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STAFF APPRAISAL REPORT

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

FEBRUARY 22, 1991

Population and Human Resources
Operations Division
Sahelian Department
Africa Region

CURRENCY EQUIVALENTS

Currency Unit	=	CFA Franc (CFAF)
US$1	=	CFAF 253 (December 1990)

WEIGHTS AND MEASURES

1 m	=	1.09 yd
1 km	=	1.6 mi
1 km^2	=	10.79 sq ft
1 m^2	=	0.38 sq mi
1 ha	=	2.47 acres

ABBREVIATIONS AND ACRONYMS

AfDB	-	*African Development Bank*
AMPPF	-	Association Malienne pour la Protection et la Promotion de la Famille/Malian Association for Family Protection and Promotion
BUNACOP	-	Bureau National de Coordination des Programmes de Population/National Population Program Coordination Bureau
BURECOP	-	Bureau Régional de Coordination des Programmes de Population/Regional Population Program Coordination Bureau
BUCECOP	-	Bureau de Coordination des Programmes de Population/District Population Program Coordination Bureau
CBD	-	Community-based Distribution
CDI	-	Community Development Technician
CEPRIS	-	Cellule d'Exécution du Programme de Renforcement des Infrastructures Sanitaires/Health Facility Upgrading Program Implementation Unit
CERPOD	-	Centre d'Etudes et de Recherches sur la Population et la Démographie/Population and Demographic Studies and Research Center
ComHC	-	Community Health Center
CCONG	-	Comité de Coordination des Organisations Non-gouvernementales/Non-governmental Organization Coordinating Committee
CPR	-	Contraceptive Prevalence Rate
DAF	-	Direction Administrative et Financière/Administrative and Financial Affairs Directorate
DHC	-	District Health Center/Centre de Santé de Cercle
DHDP	-	District Health Development Plan/*Plan de Développement Sanitaire de Cercle*
DHT	-	District Health Team/Equipe de Santé de Cercle
DNAS	-	Direction Nationale des Affaires Sociales/National Social Affairs Directorate
DNHE	-	Direction Nationale de l'Hydraulique et de l'Energie/National Water and Energy Directorate
DNHPA	-	Direction Nationale de l'Hygiène Publique et de l'Assainissement/National Public Hygiene and Sanitation Directorate
DNPFSS	-	Direction Nationale de la Planification et de la Formation Sanitaire et Sociale/National Planning and Health Training Directorate
DNSP	-	Direction Nationale de la Santé Publique/National Public Health Directorate
DRUC	-	Direction Régionale de l'Urbanisme et de la Construction/Regional Urban Planning and Construction Directorate
DSF	-	Division de la Santé Familiale/Family Health Division
EDF	-	European Development Fund
EDs	-	Essential drugs
EFDC	-	Ecole de Formation pour le Développement Communautaire/Community Development Training School
EIPC	-	Ecole des Infirmiers du Premier Cycle/Nurse-aides School
EMP	-	Ecole de Médecine et de Pharmacie/School of Medicine and Pharmacy
EPI	-	Expanded Program of Immunization
ESS	-	Ecole de Santé Secondaire/School of Secondary Health
FAC	-	Fonds d'Aide et de Coopération/French Bilateral Aid Agency
FP	-	Family Planning
GECAPOP	-	Groupe d'Etudes et de Coordination des Activités en Matière de Population/Population Activities Coordination and Research Group
HIV	-	Human Imuno-deficiency Virus
ICB	-	International Competitive Bidding
IDE	-	Infirmier Diplômé d'Etat/Registered Nurse
IEC	-	Information, Education, Communication
INPS	-	Institut National de la Prévoyance Sociale/National Social Security Institute
INRS	-	Institut National de Recherche sur la Santé/National Health Research Institute
IPPF	-	International Planned Parenthood Federation
KBK	-	Kita-Bafoulabe-Kenieba
LCB	-	Local Competitive Bidding
LDC	-	Local Development Committee
LIB	-	Limited International Bidding
LHC	-	Local Health Committee
MCH	-	Maternal and Child Health
MIHE	-	Ministère de l'Industrie, de l'Hydraulique et de l'Energie/Industry, Water and Energy Ministry
MSPAS	-	Ministère de la Santé Publique et des Affaires Sociales/Ministry of Public Health and Social Affairs
NGO	-	Non-governments: Organization
PCU	-	Project Coordination Unit
PHC	-	Primary Health Care
POPFUND	-	Population Fund
PPM	-	Pharmacie Populaire du Mali/Malian People's Pharmacy
RHT	-	Regional Health Team
SAL		Structural Adjustment Lending
SEPAUMAT	-	Service d'Entretien du Parc Automobile et Matériel/Vehicles and Equipment Maintenance Unit
TFR	-	Total Fertility Rate
UNFM	-	Union Nationale des Femmes du Mali/National Women Association of Mali
UNFPA	-	United Nations Fund for Population Activities
UNICEF	-	United Nations International Children's Emergency Fund
UNJM	-	Union Nationale des Jeunes du Mali/National Youth Association of Mali
UNIPAC	-	UNICEF Procurement and Assembly Center
UNTM	-	Union Nationale des Travailleurs Maliens/National Labor Association of Mali
UMPP	-	Usine Malienne de Produits Pharmaceutiques/Malian Pharmaceutical Production Unit
USAID	-	United States Agency for International Development
WHO	-	World Health Organization
WID	-	Women in Development

GOVERNMENT'S FISCAL YEAR

January 1 - December 31

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

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This report is based on the findings of a two-stage appraisal process; the second stage was required to incorporate up-to-date elements of a national population policy being put in place. Initial appraisal, which took place in April 1989, was led by Dr. Jean Louis Lamboray, Sr. Public Health Specialist, and included Teresa Ho, Economist; Bernard Abeillé, Architect/Implementation Specialist; Bertrand Ah-Sue, Sanitary Engineer; Diane Riesn, Operations Assistant; Marie-Odile Waty, Economist/Consultant; Peter Bachrach, Health Planner/Consultant; and Jean-Daniel Rainhorn, Pharmaceutical Specialist/Consultant. The final appraisal mission (June 1990) was led by Françoise Delannoy, Sr. Project Officer, and included Drs. J.L.Lamboray and Roland Balthès, Pharmaceutical Specialist/Consultant. Richard Heyward (UNICEF), Hildegard Ruzibiza (Regional Representative, UNFPA), and Barbara Seligman, Family Planning Specialist (USAID) worked closely with the second appraisal mission. The report was drafted by the mission members and completed by F. Delannoy. It was edited by Ms. Phyllis Roos (Consultant) and processed by Ms. Janine Vieira da Luz, Staff Assistant. Mrs. Katherine Marshall and Mr. Florent Agueh are the Departement Director and the managing Division Chief, respectively, for the operation. Mr. Aubrey Williams, Principal Health Specialist, was the Lead Advisor.

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REPUBLIC OF MALI
SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

CREDIT AND PROJECT SUMMARY

Borrower: Republic of Mali

Beneficiaries: Ministry of Public Health and Social Affairs, Ministry of Industry, Water and Energy, Ministry of Plan

Credit Amount: SDR19.2 million (US$26.6 million equivalent)

Terms: Standard, with 40 years' maturity

Project Objectives: Through an integrated program of policy/institutional reforms and investments, the project will support the Government's efforts to improve the health status and well-being of the Malian population, notably women and children, implement its emerging population policy, and broaden access of deprived rural communities to health services and safe water.

Project Description: To attain these objectives, the project comprises three components. The health component will increase the coverage and quality of health care (a) directly in four Regions and the capital area of Mali through the development of a decentralized, District-based health development program involving the construction/rehabilitation of primary and referral care centers, as well as active community, NGO and private sector participation; and (b) indirectly by improving the planning and management of the sector's personnel, physical and financial resources as well as the provision of essential drugs. The population component will (a) strengthen the institutions in charge of disseminating/implementing the national population policy and of planning, managing and evaluating family planning (FP) programs; and (b) increase the demand for, availability and quality of FP services nationwide. The rural water supply component will (a) increase the supply of safe drinking water for the rural population in the project area; (b) support the Government's policy of community participation in the financial and technical management of rural water supply; and (c) implement an iodination program in areas where iodine deficiency is prevalent.

Project Benefits: By increasing the utilization of primary health services, the project will address the basic needs of some of the most vulnerable segments of Malian society , improve the productivity of sectoral investment, and strengthen the supply response of the economy to the on-going adjustment process. The health component has been designed to directly benefit 2.4 million people (31% of Mali's population) who will gain access to quality health care. For this target population, by 1997 the proportion of disease episodes treated will double, to reach 60%; that of children fully immunized before age 1 will increase from 25% to 40%; 60% of pregnancies will receive prenatal care (at least two visits), against 38% today; the proportion of diarrhea episodes treated with oral rehydration will rise from 3% to 50%; the growth of 50% of children ages 0 to 2 will be monitored; and 50% of the estimated new cases of tuberculosis and leprosy will be detected and treated. The impact on mortality and morbidity is expected to be substantial, although it cannot be quantified. In addition to these direct beneficiaries, Mali's entire population will benefit indirectly from the project, insofar as it will reinforce the Ministry of Health's capacity to plan, manage and coordinate sectoral development programs. Similarly, the population component will have broad benefits in terms of increased awareness of population issues and experience gained on how best to tackle them. The Government's capacity to plan, manage and coordinate the implementation of population and FP programs will be strengthened, increasing the effectiveness of these programs. Through the development of a variety of information programs and delivery channels, by 1997 75% of urban women and half of rural women will be fully informed on modern FP methods and the modern contraceptive prevalence rate should rise from 1% to 10% in the Regions of project concentration and to about 8.5% countrywide. The rural water component will reinforce the impact of the health component by providing access to safe water for about 180,000 people living in the project area. These benefits will be enhanced by the iodination program, which will eliminate iodine deficiency among about 240,000 people (50% of the population) in the Districts of Kita, Kenieba and Bafoulabe, where one third of the inhabitants presently show clinical signs of goiter.

Project Risks: The project faces three major risks. The first risk is that the expected improvements in drug procurement and distribution may be slow to materialize. This risk will be addressed through up-front introduction of the required policy reform, its monitoring on the basis of objective indicators, and the gradual development of alternative supply channels. The second risk is that the attitudinal changes required, for instance, to effectively decentralize health care management or for government services and NGOs to cooperate more fully (e.g., in FP) may also be slower than expected. This risk is mitigated by the Government's strong commitment to decentralization and by the emphasis put on complementarity and well-defined responsibilities among the various operators. The third risk is that the proposed approach to health care, which depends for success on community sensitization and participation, as well as on significant cost recovery, could suffer occasional setbacks in some project areas. This risk will be reduced through carefully phased implementation and close monitoring of key activities, including the cost-recovery scheme.

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

SUMMARY AND PROJECT COST ESTIMATES a/
(net of taxes and duties)

ESTIMATED PROJECT COSTS	LOCAL	FOREIGN	TOTAL
1. HEALTH			
1.1 INCREASING THE COVERAGE AND QUALITY OF HEALTH SERVICES IN FOUR REGIONS AND THE CAPITAL AREA	8.1	11.6	19.7
1.2 IMPROVING THE EFFICIENCY OF DRUGS, FACILITY, PERSONNEL AND FINANCIAL MANAGEMENT	1.0	3.0	4.0
2. POPULATION AND FAMILY PLANNING			
1.1 INSTITUTIONAL STRENGTHENING	0.6	1.0	1.6
1.2 CORE IEC/FP PROGRAM	1.8	6.0	7.8
1.3 POPULATION FUND	2.8	1.9	4.7
3. RURAL WATER SUPPLY			
3.1 CONSTRUCTION/REHABILITATION OF 886 WATER POINTS	1.9	8.0	9.9
3.2 IODINATION PROGRAM	0.1	1.2	1.3
4. PROJECT COORDINATION UNIT	0.4	0.9	1.3
TOTAL BASE COST	16.7	33.5	50.2
PHYSICAL CONTINGENCIES	1.3	2.9	4.2
PRICE CONTINGENCIES	1.7	5.2	6.9
TOTAL PROJECT COST	19.7	41.7	61.4
FINANCING PLAN			
IDA	6.6	20.0	26.6
EDF	4.1	8.2	12.3
USAID	4.4	5.7	10.1
REPUBLIC OF GERMANY	2.1	4.1	6.2
FAC	0.1	1.6	1.7
LOCAL COMMUNITIES	1.4	1.4	2.8
GOVERNMENT	1.1	0.6	1.7
TOTAL	19.7	41.7	61.4

	IDA FISCAL YEAR							
ESTIMATED DISBURSEMENT	1991	1992	1993	1994	1995	1996	1997	1998
	IN MILLION US$							
ANNUAL	0.6	3.4	6.2	5.2	4.2	4.0	2.6	0.4
CUMULATIVE	0.6	4.0	10.2	15.4	19.6	23.6	26.2	26.6

a/ Totals may not add up due to rounding.

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

I. INTRODUCTION

1.1 The Government of Mali has requested IDA's assistance in financing a project to help achieve its development goals in health, population, and rural water supply. Total project costs are estimated at US$61.4 million. The Government would contribute about US$1.7 million; local communities (and beneficiaries), about US$2.8 million; European Development Fund (EDF), about US$12.3 million; United States Agency for International Development (USAID), about US$10.1 million; The Republic of Germany, about US$6.2 million; and French Fonds d'Aide et de Coopération (FAC) about US$1.7 million. The remaining US$26.6 million would be financed by IDA. The basic data sheet and comparative indicators are in Annex 1.

1.2 This will be the second IDA-financed project for the development of health services in Mali. The policy measures and investments included in the project were developed through a health and population sector dialogue with the Malian authorities and through experience gained during implementation of both the ongoing Health Development Project (Cr.1422-MLI) and the ongoing Rural Water Supply Project (Cr.1431-MLI/SF7). A Population Sector Memorandum was discussed in April 1987. A draft population policy prepared by the Malian Government was issued in July 1990.

II. THE HEALTH, POPULATION AND WATER SUPPLY SECTORS

A. Sectoral Overview

1. Health Status of the Population

2.1 Mortality. Mali's estimated population of 7.7 million (1987 Census) has one of the highest mortality levels (a crude death rate of 19.5 per 1,000) in Africa and in the world. Infant mortality (170 per 1,000) and combined infant/child mortality (296 per 1,000) place Mali second in the world after Afghanistan. Consequently, life expectancy at birth (45 years) is extremely low. At least 70% of infant and child deaths are attributable to malaria, measles, tetanus, respiratory diseases, diarrhea, and malnutrition; all are preventable through low-cost interventions. The high level of adult and child morbidity is largely attributable to water-related diseases such as schistosomiasis and Guinea worm. Maternal mortality is a leading cause of death among women of reproductive age (700:100,000 live births). The spread of HIV represents a serious health threat: in 1988, sero-prevalence for HIV1 and HIV2 in a large sample of students, young soldiers and prostitutes was 4.1. If unchecked, the disease might become a major cause of adult deaths.

2.2 Nutrition. Data on the nutritional status in Mali for the early 1980s are limited. Although per capita calorie availability rose above the 2,000 k.cal mark in 1989, from 1,720 k.cal in 1986, malnutrition is still prevalent; according to the 1987 Demographic and Health Survey (DHS), the proportion of children (3-36 months) showing signs of chronic malnutrition, as measured by height for age, is about 25%, which is not uncommon; however, the proportion of children showing signs of temporary, acute malnutrition, as measured by weight for height is a very high 11%; in Bamako, 15% of birth weights fall below the 2,500-gram standard for low birth weight. Iodine deficiency, which contributes

to infant mortality and causes mental and growth retardation, is revealed by the prevalence of goiter at rates above 10% in all five Regions below the 14th parallel. Prevalence rates of 30-40%, with peaks above 80%, indicate moderate to severe iodine deficiency.

2. The Health Sector

2.3 Organization. The Ministry of Public Health and Social Affairs (Ministère de la Santé Publique et des Affaires Sociales-MSPAS) has overall responsibility for health. Its functions include the formulation of health policy and strategy, planning and management, coordination of sectoral activities, operational support, training of health manpower, and monitoring and evaluation. However, historically, the Ministry has tended to focus on the direct provision of services. An organizational chart of MSPAS is in Annex 2-1. MSPAS is represented in each Region and in the capital area of Bamako by a Regional Directorate, and provides most of the health services. These government-run services essentially parallel the country's administrative structure, which comprises seven Regions, plus the capital area; 46 Districts ("Cercles"); and 286 sub-districts ("Arrondissements"). Most sub-districts (264) have a health center ("Centre de Santé d'Arrondissement"-CSA), and each District has a small hospital ("Centre de Santé de Cercle"-CSC). All Regions except Koulikoro have a hospital. Bamako is served by three national hospitals. In addition, there are 362 maternities, 322 dispensaries and 203 "dépôts pharmaceutiques" (warehouses) at the village level. Overall, about 45% of the population live within 15 km of a health facility. Annex 2-2 describes the present health care system and its functioning.

2.4 NGOs operate less than 10% of the health facilities, providing support to the government-run services. They have helped pioneer innovative approaches to health care management, such as cost recovery, rationalization of drug prescription, and improvement of local health planning. Despite the lifting of the ban on the private practice of medicine and pharmacy in 1987, in 1988 there were only 16 licensed private practitioners (9 physicians, 4 registered nurses, 3 midwives) and 29 private pharmacists, most of them in Bamako; however, many signs suggest a high level of private sector dynamism.

2.5 Service delivery. Of the four levels of government-run services--central, regional, district and sub-district--the higher three perform the same functions: provision of curative primary health care (PHC) for the surrounding population and referral services for, plus supervision of the next lower level. Information, Education and Communication (IEC) and outreach activities are practically non-existent, so that communities are left largely to themselves for village-level health care.

2.6 Health manpower and training. Of MSPAS's estimated 6,000 employees, some 2,075 are at work in health facilities throughout Mali: 249 physicians, 562 registered nurses, 256 midwives, 749 nurse's aides, 65 community development workers, and 194 sanitation workers. Although Bamako represents only 8.5% of Mali's population, 42% of the physicians, 40% of the registered nurses, 51% of the midwives, 35% of the nurse's aides, 3% of the community development workers, and 37% of the sanitation workers are concentrated there. Formal health education is provided through four schools: Ecole de Santé Secondaire (ESS) for nurses, with campuses in Bamako and Sikasso; Ecole des Infirmières du Premier Cycle (EIPC) for nurse's aides; Ecole de Formation pour le Développement Communautaire

(EFDC) for community development workers; and Ecole de Médecine et de Pharmacie (EMP) for physicians and pharmacists. Recently, graduates of these schools have had difficulty finding employment in the public sector, due to drastic limitations on civil service recruitment since 1984 (250 p.a. for all sectors combined). In 1987, for example, only four of the 60 graduates in medicine and one of the 35 graduates in pharmacy were recruited; of the 85 nurse's aides, 19 were recruited by the civil service. Slightly over one third of the schools' 270 graduates, in all categories, were hired by NGOs, the Pharmacie Populaire du Mali (PPM), or the Union Nationale des Femmes du Mali (UNFM). The high level of under-employment among graduates of the four schools remains a serious concern for the Government.

2.7 Drugs. Most of Mali's supply of drugs is imported by PPM (4/5 of the total), a Chinese-assisted parastatal under MSPAS, and by the Institut National de la Prévoyance Sociale (INPS) and the Armed Forces. NGOs (e.g., Médecins sans Frontières et Médecins du Monde) and external donors, especially UNICEF, provide the rest. Some 30-odd products are manufactured, i.e., tabletted and packaged, by Usine Malienne de Produits Pharmaceutiques (UMPP), another parastatal in operation since 1983 with Chinese technical assistance. Drugs are distributed in bulk by PPM to its own outlets (numbering 98 in 1989); by PPM, UMPP and the above-mentioned NGOs to health facilities; and by PPM and UMPP to private pharmacies. All these outlets, plus an estimated 203 village warehouses make retail sales to the public. UNICEF has played a major role in the promotion of essential drugs, especially since 1987, when it co-sponsored with WHO the "Bamako Initiative" which was adopted by all African Health Ministers.

3. Population and Family Planning (FP)

2.8 Demography. According to the 1987 Census, the crude birth and death rates yield an annual rate of natural population increase of 3.7% (Bank estimate: 2.7%). Although reduced tc 1.8% (Bank estimate: 2.5%) by out-migration, this rate holds potential for a population explosion: at current levels, Mali's population would double in about 38 years (the Bank estimate: 28), making it extremely difficult to meet basic needs and improve living standards, especially if reductions in mortality are not accompanied by fertility reductions.

2.9 Fertility is high and stable in Mali, as documented by a Demographic and Health Survey (DHS) conducted in 1987. The number of children per woman during the reproductive years averages 6.8. This high total fertility rate (TFR) is not surprising in light of the high mortality of children and the low educational level among women (only 14% of women have access to schooling and 86% are illiterate). No significant downward trend in fertility can be detected in any part of Mali since independence, with the exception of the capital area of Bamako, where the TFR is 5.4. Child spacing is a major preoccupation among Malian women; about a third of married women would like to delay their next childbirth by at least two years, and 17% do not want any more children. Nevertheless, only 10% of potential users intend to use modern contraceptive methods, partly for lack of information about these methods, partly because of the country's pro-natalist tradition and partly for lack of access to FP services. The median length of post-partum abstinence is 2.4 months; in this context, the current practice of breast feeding, which lasts an average of 21.6 months, is of particular importance as a means of child spacing.

2.10 Family planning. Mali was the first country in francophone Africa to accept FP as part of its effort to protect the health of mothers and children through wider birth spacing. FP services started in Bamako in 1972 through the Association Malienne pour la Promotion et la Protection de la Famille (AMPPF), an affiliate of International Planned Parenthood Federation (IPPF). Today, the Division de la Santé Familiale (DSF) is responsible for FP policy-making, program management, and clinic-based services, including contraceptive distribution, while AMPPF has concentrated on IEC, except in Bamako where it has an FP clinic. FP services are available in Bamako, all Regional capitals and main towns, and all 46 Districts; they are also offered in some sub-district health centers (the few that are staffed with an obstetrical nurse). Demand for sterilization is minimal, hence hospital-based services are not significant. FP acceptors number about 21,000 (1990). The predominant contraceptive method is the pill (used by about 80% of acceptors). About 53% of the contraceptive users are served at the AMPPF clinic in Bamako, another 22% in government-run maternities and MCH centers in the city, and the remaining 25% in centers outside Bamako.

2.11 Many donors have been active in the population/FP sub-sector. In particular, UNFPA, ILO, UNDP, UNESCO and UNICEF have provided institutional support, e.g., in developing a national population policy, conducting the 1987 Census, providing contraceptives, and developing research and educational programs on family education and planning. Among bilateral donors, USAID, the main donor, supports an integrated family health program involving, inter alia, the rehabilitation/service upgrading of 15 MCH/FP centers, and the Republic of Germany finances a self-help project for rural women which includes FP activities. A total of 11 NGOs, mostly USAID-financed, are implementing micro-projects involving research, IEC and alternative delivery modes. Of special interest are four USAID-supported programs: the Enterprise Project, which has successfully established employer-provided IEC and FP services in two major parastatals; a CBD (community-based distribution) operation using MCH clinic midwives and men's informal groups to distribute contraceptives; a Johns Hopkins assisted experiment in IEC/FP, based on female rural community workers ("animatrices"), which has yielded impressive results; and a Social Marketing Project, which will develop private and commercial contraceptive distribution channels. Despite the Government's receptivity to FP concerns, acceptance remains low, with a modern CPR of about 1% among women of child-bearing age.

4. Water Supply

2.12 Only 35% of the rural and 55% of the urban population have access to a safe and clean water supply. The rest of the population obtains water from polluted sources, contributing to high infant mortality and general poor health status (para 2.1). In recent years, as part of its efforts to meet basic needs and improve public health, the Government has taken steps to remedy the situation, including measures to involve village communities financially and technically in the construction, rehabilitation and maintenance of modern water points. Results of these measures are evident under the ongoing Rural Water Supply Project (Cr.1431/SF7-MLI) in the western part of the country, where some 630 village boreholes equipped with hand-pumps were constructed between 1985 and 1989. Prior to the drilling of boreholes, the villagers are required to contribute about US$400 per water point, which is equivalent to the price of the pump. Most of the pumps are functioning satisfactorily, with some in operation for more than three years. Village repairmen trained under the project have full responsibility for the maintenance of the water points.

5. Health Sector Financing

2.13 Total health expenditures. In 1989, total actual spending on organized health services amounted to CFAF 13.6 billion (2.4 for investment, 11.2 for recurrent expenditures), equivalent to US$53.7 million. Public financing accounted for only 36% of the total (down from 47% in 1983), private financing (mostly for drugs) for 44%, and external financing for 20%. The decline in the public share resulted from a reduction in the proportion of the total Government budget allocated to the sector, combined with sharp increases in private and external financing. Over 1983-87 the allocation by levels increased slightly for hospitals (to reach a moderate 16%) at the expense of the district health centers (which are still a fairly high 61%). On a per capita basis, outlays for organized services are estimated (1987) at CFAF 1,780 (US$7.0); of this, the public contribution (CFAF 690) is one of the lowest in the world (half that in Burkina Faso). By contrast, private expenditures are quite high--about CFAF 750 on organized services and 635 on traditional, informal or private services. As a result, total health spending (organized plus non organized services) may be about one third higher (at CFAF 2,400) than expenditures on organized services alone. Details on health financing are at Annex 2-3.

2.14 Investment versus recurrent expenditures. Total sectoral investment more than doubled between 1983 and 1987 (from CFAF 1.2 to 2.6 billion, nominal terms), and has slowly declined since then (CFAF 2.4 billion in 1989). The increase was mostly due to the first IDA-financed health project and an AfDB project. Public recurrent expenditures on organized services declined from CFAF 4.5 to 4.3 billion during 1985-89 (nominal terms); this is equivalent to a real reduction of 18% on a per capita basis. The share of health in the total Government recurrent budget has stagnated at a low 6.5% in 1986-89, compared with about 7-8% in neighboring countries. The structure of the recurrent budget by type of expenditure shows salaries at a relatively low 65% of the total (wages are low in Mali and the salaries bill will be frozen until 1992 under the ongoing adjustment program) and non-wage operating expenditures at about 21%. The remaining 14% is for drugs, but represents a small fraction of total spending on pharmaceuticals (para 2.21).

2.15 Cost recovery. Cost recovery has been practiced for a number of years in projects financed by IDA, NGOs and other donors, and is becoming a Government policy. In 1987, cost recovery amounted to about 50% of recurrent expenditures on organized services; however, 48% of this was attributable to the purchase of high-priced, non-essential drugs through PPM, and only 2% consisted of user fee revenues. User charges, for in-patient care and drugs, were first introduced in the three national hospitals, which were granted financial autonomy. This and other experiments--in particular the IDA-financed project in the first Region and a project financed by EDF and assisted by the NGO Médecins sans Frontières (MSF) in the sixth and seventh Regions--have yielded encouraging results. In the IDA project, which covered some of the poorest parts of the country, user charges for deliveries, consultations (CFAF 50 per visit), laboratory work, drugs and surgery met all non-salary recurrent expenditures and over half of wage expenditures (for health centers with 3 staff). Wherever drugs have been available at affordable prices, as in the MSF project, utilization rates have increased: by 300% at the primary level and 50% at the first referral level. In all the cost-recovery schemes, fee revenues were managed by staff under supervision of a Local Health Committee (LHC), resulting in efficiency gains.

B. Main Issues and Constraints

1. The Health Sector

2.16 In terms of access, quality and utilization, the health services of Mali rank among the lowest in the world. In 1984, only one Malian out of three had contact with a health service, down from one out of two 10 years earlier. More recently, only 25% of infants over one year old were vaccinated against measles, 3% of diarrhea cases were treated with oral rehydration, 1% of women of reproductive age used a modern contraceptive method, and 38% of pregnancies received prenatal care. While the situation is particularly acute in rural areas, even in urban areas large segments of the population are severely under-served. The Government alone cannot solve the problem: it has been unable to provide a reliable supply of drugs, its health manpower has low productivity, and its share of sectoral financing is declining. The key issues-access, quality, and resource management-are analyzed below.

a. Limited Access to and Poor Quality of Health Care

2.17 The limited access to and coverage of basic health services are due to three factors: underfunding (para 2.23), the use of administrative instead of people-oriented facility planning criteria and service delivery approaches in the government-run services, and the lack of alternatives, such as private medicine. Under the present system (Annex 2-2), the network of sub-district health centers provides access to only 45% of the population. Some sparsely populated areas have over-dimensioned, under-utilized facilities (e.g., one center per 1,000 pop.), while in the urban areas, where hospitals are not equipped to provide PHC and the size of the community served (e.g., 300,000 per center in Bamako) is too large, basic health needs are increasingly not being met. Even in the present system, coverage could be substantially higher if government health personnel, instead of taking a passive attitude, adopted an aggressive public health approach and reached out to the communities. As alternative delivery modes are limited to a few mission dispensaries and a small number of private physicians (para 2.4), many Malians continue to resort to traditional healing, even where modern medicine would be more effective, and a few communities have spontaneously created their own health centers (about 45). There is need to increase the productivity of the system by improving the match between supply and demand in terms of service area and by making health personnel more accountable for the health status of the community they serve.

2.18 The poor quality of health care is the main cause of the declining utilization of services. This is largely due at the primary level to the lack of drugs and supplies, low personnel productivity, limited responsiveness to local health needs, and at the secondary or referral levels (District and above) to the lack of supervision and clear delineation between the PHC, referral and management functions (para 2.5). The nature of the services to be provided under these three functions and the corresponding responsibilities, staff profiles, consumable needs (drugs, medical supplies, etc.) and operating guidelines are not clearly defined, leading to inefficiencies. For instance, in-service training for health personnel is geared towards narrow, vertical disease-control programs, instead of an integrated public health approach, resulting in expensive duplications. At the referral level, specialized personnel are wastefully used for PHC, for which they are over-qualified. Staff assigned to managerial tasks have not been trained for that purpose. No targets have been set to measure

performance, and anyway the financial, logistical and skill requirements for supervision are lacking. Faced with long waits, insecure or unconcerned staff and a shortage of drugs, patients tend to turn elsewhere for care.

b. Inefficient Use of Sectoral Resources

2.19 Weak sectoral planning and operational management. MSPAS's traditional focus on the direct provision of health services and its top-heavy operating style are no longer sustainable in a rapidly evolving sectoral context, characterized by a trend towards decentralization, a decline in the share of public sectoral financing, and the emergence of alternative, complementary delivery modes involving local communities, NGOs and private practitioners. First, being overstretched in its attempt to provide services, MSPAS has neglected its role as the institution responsible for sectoral policy-making, strategic thinking, and resource planning and management. Numerous community-based, donor-supported experiments have taken place without being coordinated, monitored or evaluated to guide future interventions. The emphasis should now shift from direct service delivery to formulating a strategic framework and creating a policy and regulatory environment supportive of new, more efficient and sustainable systems. Because practice has moved ahead of policies, there is a regulatory void to be filled, e.g., by defining (a) the distribution of roles in the new partnership among the Government, local authorities, the private sector, the communities, and donors; (b) a blueprint for cost sharing and cost recovery; and (c) norms and standards for health care, staffing, drug use, and investment. Second, due to the historical reliance of the health system on vertical, centrally directed disease-control programs, operational capacity at the intermediate levels is weak. In particular, Regional teams have typically been circumvented by these programs and do not have the means to support and supervise the lower levels; as a result, the service mix has been increasingly determined by international initiatives instead of by local demand.

2.20 Low health manpower productivity. As the second largest Government agency, MSPAS employs about 6,000 people (13% of the civil service, including contractual employees); however, its staff has low productivity and the Ministry is not equipped to manage staff efficiently. Automatic civil service recruitment until 1983 and administrative deployment have led to overstaffing in some facilities and understaffing at the periphery, with broad Regional disparities in staff per population ratios (a range of 1-3 for physicians and 1-17 for midwives), and misuse of specialized skills. Poor personnel management, including the lack of operational norms, supervision and on-the-job training, contributes to a sense of abandonment among health workers. This is exacerbated by insufficient and, until recently, frequently delayed pay and difficult working conditions, especially the lack of critically needed drugs and other medical supplies. The low motivation and job dissatisfaction resulting from this situation explain in part why the quality of public health services has deteriorated. Under-employment among health school graduates is widespread (para 2.6) and the prospects, particularly for physicians, are not bright. Despite the lifting of the ban on private medicine, the prescribed medical fees (CFAF 4,000 per visit) and technical standards for opening a private practice are so high as to discourage any young medical graduate from establishing a practice, even in Bamako. There is need for the Government to enhance the socioeconomic status of the health career stream; optimize the use of existing staff; improve working relationships with NGOs, which have become major employers of health school graduates; and develop opportunities for private practice.

2.21 Lack of drugs. Drugs, a critical factor in the credibility of health services, are neither affordable nor physically available in most parts of the country. Throughout Mali, medicines are sold at widely varying prices. The first to fifth Regions have been supplied by PPM, the parastatal with drug import quasi-monopoly and a dominant role in drug distribution (para 2.07). PPM purchases directly from firms mostly non-essential, expensive brands; both the structure of its margins and prescription practices in the government-run services are biased in favor of such brands. There is a mismatch between need (essential drugs-EDs) and supply (costly specialties, including the output of the domestic producer, UMPP), aggravated by losses during distribution, theft, and lack of effective control at the distribution level. The shortages and high cost of drugs explain why, despite the large size of the drug market (about CFAF 12 billion in 1989, of which 8 billion for PPM), the quality of care is so poor and service utilization rates so low. The Health Development Project (Cr.1422-MLI) has only partly succeeded in addressing the issues just described (para 2.37). On the other hand, in the seventh and sixth Regions, the NGO, Médecins sans Frontières, has imported under ICB a limited list of essential drugs and has trained staff to prescribe them. These Regions have had a regular supply of quality drugs, demand has been high, and service utilization has increased.

2.22 The PPM case illustrates the dilemma of a parastatal caught between social objectives (such as the promotion of EDs) and commercial objectives (profit-making). According to studies undertaken during project preparation, rationalizing drug importation, distribution and prescription could reduce the average prescription cost from the current CFAF 1,500 to 400. Implementing these policies could, at the community level, free resources that could be captured to improve the quality and coverage of health services. This would require (a) fully implementing the EDs policy and improving procurement and distribution practices; and reducing dependence on a single public sector importer/distributor by establishing a well-regulated, multiple-channel drug import/distribution system. Supervision of this process will, in turn, require strengthening of MSPAS's pharmaceutical inspection and quality control capacity.

2.23 Financial constraints. Sectoral financing--characterized by a low level of public expenditure and a high level of private expenditure--needs, first, to be rationalized and, second, expanded. Improving the coverage and/or quality of health services requires substantial additional resources, which cannot come from the central Government budget alone. At the same time, the pattern of both public and private spending is highly inefficient and wasteful (e.g., in the use of Government health personnel, provision of free health care to civil servants, and private purchase of non-essential, expensive drugs). As a result, studies have estimated that over one third of total health expenditures could be saved, while still improving quality, through rationalizing the sector's spending pattern.

2.24 Therefore, reducing the resource constraint on public health services depends on (a) improving the efficiency of public as well as private health expenditures, including rationalization of sectoral investment; (b) increasing the sectoral share of the recurrent budget, while concentrating MSPAS's efforts on its planning, policy-making and support functions; and (c) broadening the sectoral resource base, first by channelling toward cost-effective services the savings that could be achieved on patients' drug purchases, and second by building on existing cost-recovery schemes to develop a clear but flexible partnership between the Government, communities and NGOs. Improving cost-recovery

performance will involve a gradual expansion of fees for curative care, implementation of an ED policy, establishing a mechanism for regular price adjustment, and setting up local "safety nets" for the truly indigent.

2. Population and Family Planning

2.25 An emerging population policy. Most Malian want large families, and at present fertility rates Mali would have a population of about 19 million by 2015 (compared to 7.7 million in 1987). In its statements on population, the Government has traditionally emphasized human resource development (improvements in education, health and employment, morbidity reduction, the status of women, environmental protection), over purely demographic objectives. Until recently, it was hesitant in recognizing the social and economic development implications of rapid population growth in the context of a limited natural resource base, and in formulating explicit demographic targets. Its reluctance to do so was reinforced by data problems, such as the initial results of the 1987 population Census, which suggest a surprisingly low intercensal growth rate of 1.8% since 1976 (para 2.8). This reluctance is gradually changing to a more realistic assessment of the situation.

2.26 A draft population policy that includes specific strategies as well as quantified demographic targets (para 2.33) was discussed at a national seminar in July 1990. The draft was prepared (with UNFPA/ILO assistance) by the Ministry of Planning's Population Unit, which serves as Secretariat to the inter-ministerial Groupe d'Etudes et de Coordination des Activités de Population (GECAPOP); official adoption is expected by end-1990. The seminar, while supportive of the policy, confirmed that a long time-lag and an all-out IEC effort will be required to increase public awareness of the issues at stake, build a consensus on objectives and strategies, implement action programs, and achieve results. Therefore, the Government needs early, well-designed and sequenced assistance in disseminating and operationalizing the policy.

2.27 Limited demand for and availability of FP services. Despite the Government's early acceptance of FP for the protection of maternal and child health (para 2.10), efforts have remained diffuse for lack of a well-defined and coordinated strategy, and expansion of FP services is constrained by a combination of supply and demand problems. Where there is a demand, mostly in urban centers, it remains partly unmet due to an insufficient number of delivery points, the few FP options offered, the limitation of authorization to distribute hormonal contraceptives to physicians and midwives (the only staff receiving FP training), and the practice of restricting the prescript- ion of contraceptives to married women who have marital consent. As a result, the number of abortions (in Mali they are illegal) is growing, although still modest. In rural areas the main problem appears to be the low level of demand; this is largely due to the absence of a clear and systematic IEC strategy explaining FP, its benefits and availability, targeted at priority groups and carefully tested and timed with FP service development. Such a strategy has just been prepared, building on the draft population policy, which proposes CPR target; various experiments that have yielded insights on how to proceed with FP; the fact that many organizations, NGOs and private practitioners are prepared to assist with implementation; and the operational norms for integrated MCH/FP, which have being tested in Bamako since 1987. The two leading institutions active in IEC and FP, DSF and AMPPF (para 2.10), are understaffed and overstretched, leaving donor coordination unattended. The needs are therefore to (a) reinforce sectoral capacity to plan,

manage and evaluate FP activities; (b) stimulate demand for FP through IEC; and (c) strengthen traditional as well as alternative IEC/FP channels to satisfy effective demand by improving service delivery.

3. Rural Water Supply

2.28 To increase access of the rural population to a safe water supply, especially in the most deprived areas, and thus improve their sanitation and the health environment, the Government needs assistance in completing and expanding the work begun in the drilling of boreholes and equipping/maintenance of water points with hand-pumps (para 2.12). Because of the prevalence of goiter in many areas due to iodine deficiency, the improvement efforts should include an iodination program, carried out mainly by village pump repairmen.

2.29 Improvement of rural water supply used to be hampered by inadequate cost recovery for investment and maintenance, as well as by shortages of skilled personnel and material resources. These issues have been addressed through policy measures involving the technical and financial participation of villagers in the installation, operation and maintenance of their water points. The respective responsibilities and functions of village communities and DNHE (Direction Nationale de l'Hydraulique et de l'Energie) are specified in contracts between them. The issue now is to generalize countrywide this policy, which is being successfully implemented under the IDA-financed Rural Water Supply Project. Community development activities are being promoted to directly involve the villagers in the improvement campaign, keep them informed of the health benefits of safe drinking water, and motivate them to assume responsibility for operating and maintaining their water points and to participate in other aspects of the ongoing efforts to make the Malian rural environment more healthful.

C. The Government's Sectoral Strategies

2.30 Despite the difficulties faced by the public health system, there are reasons for optimism: the many tests and experiments supported by NGOs or donors have elicited a strong community response, leading the Government to revise its strategy. In particular, (a) various cost-recovery formulae have been successfully tested, notably in Kayes Region (KBK Districts, first IDA-financed Project), in the Gao and Tombouctou Regions (EDF-financed project, with Médecins sans Frontières) and under various UNICEF schemes; (b) Mopti Region, with UNICEF and German assistance, has pioneered in the area of decentralized health planning involving Local Health Committees; (c) treatment protocols have been developed and EDs introduced in KBK, Gao and Tombouctou; and (d) KBK Districts and Sikasso Region have shown the way in preparing District health development plans, assisting in the establishment of community health centers and mobilizing local tax financing to cover part of their costs. The lessons learned from these experiments are providing the building blocks for implementing the Government's health strategy that the project will support.

2.31 The health sector. Mali pursues the goal of "Health for All" through the promotion of primary health care (PHC). Intermediate objectives are to expand coverage, improve quality, and rationalize sectoral resource use. As a prerequisite to achieving these objectives, the Government proposes to refocus its role away from service provision toward its strategic, policy, management and support functions, improvement of the quality and efficiency of referral care, and the promotion of public health. This strategy was developed through a policy

dialogue conducted with IDA during project preparation. It endorses the basic principles of the "Bamako Initiative"(para 2.7). Its key elements are:

(a) Decentralization of health services management to local governments, communities and NGOs--a policy adopted by many African countries for health and by Mali for all sectors, with a strong local tax-base (CFAF 6 billion in 1989). To implement the policy, the District is identified as the critical level in the administrative structure, since it is the first level encompassing both primary and referral services, and it is close enough to the communities (160,000 inhabitants on average) to be responsive to their needs.

(b) Implementation of the essential drug (ED) policy. The Government has placed PPM and UMPP under MSPAS's control, in the expectation that these parastatals will cease pursuing purely financial objectives and become effective instruments for ensuring a sustainable supply of low-cost, quality drugs. A list of 199 EDs has been officially established. To make these drugs available countrywide within a year, MSPAS and PPM are finalizing a revised "Contrat-Plan" specifying the implementation details of the policy (para 3.25). The Government has also encouraged the private sector to assume more responsibility for distribution (14 new pharmacies opened in 1989 and all of PPM's retail points were to be divested by end-1990), while protecting the consumer through an information campaign.

(c) Cost recovery. Recognizing its inability to finance the expansion and improvement of the health care system out of the public budget, and building on the country's tradition of self-reliance, the Government has proposed adopting countrywide the principle of cost recovery (para 2.15). Ongoing experiments have demonstrated the feasibility of an arrangement under which a large share of the recurrent costs of community health facilities are borne by the surrounding population, provided they receive support from their local government and are empowered to manage the facilities. MSPAS has studied the conditions for success of this approach and is finalizing the regulatory provisions for including it in its sector financing strategy.

2.32 The above-described principles, which are being adopted in many other African countries, are sound and deserve IDA's support; moreover, the Government's use of this policy framework to coordinate all donor interventions is especially welcome. However, the proposed strategy has two weaknesses. First, it is not geared toward specific, quantified targets and consequently the monitoring of progress and measurement of success would be difficult and subjective. Second, while Mali has gained experience in decentralization and cost recovery, the implications of operationalizing these policies on a large scale need to be thought through. The strong interest of the donor community in providing large-scale assistance makes systematic planning, norm-setting, monitoring, evaluation and feedback especially important. At the same time, the clarity of the strategic directions set by the Government, the urgency of the needs, and the rapid pace at which changes and innovations are spontaneously taking place at the "grass roots" level all argue in favor of leaving some flexibility in the implementation process.

2.33 Population policy and FP strategy. Since the 1983 Mexico Conference on Population, GECAPOP, assisted by the Centre d'Etudes et de Recherche sur la Population et la Démographie (CERPOD), a Sahel-wide institution based in Bamako,and by UNFPA and ILO, has been studying the interaction between demographic variables and socioeconomic development. The recently drafted population policy (para 2.26) proposes to (a) control demographic growth; (b) improve the health status of the population, especially children, women of child-bearing age and elderly people; (c) make out-migration an integral part of the country's socioeconomic development plans; and (d) improve living conditions through food security, protection of the environment, human resource development, the promotion of women's role, and demographic research. Under (a) above, a number of measures are proposed, including (i) broadening access to FP to raise the CPR from 4.6% (all methods) to 40% by 2000 and to 70% by 2020 in urban and 10% and 40% in rural areas; (ii) promoting breastfeeding and other traditional birth-control methods; (iii) enforcing the legal age of marriage (18 years for women, 21 for men); (iv) promoting female education and introducing family health education in both the formal and nonformal systems; (v) reducing teen-age and over-age pregnancies by 40% by 2000 and 90% by 2020; (vi) promoting IEC on the benefits of FP; (vii) systematically integrating FP into MCH; (viii) addressing sterility-related issues; (ix) training all health personnel in FP; and (x) supporting public, private and non-governmental institutions involved in FP.

2.34 This policy is quite ambitious (because reaching the proposed CPRs would require fundamental changes in attitudes which are unlikely to happen so rapidly) and still lacks operational specificity, as well as short-term objectives. By contrast, the FP/IEC strategy recently adopted by the MSPAS is immediately actionable. It sets a short-term, more realistic CPR of 10%, precise geographic and user targets, and identifies means to intensify services in urban areas and extend them at the periphery. It proposes to build on a variety of complementary channels and options to expand demand for FP through IEC, and to increase service availability while putting in place appropriate mechanisms to plan, implement, coordinate and monitor the national FP program.

2.35 Water supply strategy. Within the framework of the Water and Sanitation Decade, the Government set a goal to provide potable drinking water for the entire rural population by end-1990. To date, there are about 10,000 modern water points, serving about 35% of the rural population, representing an annual increase of 2-3% in service level over the past six to seven years. During the best years, some 1,300 modern water points were constructed annually. Even if this construction rate were maintained until 1995, the service level would increase to only 50%, provided all existing water installations are kept in good working condition. Realizing that providing access to potable water to the entire population in the near future would be a nearly impossible task, the Government recently adopted a strategy for achieving a modest increase in service level, but more importantly, for keeping all existing water installations in good operating condition. To attain this goal, the Government has placed strong emphasis on villagers' financial participation in investment and maintenance--a necessary criterion to ensure the sustainability of water installations.

D. The Bank Group's Role

2.36 The Bank Group's involvement in the health sector in Mali includes the Health Development Project (Cr. 1422-MLI), approved on January 23, 1984; health components in agricultural and livestock projects (Mali Sud II and the Mopti Area

Development Project); water and sanitation components in the Rural Water Supply Project (Cr.1431-MLI/SF7), approved in December 1983; and support for the Regional onchocerciasis control program. A Population Sector Memorandum was issued in February 1988.

2.37 The nearly completed Health Development Project (Cr.1422-MLI) consists of two parts. Part A supports national-level activities (training, drug supply, capacity building in planning and coordination); Part B focuses on three Districts in Kayes Region--Kita, Bafoulabe and Kenieba (the KBK Districts). At the national level, the training component has had mixed results: due to disruptions in the provision of technical assistance, in turn caused by the bankruptcy of the agency selected and the difficulty experienced in finding a replacement, revision of the curricula is behind schedule. In contrast, health financing and planning have been strengthened and now play a key role in sectoral policy formulation and implementation. MSPAS has improved its central capacity to collect, compile and analyze health services data. The project helped improve PPM's management, convincingly tested the acceptability of generic drugs, and demonstrated the cost advantages of ICB. However, the project did not succeed in making EDs widely available, because PPM concentrated on repaying its debt; the sales proceeds were mainly used to purchase more lucrative drugs, thereby perpetuating the shortage of EDs. The cost-recovery measures proved the feasibility of maintaining District-level drug revolving funds and resulted in quality improvements; however, because the centers purchased drugs at PPM prices (2 to 3 times higher than needed), drug utilization did not increase.

2.38 In the KBK Districts the Health Development Project aimed to strengthen the existing public health network in accordance with PHC objectives and to develop related activities at the village level. This part of the project is undoubtedly the most successful, despite implementation problems with NGOs involved in the civil works component and considerable delays and cost overruns in the facility construction program, which are now resolved. Annual District health programming and budgeting were successfully introduced, in-service training improved, and medical and nursing students provided with field training in the project area.

2.39 MSPAS has drawn extensively on the experience, both positive and negative, gained in KBK to develop the investment and organizational policies to be implemented under the proposed second project:

(a) Construction: To avoid locating health centers in sparsely populated areas, facility planning will be based on strict population criteria instead of the administrative level of the particular locality. Infrastructure norms for rehabilitating/constructing and equipping health facilities have been reviewed to reduce investment and maintenance costs.

(b) Drug provision: The full package of measures required to implement the EDs policy is being introduced up-front; EDs will be sold in Community Health Centers (ComHCs) under the supervision of the District Health Team and a local Health Committee. To achieve significant progress in rationalizing drug utilization, protocols for ensuring better patient diagnosis and prescription practices are being developed and applied, for both PHC and referral care.

(c) Financing: The cost-recovery measures procedures successfully implemented in the referral centers under the first project will be extended to the newly created Community Health Centers (ComHCs) under already tested, well-defined arrangements (para 3.08). The District Health Team will use the experience gained in programming and budgeting in KBK to develop District Health Development Plans.

(d) Information system: Assistance has been provided to the central level of MSPAS to process locally produced data; in line with the Government's current strategy of decentralization, priority will be given to developing local management information systems to monitor service quality and utilization.

(e) Management arrangements: The first health project's implementation mechanisms, under which the current Project Management Unit (PMU) has tended to function in isolation from the rest of MSPAS, have been revised to give more responsibility to the various parts of the Ministry, while emphasizing PMU's coordinating and support role.

In addition, the processes for managing community water points successfully applied under the Rural Water Supply Project (para 2.12) will be extended.

2.40 Rationale for IDA's involvement. Socioeconomic indicators place Mali among the five lowest-ranking countries in the world in terms of health status and the situation of women, making human resource development a top priority in IDA's country strategy. Rapid population growth is also a source of serious concern, given the relatively limited resource base and harsh natural environment in Mali. Broadening access to quality, affordable health and FP services will contribute to achieving the Government's objectives of growth and equity, while helping to meet the basic needs of some of the poorest and most vulnerable segments of Malian society. Reversing the worrisome trends of the past 10 years will require drastic reforms in the way health services are operated, financed and managed. Some of these reforms (EDs supply, cost recovery) have been initiated under the first IDA-financed project, and IDA is well positioned to play a catalytic role in ensuring that they are carried out. With the donor community prepared to provide large-scale assistance to the sector, the Government is using the strategy and policies developed during its dialogue with IDA as a framework to coordinate their interventions. The rural water supply component will not only reinforce the impact of the health component, but also cover parts of Mali that are the most deficient in access to safe water and for which external financing might otherwise not be forthcoming. Finally, the project will contribute importantly to IDA's macro objectives for Mali (para 3.56).

2.41 Donor assistance and coordination. Many donors have been active in the health, population/family planning, and water supply sectors. In health, some have focused on strategic activities and others on specific geographic areas. For instance, French bilateral assistance has concentrated on institution building at the central and Regional levels, health training, the hospital subsector, and more recently the establishment of young doctors in rural areas. Hospitals have also been the main recipients of AfDB assistance. On the other hand, EDF, German and Swiss aid flows have supported Regional and District operations. The first IDA-financed project included both types of activities. In population and family planning, USAID, the UN Fund for Population Activities (UNFPA) and IPPF, through its affiliate AMPPF are the main sources of financing

for training activities, contraceptive and equipment supply, technical assistance, and programs. Other donors, including UNICEF (a major provider of drugs), WHO, bilateral agencies and NGOs, contribute to maternal and child health (MCH) programs that include family planning. In both sectors, preparation of the proposed project has been instrumental in moving away from fragmented approaches and in building a consensus between the Government and donors around a program that provides an "umbrella" for all future donor interventions. In rural water supply, AfDB, IDA, the French CCCE, Denmark, Japan, Saudi Arabia and Switzerland have supported in varying degrees the Government's program based on community participation in well building and maintenance. Most of these activities have been undertaken under parallel financing, and coordination has been satisfactory.

III. THE PROJECT

A. Project Objectives and Description

3.1 The project is part of a multisectoral effort to help the Government achieve sustainable growth with equity. Through a set of policy/institutional reforms and investments, it aims to improve the health status and well-being of Mali's population, especially women and children by:

(a) Increasing the coverage and quality of health services directly for about 1.4 million people in four of Mali's seven Regions--Kayes and Mopti in a Phase 1, Koulikoro and Segou in a Phase 2--and in the capital area of Bamako, and indirectly nationwide by strengthening the efficiency of sectoral resource use. As a result by 1997, at least 52% of the population are expected to live within 15 kms of a health center versus 45% today; in the areas of project concentration, the proportion of children immunized before age one will increase from 25% to 40%, while 60% of pregnancies will receive pre-natal care versus 38% now, and the growth of half the children below the age of two will be monitored;

(b) Implementing its emerging population policy through integration of FP into MCH and an all-out IEC/FP development effort designed to increase the modern CPR from 1.2% to 8.5% countrywide by 1997; and

(c) Providing access to safe water for about 180,000 people living in some of the poorest part of the four Regions mentioned above and implementing an iodination program to eliminate goiter from among 240,000 people.

The project is expected to both alleviate poverty and improve the economy's supply response to the adjustment process, thus increasing the health system's ability to become self-sustaining (paras 3.53-3.57). The Government's strategy for health and population is stated in a Letter of Development Policy dated December 15, 1990 (Annex 3-1). To attain the above objectives, the project comprises three components: health, population and rural water supply.

3.2 The health component will:

(a) Increase the coverage and quality of health services directly in the four above-mentioned Regions, through implementation of a decentral-

ized, district-based health development program involving communities, NGOs and private practitioners. The project will finance:

(i) The broadening access to PHC at the community level: construction/upgrading/extension of about 120 community health centers; provision of EDs; IEC materials; support to community initiatives; motorcycles; training; and incremented operating costs (Base cost: US$5.4 million);

(ii) Quality improvement of health referral services: construction/upgrading/extension of about 21 District health centers and about 25 "enhanced" sub-district health centers; provision of equipment, furniture, EDs and supplies; training and short-term surgical expertise (Base cost: US$7.4 million); and

(iii) The strengthening of health management, at the District level: construction/upgrading/extension of about 21 existing District offices; vehicles and motorcycles; training of key staff and community development agents; project workshops; incremental operating costs (Base cost = US$4.3 million); at the Regional level: construction/upgrading/extension of five Regional offices; provision of office equipment and supplies; vehicles; training; study tours; maintenance and incremental operating costs (Base cost: US$2.5 million).

(b) Improve the efficiency of the national directorates in charge of planning and managing sectoral resource use. The project will finance:

(i) Health planning: health planning specialist services; office equipment and supplies; vehicles; training and IEC in rural water management (Base cost: US$1.3 million);

(ii) Human resource and financial management: specialist services and training in personnel and financial management; provision of vehicle, office supplies and equipment (Base cost: US$0.5 million).

(iii) Facility planning/maintenance: local long-term construction/maintenance specialists; short-term computer/procurement specialists; vehicles; provision of furniture and equipment (Base cost: US$0.7 million);

(iv) Drug supply: 4 years of pharmaceutical management specialist services; scholarships and workshops for technical staff and prescribers; provision of equipment and vehicles (Base cost: US$1.5 million).

(c) Project Coordination Unit (PCU). The project will finance: remodeling of facilities; provision of additional equipment; contractual staff, short-term specialist services; training; and incremental operating costs (Base cost: US$1.4 million).

3.3 Countrywide, the population component will:

(a) Provide institutional support for implementation of the national population policy and the national FP/IEC strategy by financing: the provision of short- and long-term population, FP, IEC, O&M and sectoral specialist services; the training of FP program middle-level managers; facilities rehabilitation; provision of vehicles, office equipment and supplies (Base cost: US$1.6 million).

(b) Increase the demand for, availability, and quality of FP services by financing: strengthening of AMPPF's five Regional antennae and opening of two new ones; integration of FP delivery into MCH; IEC/FP specialists services; provision of vehicles; contraceptives IEC/FP material; training; establishment of a fund (POPFUND) to finance public, private and NGO innovative activities in population, IEC, FP, female promotion, and operational research, surveys and studies (Base cost: US$12.5 million).

3.4 The rural water supply component, in the Regions of Kayes, Mopti, Koulikoro and Segou, will:

(a) Increase the rural population's supply of safe drinking water and support the Government's policy of community financial and technical water management by financing: the construction of about 385 modern rural water points in the Districts of Kenieba and Bafoulabe (Base cost: US$8.5 million); the rehabilitation of some 500 existing water points on a priority basis (Base cost: US$1.2 million); and studies (Base cost: US$0.3 million).

(b) Combat iodine deficiency by financing the supply, installation and evaluation of iodine modules in about 1,500 existing and new water points (Base cost: US$1.3 million).

The project is expected to be completed by June 30, 1997.

B. The Health Component

1. Increasing the Coverage and Quality of Health Services

3.5 To alleviate the constraints on access to and quality of basic health services, the project will assist the Government in implementing its District-based health development program (para 2.31) in the capital area of Bamako and in the four Regions mentioned in para 3.1 (a). In doing so, the project will help MSPAS to concentrate on its key management and support functions, while supporting the capability of local communities to extend and manage the network of basic health centers. Specifically, this sub-component will, in each District selected (a) expand PHC by supporting the creation of network of Community Health Centers (ComHCs) (paras 3.7-3.12); (b) improve the quality and utilization of primary and referral services, which will be provided, respectively, by these ComHCs and by District Health Centers (DHCs) (paras 3.14-3.15); and (c) establish District Health Teams (DHTs) to manage the District health systems, and ensure that they receive adequate support from Regional Health Teams (RHTs) (paras 3.16-3.18). Annex 3-2 describes, for each level of the proposed system, the entity responsible and its staffing, functions and operational instruments.

3.6 Proposed approach. The project will be based on the principles of population-based planning, community empowerment, and separation of primary care, referral and management functions. It will provide support to 17 Districts (out of 29) in the four Regions and to four Districts (out of six) in Bamako. The assumed eligibility rate of 60% is based on observed contributive capacity and management capabilities. To be selected, the Districts should meet the following eligibility criteria: (a) a five-year District Health Development Plan (DHDP), specifying the District's health status and issues, health strategy, and investment/recurrent financing plan, has been drafted in accordance with an agreed framework, endorsed by the District administration and approved at the national level by a Ministerial Project Monitoring Committee (para 4.4); at least one ComHC within the District is operational, as measured by agreed upon technical and financial performance criteria; (c) the District's Local Development Committee (LDC) has made a formal commitment to spend in support of the DHDP at least 7% of revenues from the Local Development Tax (corresponding to their estimated average share of the costs); and (d) the District Health Team, consisting of personnel already based at the District level, has been selected and is adequately staffed. Under the project, the Regional Health Directorates will assist the candidate Districts in meeting the conditions of eligibility and in implementing their DHDP. The DHDPs (including a base line survey, (para 4.8 (a)) for the Districts to be assisted during PY1 will be ready by Project Effectiveness. Annex 3-3 describes the framework for District Health Development Planning; and Annex 3-4, the performance indicators agreed with Government for the Community and District Health Centers; Annex 3-5 shows the population covered by the ComHC program.

3.7 Establishing a network of ComHCs to provide PHC. In the selected Districts, health services will be brought closer to the population and made more responsive to their needs by supporting the creation or reinforcement of about 120 urban/rural ComHCs and by encouraging community participation in their management and in the promotion of public health and self-care.

3.8 Under the DHDP, which will be approved with IDA each year in a consolidated form, the DHT will guarantee to eligible communities a sustained minimum package of basic health care services if the community agrees to support the remaining recurrent costs. The norms and standards to be applied in ComHC staffing (2 or 3 staff), type and number of services offered, facility planning, and equipment have been tailored to the communities' ability to sustain the recurrent costs. Sector work and ongoing experiments have shown that the proposed cost-sharing arrangements can succeed. These arrangements typically involve a well-defined but flexible mix of (a) allocation from the Local Development Tax equivalent to the nurse's salary (the 7% mentioned in para 3.6); (b) the charging of a fee based on various possible formulae to cover other operating costs; and (c) sales of drugs to patients. This financial framework is described in detail in Annex 3-6.

3.9 To break even, a 3-staff ComHC should collect annually CFAF 2-2.5 million in revenues, corresponding to 4,000-5,000 visits at a charge (combination of yearly membership, fee per episode, etc.) of CFAF 500, or half the charge for twice as many visits. In addition, EDs will be sold to patients with a small profit margin determined by the local health committee (except for high-priority items such as vaccines, contraceptives, medications against tuberculosis and leprosy, which will be subsidized). The cost of drugs is estimated at about CFAF 400 per episode once the pharmaceutical sector is rationalized. This total level

of cost recovery is realistic, given that total private health expenditure are presently estimated at CFAF 2,400 per capita and that the above corresponds to a conservative utilization rate of 0.4-0.5. However, to initiate the process, the LDC will, for a period to be determined on a case-by-case basis, finance the equivalent of the nurse's salary on a decreasing basis until financial balance is fully reached, at which point LDC support will be shifted to new ComHCs. UNICEF will conduct operational research on the best way to provide performance-based compensation for staff paid by the communities. Even when well managed, some of the poorest ComHCs (no more than 10%), might require permanent LDC support. These decisions will be made at the yearly DHDP review.

3.10 The conditions for community eligibility will be (a) previous selection of the District where the community is located for project support; establishment of a Health Committee representing at least 5,000 inhabitants and up to 15,000 within a radius of 15 km; (c) evidence of community initiative, such as construction of a primary school; and (d) contribution of 50% toward the cost of rehabilitation (estimated at US$4,500 per ComHC) or construction (estimated at US$20,000) of the facilities, which will not exceed 124 sq meters; this is equivalent to a range of US$2.0-0.7/person for a new center and is already working in KBK. To achieve the 50% target, the communities will be encouraged to include in their participation their labor, ad hoc allocations from local governments or contributions from NGOs--an approach successfully initiated under the ongoing Education Sector Consolidation Project (Cr.2054-MLI). Sustainability is discussed in para 3.54. The proportion of communities expected to receive project assistance is about 60% of the potentially eligible points in Phase 1 area and 40% in Phase 2 area (starting one year later).

3.11 Following an information/sensitization campaign conducted by the District's community development agents, local community applications will be screened at the District and Regional levels and approved for each District at the central level by a recently created Project Monitoring Committee, for inclusion in the yearly ComHC program. Simple agreements specifying the obligations of the communities and the DHT will be signed by representatives of both parties. Project contributions toward the cost of the investment will be released by MSPAS in tranches upon satisfactory completion of pre-agreed phases (maximum of 4) and technical requirement certifications by the Ministry and CEPRIS. A preventive maintenance system will be established at regional and central levels (paras 3.18 and 3.28). Experience with community mobilization will be examined each year during joint government/IDA reviews. The program is described in Annex 3-7.

3.12 The ComHc program will be based on community participation at three levels. First, the ComHcs will be managed under the supervision of Local Health Committees, which will work with the DHT in planning, implementing and monitoring the program. Second, a training system, involving successively the Regional, District, and community levels, will equip the ComHC to assess the community's health and nutrition status, monitor the growth of children, and address local health problems through IEC on appropriate practices (in FP, hygiene, child care, nutrition, use of EDs, sanitation, water-point maintenance) and through local initiatives. Third, the ComHcs will promote self-care by operating pharmacies to supply the village with EDs ranging from chloroquine to contraceptives. During negotiations the Government gave assurances that it will apply the criteria agreed for selection of the Districts and communities to be supported under the project.

3.13 To further improve access, at least in the urban areas, promote employment among medical graduates (and thus free public resources which could be channelled to health care for the poor), the project will provide incentives to the development of private medicine. First, physicians will be able to be contracted by the Districts and communities to provide integrated care in the framework of an association ("Convention") with the Government--an approach already tested in Sikasso Region. Second, young medical graduates will be eligible for financial assistance and technical guidance to establish their own practice under a line of credit opened under the ongoing Education Sector Consolidation Project. Third, the Government has recently revised its legislation to liberalize medical fees, and to provide more favorable incentives and technical specifications for establishing private medical practices and pharmacies.

3.14 Improving the quality and utilization of health services. Under this sub-component, primary and referral care will be clearly differentiated and placed under the respective responsibility of the ComHCs and the DHCs. A minimum package of health services 1230`defined and rigorously applied for both levels. At the PHC level, the package of services (curative, health IEC, MCH/FP, immunization, pharmacy) provided by the ComHcs will take into account the local epidemiological situation as well as public demand. Using training modules, already developed on the basis of tested treatment protocols, staff will be trained to provide integrated care. Quantified utilization targets have been agreed for the annual reviews. Poorly performing ComHC will receive intensified supervision/assistance from the District unless the DHT and the ComHC's Health Committee jointly reach the decision to close it down. However, the sharp interest expressed by the communities, and the prudent pace of implementation proposed (an average of 1.2 ComHC to be opened each year in each District) suggest that these cases will be rare. Conversely, in more affluent communities the minimum package could be expanded and staff upgraded (e.g., by recruiting a physician) as long as the community could bear the full incremental cost. Thus, the system will be based on a combination of needs and effective demand, depending largely on the satisfaction of its clients and its responsiveness to their needs.

3.15 At the referral level, the DHCs will be staffed with existing Government personnel and paid out of the public budget. Service fees will be charged and drugs will be sold at cost. The existing DHCs will be strengthened to offer referral consultations (pregnancies with complications, an important safe motherhood feature), medicine, surgery, laboratory, radiology, dental care and ophthalmological services. In addition, one of every four ComHCs will be equipped to offer limited referral services (such as microscopic examinations) to the surrounding ComHCs. These "enhanced ComHCs" will, typically but not necessarily, be the sub-district health centers.

3.16 Providing District and Regional managerial support. Under the new decentralized system, (a) in each selected District, a District Health Team (DHT) will be created to manage the District Health System; and (b) in each project Region, a capacity will be created at the Regional level to support District-level operations.

3.17 The District Health Team (DHT), which will be constituted (as a condition of eligibility for project support) from Government personnel available in existing DHCs or Regional Directorates, will report to the LDC and the

Regional Health Officer. Its main responsibilities will be: (a) programming and budgeting, including preparation of the DHDP, a detailed implementation plan to increase coverage and gradually integrate services, a budget and financial plan, and an annual report; (b) the management of physical resources, especially drugs (purchased from the Regional or central PPM stores, UMPP or other sources, stored and sold to the District hospital and the COMHCs), financial resources (preparation of financial reports and guidance to ensure the financial viability of the ComHCs), and human resources (staffing plans for both the civil servants and locally recruited District health staff under the DHDP, and supervision of staff); (c) the training of ComHC staff in integrated, preventive and curative care (including FP and simple management skills) based on the treatment protocols, and with participation from already operational ComHCs; additionally, the DHT will organize workshops (on a quarterly basis for two years, then twice a year) on implementation issues and experience; DHT will also provide regular supervision of the ComHCs based on the training and visit system; and (d) social mobilization by two community development agents who will be part of the DHT. These agents will be trained by UNICEF field staff in mobilization techniques already under experimentation. Downstream, the DHT will reach out to the unserved communities through an Infirmier d'Etat, based in each sub-district and equipped with a motorcycle, who will also assist with ComHc supervision. Upstream, the DHT will receive support from the Regional level.

3.18 In the four project Regions and in the capital area of Bamako, the project will build Regional capacities and establish the mechanisms needed to effectively support District health operations. This support will focus on (a) program management: the Regional Health Team (RHT), drawn from staff of the existing Regional health Directorates, will assist the Districts in meeting the eligibility conditions, preparing the DHDPs and ensuring their implementation; it will organize exchanges of experience between Districts, appoint the DHT members, and review each District's annual report and its program for the following year, prior to submission to the Ministerial Project Monitoring Committee for approval; (b) resource management of (i) staff and other resources (establishing with the assistance of CERPOD a Management Information System (MIS) to collect and analyze, for the purposes of monitoring, evaluation and redeployment, such data as personnel profile and history, essential drug availability and cost, utilization rates, cost-recovery performance); (ii) physical resources (maintaining the physical inventory system and systematizing equipment maintenance, assisting the Regional pharmacist in promoting the essential drug policy, developing local maintenance and repair capability); and (iii) financial resources (assisting the DHTs in applying the accounting guidelines to be developed by DAF by the first joint annual review in November 1991); and (c) support to the District community development agents. As the Malian teams are not yet familiar with some of the approaches to be taken under the project, in each project Region UNICEF will provide outside the project the services of five public health specialists to the concerned RHTs to help put the new system on track. Also complementary to the project will be a major USAID- and UNICEF-supported campaign focusing on child survival practices, including breastfeeding and oral rehydration techniques. Details are in Annex 3-6. In Annex 3-8 is a description of the proposed management of physical resources; financial objectives are set out in Annex 3-9. All of the administrative reforms described in para 3.5 through 3.18 have been formalized and implementation has begun in a number of Districts (para 3.32).

2. Improving the Efficiency of Resource Use

3.19 Strengthening sectoral planning and operational capabilities. To facilitate implementation of the proposed health system in the context of general government decentralization (para 2.31 (a)), the project will (a) reinforce the planning function of the Ministry, recently transferred to the Direction Administrative et Financière (DAF) (para 3.20); and (b) support the development and use of operational guidelines for the District health system (para 3.21).

3.20 Each year, DAF, in liaison with the Directorate of Public Health (DNSP) and the Directorate of Social Affairs (DNAS), will prepare for a joint Government/donor review a work plan for the sector, including project and non-project activities. The plan will take stock of experience gained during the previous year relative to intermediate objectives as set in the national health strategy, and will propose revised objectives and approaches as needed, including studies and research action proposals.

3.21 Logistical and material support will be provided for the development and use of operational guidelines by DAF/DNSP/DNAS. This task is already underway with technical assistance from a multi-national team (American, Belgian, French, German and UNICEF specialists) based in and coordinated by DNSP under parallel agreements. It involves an iterative process analyzing the Malian experience with health service delivery, especially NGO and community initiatives, and building on the lessons learned to develop norms and procedures for providing basic and referral services by program and for ComHC, DHC and DHT management. The guidelines will be tested as a planning/programming/evaluation device in two Regions in PY2, five in PY3, and the whole country in PY4.

3.22 Improving the productivity of health personnel. The project will (a) provide guidelines, training and supervision for service delivery and (b) at the central level, help MSPAS's Administrative and Financial Directorate (DAF) to rationalize staff deployment, improve manpower management, and enhance the status of the health professions. The training modules have been developed with USAID assistance on the basis of the operational guidelines prepared in the KBK Districts by observing the most commonly performed tasks in a ComHC. This training will be provided by the Regional Directorates to the Districts, and by the Districts to ComHC staff. The initial training will be reinforced by intensive supervision, based on the T and V system. It will be enriched through the lessons learned during supervision. Recruitment of consultants is under way for a major personnel study, involving a detailed Census of health personnel, preparation of staffing plans (taking into account the existing "cadres organiques") and recommendations to improve MSPAS's organization, management and financing (TORS in project file). The study will produce a Manpower Development Plan (MDP) to be discussed with IDA and to serve as a basis for the Regional staffing plans. Through an iterative process between the MDP and the Regional plans, all major staff deployment imbalances are expected to be corrected by end of PY3.

3.23 The recommendations of the personnel/financial study will help modify the preliminary targets and modalities for a voluntary departure program agreed with the Government during preparation of the proposed Structural Adjustment Lending (SAL). They will also include incentives to motivate personnel on the basis of performance, and to improve career prospects, especially for the District Medical Officers, whose salary levels do not match their new responsi-

bilities. The personnel statistics collected will be computerized, and the three personnel data bases (Ministries of Finance, Health, and Civil service) will be harmonized and integrated into the Management Information System (para 3.18). In parallel, two studies will be conducted: one on hospital efficiency (ongoing as part of bilateral cooperation with France), covering financial as well as technical organizational and staffing aspects, and the other on the labor market for health graduates. During negotiations the Government gave assurances that it will review the hospital and labor market studies and action plans with IDA by September 30, 1991, and implement the agreed recommendations within six months thereafter.

3.24 Ensuring the availability and affordability of essential drugs (EDs). A regular supply of low-cost quality drugs is a key element in improving service utilization and cost-recovery performance. Therefore, this sub-component will (a) help the Government speed up implementation of the reform of the pharmaceutical sector undertaken under the first Health Development Project (Cr.1422-MLI) and the Public Enterprise Project (Cr.1937-MLI); and (b) strengthen MSPAS's Pharmacy/ Laboratory Division to enable it to monitor progress in implementing the reform. The drug policy reform aims to make quality drugs available throughout Mali within a year, to reduce the cost of the average prescription by 2/3 to 3/4 through implementation of an EDs policy, and to ensure the sustainability of the system by gradually developing a well-regulated, multiple-channel, open drug import and distribution network to reduce dependency on a single source.

3.25 To achieve these objectives, the Government has initiated implementation of a far-reaching pharmaceutical reform Master-Plan. First, recent legislation limits exemption from import taxes and duties to the 199 approved EDs (the list of which can be revised every other year); under the SAL, differentiated import taxation will be used to discourage the consumption of commercial brands. Second, PPM's import monopoly has been lifted, and regulations governing the opening of the drug import market to other operators (private sector, NGOs, etc.) are being finalized. Third, a 3-year Contrat-Plan redefining the respective obligations of Government and PPM as the official vehicle for implementing the new EDs policy is at an advanced stage of preparation, based on detailed management and financial studies. The draft document commits PPM to buying EDs only in generic form and by competitive bidding, phasing out the import of all EDs brand equivalents over a two-year period, including the 350 brand equivalents to the 60 most critical EDs by end of 1991 (other operators will be allowed to import brands), to limiting to 15% the preference margin granted to UMPP, the local drug producer whose prices have been twice as high as those on the world market, to reducing its staff of 700 by at least 300, to suspending its functionally and financially marginal activities, and to introducing greater transparency into its financial operations. Two areas still under study are PPM's internal price system which will be revised to reflect its new cost structure, and the modalities for PPM to retain 8 retail sales points (one per Region) out of 98 to offer customers a low-cost alternative in a context of liberalized drug prices (para 3.27). Fourth, bids have been launched by PPM for a major purchase of EDs which will bring its stock to a one-year level. Fifth, a technical and financial diagnosis of UMPP is underway and will serve as a basis for its restructuring. Sixth, with the assistance of UNICEF and USAID, MSPAS has launched an information and training program on the benefits available and use of EDs for opinion leaders, the general public, and prescribers. Seventh, only generic EDs will be provided in government-run and project-supported community facilities. Issuance of new drug import regulations and the

signing of a Contrat-Plan for PPM (including an acceptable plan for restructuring UMPP) will be conditions of credit effectiveness.

3.26 At negotiations the Government gave assurances that during project implementation three indicators will be met to monitor (a) PPM's competitive bidding for the purchase of generic drugs: the Bamako price paid by PPM for EDs will not exceed the CIF Bamako price offered by UNIPAC (UNICEF's Procurement and Assembly Center); (b) PPM's margin: a revised margin, based on PPM's new cost structure, and designed to encourage the sales of EDs, will be agreed with IDA and specified in the Contrat-Plan and implemented within six months; and (c) drug availability: at least 55 out of the 60 most critical EDs will be available in every project District outlet by November 1, 1991. Compliance will be controlled by the Pharmacy/Laboratory Division of MSPAS (with technical assistance) for the Government, and by UNICEF (random checks) at the field level. The Pharmacy/ Laboratory Division will be reinforced to: supervise the reform; promote the EDs policy; inspect public and private pharmacies; broadly publicize the price at which EDs will be sold to retailers. PPM's accounting and stock inventory systems will also be strengthened. A pharmaceutical sector management specialist, has been recruited under a twinning arrangement with a specialized institution, to monitor and assist the reform process through a combination of short and long-term missions (TORs in project file).

3.27 The new drug procurement and distribution system will be as follows. A more efficient PPM could become a joint procurement agency, placing multi-year drug orders for public as well as private distributors. Conversely, PPM's failure to adjust would lead to its collapse. In any case, drugs will become available in Mali and customers will be protected through quality controls. In distribution, the private sector is also expected to take over an increasing share of the market in the more affluent Regions (Bamako, Sikasso, Segou and Koulikoro) and down to the District level. PPM will gradually become a wholesaler. Below the District level, drugs will be offered initially through PPM's sub-district retail points, and gradually through community-run sales points and "dépôts" and the ComHCs as they are created. PPM will only operate warehouses down to the District level (and eventually to the Regional capitals only), and distribution will be flexibly organized by the District medical officer. The price of all drugs was be liberalized in private pharmacies as of January 1, 1991. For the community "dépôts" and the ComHCs, the final retail price will cover distribution cost plus a small margin, determined by each Health Committee. Details are in Annex 3-11.

3.28 Developing a facility planning and maintenance capacity. In order to strengthen Regional and central capacity to maintain and manage existing infrastructure and to plan for expansion and its financing through increased local participation, the project will improve MSPAS's facility and equipment inventory system. At the central level, at CEPRIS, a computerized inventory of existing infrastructure will be developed, standards for construction and equipment will be updated, procurement for medical equipment will be rationalized within the existing Malian legislation, and regular maintenance capacity will be reinforced. This will facilitate budget preparation, minimize replacement costs and enhance the quality of health services. Operating procedures and additional equipment will allow SEPAUMAT to improve its equipment maintenance capability. At the Regional level, major DHC repairs will remain the responsibility of CEPRIS/SEPAUMAT, while CEPRIS will be responsible for sensitizing communities to the need for regular maintenance of ComHCs. Such maintenance will be entrusted to skilled labor under the control of the RHT.

3.29 Alleviating the sector's financial constraints. To mobilize the resources required to improve the coverage and quality of health services, this sub-component will rationalize and broaden sectoral public and private financing.

3.30 Regarding public health financing, as part of the cross-sector effort to improve public resource management, support will be provided to MSPAS's DAF. The personnel/financial study (para 3.23) will help DAF to revise the health budget nomenclature and make it more functional and transparent, to develop and implement budgetary norms and a cost and expenditure monitoring system, to prepare consolidated budgets and financing plans integrating public, private and external contributions, and to define the key financial indicators to be included in the sector's Tableau de bord for the annual reviews (para 4.10). Under the SAL (1990-92), the Government will gradually increase the sectoral share of its total recurrent budget from 6.6% (1990) to 8% by 1992, with a 65:35 wage non-wage ratio (targets by type of expenditure and level will be agreed during PY1 on the basis of the revised budget nomenclature). Following completion of the SAL, and as indicated in the Letter of Development Policy, the Government will continue to increase of the share of health in its recurrent budget to reach 9% (as recommended by WHO) by 1995 and will apply the allocation by level and type of expenditure agreed with IDA on the basis of the study. During negotiations, the Government gave assurances that each FY as of 1991 it will review with IDA, prior to approval, MSPAS' draft investment budget, as well as its three-year rolling investment program, based on the agreed criteria (in Annex 3-9).

3.31 This sub-component will also help the health system to capture the household expenditures at the community and District levels and to combine the public and private sectoral resources into an equitable and sustainable financing framework. This framework, which will be flexibly adapted to meet the particular circumstances of each District, will be based on the principles outlined in Table 1 below. Alternative cost recovery formulae (e.g., per episode, per visit, annual fee) will be offered to the communities, all falling within sustainable ranges (para 3.54). The DHTs and the Health Committees will closely monitor the financial affordability of the system, and when faced with signs of reluctance on the part of potential users of an otherwise well-managed ComHC, will examine whether a solution lies in a reduction of the minimum package of basic care or in an increase in the allocation from the Local Development Tax. The community will select its poorest members eligible for free care (only 4% in the Tombouctou experiment vs 30%, when selected by government services). A local Research Institute (Institut National de Recherche sur la Santé-INRS) and the Social Dimension of Adjustment (SDA) program about to start in Mali will monitor the impact of cost recovery.

TABLE 1

	INVESTMENT	SALARIES	NON-WAGE OPERATING COSTS	DRUGS	MISCELLANEOUS
DISTRICT HEALTH TEAM (MANAGEMENT)	GOV'T THROUGH EXT.FINANCING (PROJECT)	GOV'T	GOV'T	--	GOV'T
DISTRICT HEALTH CENTER (REFERRAL)	GOV'T THROUGH EXT. FINANCING (PROJECT)	GOV'T	USERS (FEES)	USERS	GOV'T
COMMUNITY HEALTH CENTER (PHC)	GOV'T THROUGH EXTERNAL FINANCING = 50% COMMUNITIES + LOCAL DEVLPT TAX+NGOs = 50%	NURSE = LOCAL DEVLPT TAX OTHER 2 STAFF = COMMUNITIES	USERS (FEES)	USERS	COMMUNITIES

3.32 A decree formalizing the financial and administrative framework for the District health system was recently approved . Annex 3-6 gives details on the financing framework.

C. The Population Component

3.33 Disseminating and operationalizing the population policy. This sub-component will help the Government to implement its population policy. Following the national debate of July 1990, a Presidential statement on population is expected by early 1991. Under the aegis of the Ministry of Plan, a multi-sectoral commission on human resources and population will then be created, with an operational arm, tentatively named the Bureau National de Coordination des Programmes de Population (BUNACOP). BUNACOP will prepare an action-plan to be presented at a donor's Round Table by end-1991. The project will, first, assist the Ministry of Plan in completing the analysis of the 1987 Census results and improving population data collection/processing. Second, it will finance, for each Region, two seminars (PY1 and PY2) run by the Population Unit and aimed at sensitizing administrative, political and religious leaders on the new policy. Third, the project will support the establishment and efficient operation of BUNACOP. Finally, it will complement the support already provided by ILO/UNFPA by funding the services of sectoral specialists to prepare projects under the action-plan. A mechanism will also be provided to finance a trial experimentation of these projects (para 3.42). The full action-plan, or parts of it, could form the basis for a free-standing IDA-supported population project. At Annex 3-12 is a detailed description of the population component.

3.34 Strengthening local MCH/FP capabilities. MSPAS's MCH/FP strategy (para 2.34), calls for an all-out effort involving the public and private sectors, NGOs and donors and a stepping up of IEC and FP activities. Hence, there is need to reinforce local capabilities to plan, manage, coordinate and evaluate FP programs (the responsibilities of the Division of Family Health-DSF), to define and monitor an IEC strategy (National Directorate of Social Affairs and AMPPF), and to deliver IEC and FP services (Government, NGOs and private practitioners). To that end, the project will offer an in-country, Mali-specific training course for some 250 managers of MCH/FP/IEC public, as well as private programs. This program, which will also include short-term specialist services and a study tour, will be designed and carried out under an umbrella-contract with a specialized institution. DSF's recently created evaluation capacity will be reinforced, while the central/Regional offices of DNAS and MSPAS's Health Education Division will be re-equipped to allow them to play their role more effectively. Yearly seminars will be organized by DSF to compare the cost effectiveness of different ongoing IEC and FP approaches.

3.35 Increasing the demand for, availability and quality of FP services. This sub-component will, in the context of the Government's emphasis on integrated MCH/FP, support MSPAS's, local, NGO and private efforts to (a) promote IEC so as to stimulate demand for FP services where it is weak, especially in the rural areas (paras 3.36-3.38); satisfy unmet demand where it exists, using different strategies for urban and rural areas (paras 3.39 and 3.40); and (c) improve the quality of FP services (paras 3.39 and 3.41). To achieve these objectives, the project will rely on two tools: (i) a core program of thoroughly appraised priority investments, and (ii) a donors' fund

for population activities (POPFUND) (para 3.42), which will flexibly finance, on a competitive basis, sub-projects that have been identified but require more preparation or are of an experimental nature but warrant expansion, or have yet to be developed as the strategy is implemented.

3.36 The project will stimulate demand for FP services through an all-out IEC effort. First of all, to reduce the constraints on demand for FP services, MSPAS recently issued internal guidelines (a) authorizing all trained medical personnel (including assistant-nurses and midwives) to prescribe and distribute hormonal and other contraceptives, while community agents will be allowed to resupply women previously screened at a District or sub-district facility; and (b) reminding public and private health/FP personnel that there is no legal basis for denying access to FP services to unmarried women or to women who do not have parental or marital consent. Against this background, this sub-component will (i) help to refine the messages to be delivered and the channels to be used, depending on the target group; (ii) support both formal and non-formal types of IEC and family health education. The population policy has identified three priority target groups for IEC: women of reproductive age (15-49 years), especially young mothers, men (who tend to be more conservative) and young people (among whom the growing number of illegal abortions and early pregnancies pose a serious health problem). During PY1, a beneficiary assessment of the underlying causes behind the low demand for FP services in different parts of the country will be conducted. Taking into account the results of its findings, a Malian task force (DNAS, AMPPF, the Health Education Division, DNAFLA, the NGO Coordinating Committee, and the medical profession associations), assisted by short-term IEC and FP specialists, will evaluate the existing IEC messages for appropriate emphasis, congruence and maximum impact. Focused tests of the improved messages will then be conducted, using the women's and youth associations' network, the national trade Union for men, and the rural functional literacy centers.

3.37 Once the messages have been refined, posters, brochures, video films and audio cassettes will be produced. DNAFLA's Materials Production Unit of the Ministry of Education will be reinforced for that purpose. A media campaign, using radio time, newspaper coverage, and television clips will be prepared with the assistance of local media consultants based on the inputs of the task force and launched in PY2. The existing family IEC education program for basic and secondary education will be improved for clarity and simplicity by the Health Education Division and the National Pedagogical Institute (IPN) and will be introduced in the teacher training colleges by PY2 and in the schools by PY3. Every school will receive a family health education kit (total: 2,000). Family health education training will be provided to 1,000 experienced teachers, and reinforcement will be provided by AMPPF mobile video units.

3.38 AMPPF has traditionally been the lead agency for IEC. Its five Regional antennae will be strengthened with contractual staff, equipment, materials and mobile video-units. Additionally, to ensure countrywide coverage, two new antennae will be created in Gao and Tombouctou. Dissemination of the IEC message will be carefully coordinated with the introduction of FP into the public health facilities or its development through the private sector and will follow the Regional phasing of the health component. Besides this core program, other IEC activities, using eight different

channels, will be eligible for financing under the POPFUND following satisfactory focus testing (para 3.42). Breastfeeding as a natural FP technique and sound nutritional practice will receive major emphasis.

3.39 To satisfy unmet demand for FP within the context of integrated MCH/FP the project will create additional complementary channels and distribution points and broaden the choice of contraceptives to match individual needs and preferences, taking into account socio-cultural, logistical and economic considerations. In urban areas: (a) the urban health centers included in the health component (about 64) will gradually expand the menu of FP options (pills, condoms, spermicides, injectables in the ComHCs, plus eventually surgical services in the DHCs) as part of the minimum and referral care packages; (b) FP, hitherto largely limited to the 46 Districts, will be extended down to the 262 sub-district health centers countrywide. This will be done through the training by DSF of some 400 nurses and midwifes in integrated MCH/FP on the basis of training modules already successfully developed and tested. To improve the quality of service delivery, which is essential to increase the number of new acceptors and of regular users, the training will cover, inter alia, the identification of specific fertility problems, monitoring the potential side effects of different types of contraceptives, and managing a regular supply of FP products. Standardized equipment will be provided through the POPFUND.

3.40 In rural areas, for the first time, FP will be made available through the PHC system, with the opening under the health component, of rural ComHCs (about 56) offering integrated health and FP services. Furthermore, outreach activities will ensure that the centers respond adequately to fertility-related needs of the local population. Other FP activities (community-based distribution, social marketing, and FP clinics), relying heavily on the private sector, are under experimentation and will be eligible for expansion under the POPFUND (para 3.42). As indicated in the Government's Letter of Development Policy any public, private or non-governmental institution or individual that meets the agreed criteria will be authorized to provide IEC and FP services in line with the national MCH/FP strategy.

3.41 The provision of contraceptives (pills, IUDs, condoms, injectables, vaginal tablets and spermicides) will be the final element in the core program. Given the socioeconomic, technical and logistical constraints, projections of contraceptives needs were made (Annex 3-12), using a more conservative CPR target than in the population policy (8.5% vs. 13%). Each year, DSF will organize a meeting of the project cofinanciers and the other key donors, UNFPA and WHO, to coordinate and contraceptive inputs and streamline the number of brands purchased. The efficient computerized stock-management and distribution monitoring system recently developed by DSF will be expanded to serve the whole country.

3.42 The fund for population activities (POPFUND) (US$5.0 million, to be financed by IDA, USAID, EDF and the Republic of Germany, plus possible TA contribution by UNFPA), will be a flexible mechanism to provide grant financing to public, non-governmental and private operators for implementation of the population policy, while facilitating aid coordination and monitoring. The criteria and rules under which the POPFUND will operate have been defined and are being translated into legal statutes. They include (a) types of sub-projects financed: population (up to 10%), IEC (up to 25%),

MCH/FP (up to 30%), WID (up to 25%), and operations research, surveys and studies (up to 10%). About 20 sub-projects (listed in Annex 3-12), potentially equivalent to twice the amount of the fund, have already been submitted for financing; (b) eligible recipients: public, parastatal entities, firms, NGOs and private individuals (full grants for the first two, and matching grants up to 75% of costs for the latter three); (c) indicative ceilings by type of sub-project, category of recipient, and Region; (d) expenditure categories: local and international consultancies (including twinning arrangements with international NGOs) rehabilitation of buildings, vehicles, supplies, materials, media coverage, critical operating costs; (e) management arrangements: an autonomous entity placed under the authority of a joint Steering Committee consisting of representatives from public, private and NGO sectors (the BUNACOP) for one-third each, and equipped with a strong Technical Secretariat (five Malians: a Director, a physician with an FP background, an IEC specialist, an accountant and a procurement specialist; and an internationally recruited Administrator); provision of counterpart funds by the implementing agency; (f) controls: semi-annual audits by a firm acceptable to IDA; IDA prior review for sub-projects above US$100,000, ex-post review below that threshold; biannual field supervision of all projects by UNICEF, plus selective supervision by IDA; and (g) legal framework: each sub-project will be pre-screened by the Technical Secretariat of the POPFUND on the basis of a brief and approved by the Steering Committee on the basis of a full report following an approved format; a contract will be signed between the implementing agency and the fund; and funding will be granted for three years and be renewable on the basis of performance as determined by quantified indicators. Disbursements under the POPFUND will be conditional on (a) creation of BUNACOP (para 3.33), and (b) establishment of POPFUND management and staffing arrangements fully satisfactory to IDA (including full appraisal of at least one sub-project in each category).

D. The Rural Water Supply Component

3.43 To reinforce the impact of the health component and maintain at least the current service level while keeping pace with population growth, more modern water points need to be created in the four project Regions and existing installations kept functioning and adequately maintained. The rural water supply component aims to (a) support the Government's strategy of involving villagers financially and technically in investment and especially in maintenance services; (b) strengthen the project identification, preparation, implementation and supervision capabilities of the Direction Nationale de l'Hydraulique et de l'Energie (DNHE) of the Ministry of Industry, Water and Energy; (c) train village pump repairmen and establish a decentralized village-based maintenance network; (d) ensure the sustainability of water installations; and (e) implement an iodination program to combat goiter. A detailed description of this component is at Annex 3-13.

3.44 The village communities will make a significant contribution to this component. Boreholes will be drilled only after the villagers have contributed about US$400 (75% of the cost of the hand pumps); the villagers will be able to choose the site of the water point within the limits of technical constraints. The pumps will be maintained by village repairmen selected locally and trained under the project. All costs of labor and spare parts will be borne by the villagers, including those for construction of drains and drainage pumps and regular cleaning of the pump areas. Village

water committees, composed of women, will be expected to take full responsibility for the water point from identification through installation, commissioning and maintenance. A model contract between village communities has been developped. During negotiations the Government gave assurances that the contracts between the village communities and DNHE, defining community responsibilities and financial participation in the rural water supply component, will be signed and the cash contribution (CFAF 135,000 per water point) paid one month before arrival of the borehole siting team.

3.45 A village-based decentralized maintenance system will be established to ensure the sustainability of the water installation. The pump repairmen will be selected locally from among motor-bike repairmen and will undergo training through integration in the team of the firm selected to install the pumps. Each repairman will participate in the installation of at least 10 pumps. He will be provided with tools and means of transport, and will take care of 10-15 pumps in his area of operation. The village water committee is expected to select one pump caretaker to clean the pump areas; the caretaker will also be trained to make minor repairs. A large network of spare parts dépôts will be established; the distribution and sale of spare parts will be finally entrusted to the project unit for this component and eventually transferred to small traders. To ensure the immediate take-over of the pumps after installation, there will be no guarantee period; only obvious factory transport or pre-installation defects will be repaired by the project. At the time of commissioning of their water point, the villagers will be expected to immediately purchase a small stock of spare parts. This system of decentralized maintenance of water installation has been tested in the ongoing Rural Water Supply Project (Cr.1431-MLI/SF7) and has greatly reduced the need for the Government intervention and financial support.

3.46 This component includes a program to supply and install iodine modules in the KBK (Kita-Bafoulabe-Kenieba) Districts of Kayes Regions. This area has a high iodine deficiency prevalence, known to contribute to neonatal, infant and childhood mortality, and to hinder children's mental and physical development. As an experiment with five boreholes in Kati Region has proved, modules of resin fitted into boreholes slowly release iodine, thereby eliminating iodine deficiency within six months; no side effects were detected. In light of the experimental nature of this technique, the iodine modules will be installed in two phases: an experimental and evaluation phase for two years; and if results are positive, an expansion phase at a rate of 200 new water points per year (the 630 existing water points, the 385 still to be constructed in the KBK area, and the 500 to be rehabilitated under the project. Under the project, French bilateral aid will finance Phase I and, if conclusive, Phase II. This program will continue to be externally financed after end-1996.

3.47 Community development activities in this component will start some six months ahead of construction/rehabilitation of water points. Community development and health agents will be seconded from the project unit. They will inform the villagers about the objectives of the rural water supply component, get them involved in choosing the site of their water point, assist in establishing the water committees, and generally help them to gradually assume full responsibility for the operation and maintenance of their water point. Major themes of discussion will include the proper sanitation procedures to clean and drain the pump area, the importance of

maintenance and cost recovery, and the health benefits of safe drinking water. An agreement specifying the rights and obligations of all parties concerned with community development activities in the Districts of Kenieba and Bafoulabe was recently signed. Details are in Annex 3-13.

E. Project Coordination Unit

3.48 Project Coordination Unit (PCU). Each component will be implemented by the relevant Ministry Directorate (para 4.04), while project overall coordination and support will be the responsibility of the existing Project Management Unit, recently streamlined and reorganized into a Project Coordination Unit (PCU) to address the issues mentioned in para 2.39 (e). The PCU will essentially focus on planning/coordination functions and financial/procurement aspects. It will act as liaison with IDA and the other cofinanciers, and will also serve as the Permanent Secretariat of the Project Monitoring Committee (para 4.4), with responsibility for preparing its meetings, following up on decisions, and organizing the annual joint government-donors review meetings. The PCU will be specifically responsible for (a) supervising and monitoring project activities; administering project resources; (c) maintaining project accounts, preparing reimbursement applications, and providing necessary certifications for disbursement, including SOEs; (d) ensuring observance of IDA's procurement procedures; (e) reporting on progress in project implementation; (f) organizing yearly annual reviews with IDA and other donors and the mid-term review; (g) liaising with other government ministries and the donor community; and (h) ensuring adequate auditing of project activities.

3.49 Based on recommendations from an independent audit firm which conducted a study on administrative and management arrangements, the PCU staff will comprise, on a full-time basis: (a) a Project Director, (b) a Deputy Director in charge of project monitoring, (c) a procurement specialist (d) an accountant, (e) five Regional accountants to be posted in the RHTs, (f) support staff, and (g) short-term specialists, as needed, for preparation of bidding documents, external evaluation (for preparation of annual reviews and the mid-term evaluation), audits, and future project preparation. PCU's accounting system will be reinforced as recommended by the study. During negotiations the Government gave assurances that the positions of Project Director, Deputy Director, procurement specialist, and accountants (6) will be filled at all times by persons with experience and qualifications acceptable to IDA. By decree, PCU has recently being reorganized and adequately staffed. At Annex 3-14 is a detailed description of project coordination and management, including implementation responsibilities for each component. Criteria for the joint annual review are set out in Annex 3-15.

F. Project Costs and Financing Plan

3.50 At current prices, taking into account the country cross-sector disbursement profile and the six-year implementation period, the project is estimated to cost US$61.4 million equivalent (net of taxes and duties), with a foreign exchange component of US$41.7 million (68%). The base cost will be US$50.3 million (81%). Physical and price contingencies are estimated at to US$11.1 million (18%); the physical contingencies include 10% for physical investments and 5% for training, technical assistance and operating costs.

Price contingencies assume (a) a domestic inflation rate of 3% throughout the life of the project and (b) an international inflation rate of 3.9% p.a. during the first five years and 3.7% p.a. in the sixth year. The major assumptions made to obtain the cost estimates, as well as detailed project costs by component, cost category and financing source, are given in Annex 3-16. Cost estimates by component and by category of expenditure are shown in Tables 2 and 3 below.

TABLE 2

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

PROJECT COST SUMMARY PER CATEGORY OF DISBURSEMENT

	(CFAF MILLION)					(US$ MILLION)				
	LOCAL	FOREIGN	TOTAL	% OF FOREIGN EXCHANGE	% TOTAL BASE COST	LOCAL	FOREIGN	TOTAL	% OF FOREIGN EXCHANGE	% TOTAL BASE COST
A. HEALTH										
1. COVERAGE AND QUALITY OF HEALTH SERVICES										
SUPPORT TO 120 COMMUNITY HEALTH CENTERS	608.99	780.30	1,389.29	56	11	2.41	3.01	5.41	56	11
QUALITY IMPROVEMENT OF HEALTH SERVICES	831.10	1,047.24	1,878.33	56	15	3.28	4.14	7.42	56	15
ESTABLISHMENT OF 23 DISTRICT TEAMS	312.47	773.61	1,086.08	71	9	1.24	3.06	4.29	71	9
REGIONAL SUPPORT IN FIVE REGIONS	303.13	337.75	640.88	53	5	1.20	1.33	2.53	53	5
SUB-TOTAL COVERAGE AND QUALITY OF HEALTH SERVICE	2,055.68	2,918.90	4,974.58	59	39	8.13	11.54	19.66	59	39
2. INCREASING THE EFFICIENCY OF RESOURCE USE										
STRENGTHENING SECTORAL PLANNING	127.26	198.29	325.55	61	3	0.50	0.78	1.29	61	3
FACILITY PLANNING/MAINTENANCE	45.99	120.93	166.92	72	1	0.18	0.48	0.66	72	1
AVAILABILITY OF ESSENTIAL DRUGS	87.70	341.82	379.52	90	3	0.15	1.35	1.50	90	3
HUMAN RESOURCES DEVELOPMENT	0.50	67.21	67.71	99	1	0.00	0.27	0.27	99	1
HEALTH FINANCING	34.61	25.18	59.80	42	0	0.14	0.10	0.24	42	0
SUB-TOTAL INCREASING THE EFFICIENCY OF RESOURCE USE	246.07	753.43	999.50	75	8	0.97	2.98	3.95	75	8
SUB-TOTAL HEALTH	2,301.75	3,672.32	5,974.08	61	47	9.10	14.52	23.61	61	47
B. POPULATION AND FAMILY PLANNING										
1. INSTITUTIONAL STRENGTHENING	151.07	246.19	397.26	62	3	0.60	0.97	1.57	62	3
2. CORE IEC/FP PROGRAM	460.63	1,522.83	1,983.46	77	16	1.82	6.02	7.84	77	16
3. POPULATION FUND	697.49	482.57	1,180.06	41	9	2.76	1.91	4.66	41	9
SUB-TOTAL POPULATION AND FAMILY PLANNING	1,309.19	2,251.59	3,560.78	63	28	5.17	8.90	14.07	63	28
C. RURAL SUPPLY OF POTABLE WATER										
1. CONSTRUCTION OF 385 WATER POINTS	414.93	1,726.87	2,141.80	81	17	1.64	6.83	8.47	81	17
2. REHABILITATION OF 800 WATER POINTS	43.14	252.72	295.86	85	2	0.17	1.00	1.17	85	2
3. SUPPLY/INSTALLATION OF IODINE MODULES	16.65	315.12	331.77	95	3	0.07	1.25	1.31	95	3
4. STUDIES FOR FUTURE REHAB. EXTENSION	32.48	39.45	71.93	55	1	0.13	0.16	0.29	55	1
SUB-TOTAL RURAL WATER SUPPLY OF POTABLE WATER	507.20	2,334.15	2,841.35	82	22	2.00	9.23	11.28	82	22
D. PROJECT MANAGEMENT UNIT (INCLUDING MID-TERM REVIEW)	140.52	238.29	342.81	70	3	0.41	0.94	1.35	70	3
TOTAL BASELINE COSTS	4,222.66	8,496.35	12,719.01	67	100	16.69	33.58	50.27	67	100
PHYSICAL CONTINGENCIES	333.18	737.25	1,070.43	69	8	1.32	2.91	4.23	69	8
PRICE CONTINGENCIES	431.16	1,309.97	1,741.14	75	14	1.70	5.18	6.88	75	14
TOTAL PROJECT COSTS	4,987.01	10,543.57	15,530.58	68	122	19.71	41.67	61.39	68	122

TABLE 3

PROJECT COST SUMMARY PER COMPONENT

	(CFAF MILLION)					(US$ MILLION)				
	LOCAL	FOREIGN	TOTAL	% OF FOREIGN EXCHANGE	% TOTAL BASE COST	LOCAL	FOREIGN	TOTAL	% OF FOREIGN EXCHANGE	% TOTAL BASE COST
I INVESTMENT COSTS										
A CONSTRUCTION										
1. GENERAL CONTRACTS	977.14	1,935.40	2,912.54	66	23	3.86	7.65	11.51	66	23
2. SELF HELP	506.64	273.48	780.12	35	6	1.92	1.08	3.08	35	6
SUB-TOTAL CONSTRUCTION	1,483.78	2,208.89	3,692.46	60	29	5.82	8 73	14.59	60	29
B FURNITURE AND EQUIPMENT										
1. VEHICLES	-	462.39	462.39	100	4	-	1.83	1.83	100	4
2. COMPUTERS	-	9.94	9.94	100	0	-	0.04	0.04	100	0
3. NON-HEALTH RELATED MATERIALS	4.96	4.02	8.98	45	0	0.02	0.02	0.04	45	0
4. FURNITURE	109.85	88.95	198.80	45	2	0.42	0.35	0.79	45	2
5. NON-MEDICAL EQUIPMENT AND SUPPLIES	128.17	934.05	1,062.22	88	8	0.49	3.69	4.20	88	8
SUB-TOTAL FURNITURE AND EQUIPMENT	242.99	1,499.34	1,742.33	86	14	0.92	5.93	6 89	86	14
C. MEDICAL EQUIPMENT AND PHARMACEUTICALS										
1. MEDICAL EQUIPMENT AND SUPPLIES	-	5.08	5.08	100	0	-	0.02	0.02	100	0
2. HEALTH-RELATED MATERIALS	-	388.23	388.23	100	3	-	1.53	1.53	100	3
3. ESSENTIAL DRUGS	-	323.99	323.99	100	3	-	1.28	1.28	100	3
4. CONTRACEPTIVES	-	1,032.24	1,032.24	100	8	-	4.08	4.08	100	8
5. IODINE MODULES	-	294.90	294.90	100	2	-	1.17	1.17	100	2
SUB-TOTAL MEDICAL EQUIPMENT AND PHARMAC.	0.00	2,044.44	2,044.44	100	16	0.00	8.08	8.08	100	16
D. SPECIALIST SERVICES										
1. INT'L SPECIALISTS	-	805.15	805.15	100	6	0.00	3.18	3.18	100	6
2. TECHNICAL FEES	304.91	370.33	675.25	55	5	1.15	1.46	2.67	55	5
3. NATIONAL SPECIALISTS	572.53	-	572.53	-	5	2.32	0.00	2.26	-	5
SUB-TOTAL SPECIALIST SERVICES	877.44	1,175.48	2,052.92	57	16	3.48	4.65	8.11	57	16
E. TRAINING										
1. LOCAL MALIAN TRAINING	528.45	-	528.45	-	4	2.00	0.00	2.09	-	4
2. REGIONAL AFRICAN TRAINING	-	92.76	92.76	100	1	0.00	0.37	0.37	100	1
3. OVERSEAS TRAINING	-	95.09	95.09	100	1	0.00	0.38	0.38	100	1
4. TRAINING MATERIALS	-	246.50	246.50	100	2	0.00	0.97	0.97	100	2
5. TRAINING DEVELOPMENT AND EVALUATION	25.20	-	25.20	-	0	0.10	0.00	0.10	-	0
SUB-TOTAL TRAINING	553.65	434.35	988.00	44	8	2.10	1.72	3.91	44	8
F. POPULATION FUND	714.22	496.12	1,210.34	41	9	2.71	1.96	4.78	41	9
TOTAL INVESTMENT COSTS	3,872.08	7,858.42	11,730.50	67	92	14.62	31.06	46.37	67	92
PHYSICAL CONTINGENCIES	315.65	706.35	1,021.00	69	8	1.20	2.79	4.04	69	8
PRICE CONTINGENCIES	378.35	1,177.92	1,558.27	76	12	1.44	4.66	3.14	76	12
TOTAL INCLUDING CONTINGENCIES	4,566.08	9,741.69	14,304.78	68	113	17.46	38.50	56.54	68	113
I. RECURRENT COSTS										
a. VEHICLE OPERATIONS	56.48	208.60	265.08	79	2	0.22	0.82	1.04	79	2
b. EQUIPMENT MAINTENANCE	2.34	7.86	10.20	77	0	0.01	0.03	0 04	77	0
c. INFRASTRUCTURE MAINTENANCE	1.13	3.65	4.78	76	0	0.00	0.01	0.02	76	0
d. REPLENISHMENT OF MATERIALS/SUPPLIES	1.10	3.55	4.65	76	0	0.00	0.01	0.02	76	0
e. PER DIEMS	161.02	-	161.02	-	1	0.61	0.00	0.64	-	1
f. PRODUCTION OF RESEARCH/INFO MATERIALS	0.66	2.14	2.80	76	0	0.00	0.01	0.01	76	0
g. OPERATING EXPENDITURES	43.57	141.11	184.68	76	2	0.17	0.56	0.73	76	2
h. SALARIES	84.30	273.02	357.31	76	3	0.29	1.08	1.41	76	3
TOTAL RECURRENT COSTS	350.58	637.93	988.51	65	8	1.30	2.52	3.91	65	8
PHYSICAL CONTINGENCIES	17.53	31.90	49.43	65	0	0.07	0.13	0.20	65	0
PRICE CONTINGENCIES	55.81	132.05	187.97	70	1	0.07	0.52	0.74	70	1
TOTAL INCLUDING CONTINGENCIES	423.92	801.88	1,225.80	65	9	1.58	3.17	4.85	65	9
TOTAL BASELINE COSTS	4,222.66	8,496.35	12,719.01	67	100	16.69	33.58	50.27	67	100
PHYSICAL CONTINGENCIES	333.18	737.25	1,070.43	69	8	1.32	2.91	4.23	70	8
PRICE CONTINGENCIES	431.16	1,309.97	1,741.14	75	14	1.70	5.18	6.88	76	14
TOTAL PROJECT COSTS	4,987.01	10,543.57	15,530.58	68	122	19.71	41.67	61.39	68	122

3.51 IDA has allocated US$26.6 million toward the financing of this project, or 43.3% of total cost. Contributions by local communities for construction costs (US$2.8 million, or 4.6%) and budgetary allocations by the Government (US$1.7 million, or 2.7%) add up to US$4.5 million equivalent, or 7.3% of project cost. Financing of the remaining US$30.3 million will come from (a) EDF (US$12.3 million, or 20.1%); (b) USAID (US$10.1 million, or 16.5%); (c) FAC (US$1.7 million, or 2.8%); and (d) the Republic of Germany (US$6.2 million or 10.0%). The Kingdom of Belgium, UNICEF and UNFPA will continue their ongoing programs (technical assistance, community development training, and IEC/FP) which, although not costed here, have been reoriented to complement the proposed project. A condition of Credit effectiveness is that the grant agreements with EDF and USAID have been signed.

3.52 Recurrent cost implications. Project incremental operating costs amount to US$4.9 million, or 7.9% of total cost, of which US$1.2 million is to be financed by the Government. The project has been designed to keep incremental operating costs to a minimum by (a) emphasizing rehabilitation whenever possible and (b) promoting a cost-efficient use of sectoral resources. By the end of the project (mid-1997), total annual project-related incremental recurrent costs (staff, fuel and maintenance, operating expenses) will be equivalent to about 15% of the 1990 MSPAS recurrent budget; however, this will only cover the needs for 26 out of 46 Districts. This is why, in order to improve service quality and coverage countrywide, budgetary norms have been prepared and will be refined, which will require a 25% real per capita increase in the health budget over 1990-96. It is estimated that about 30% of total recurrent health expenditure, excluding EDs and contraceptives, could be recovered from patients by 1996. Contraceptives alone by 1996 will be equivalent to 13% of the 1990 MSPAS recurrent budget. This is clearly not sustainable and highlights the need for Mali to finance these needs by using a combination of donor contributions and cost recovery.

G. Impact of the Project

3.53 Impact on health. The health component has been designed to directly reach 2.4 million people (31% of Mali's population). Table 4 below compares the current key health indicators, to those for the target population by 1997. It should be borne in mind that, without the project, access to and utilization of organized health services would continue to deteriorate.

TABLE 4

	1989 COUNTRYWIDE	1997 TARGET POPUL.
% OF DISEASE EPISODES TREATED	30%	60%
% OF CHILDREN IMMUNIZED BEFORE AGE 1	5%	40%
% OF PREGNANCIES RECEIVING PRE-NATAL CARE	38%	60%
% OF CHILDREN UNDER 2 MONITORED FOR GROWTH	N/A	50%
% OF NEW CASES OF TUBERCULOSIS AND LEPROSIS TREATED	N/A	50%
CONTRACEPTION PREVALENCE RATE	1%	10%
% OF WOMEN AWARE OF MODERN CONTRACEPTIVES:		
URBAN	57%	75%
RURAL	19%	50%
ACCESS TO SAFE WATER (KENIEBA & BAFOULABE ONLY)	27%	60%

3.54 Financial impact. The questions of affordability and equity are critical for the sustainability of the project. Depending on the population served (5,000-10,000) and on whether, and to what extent the communities obtain or not assistance from the local development tax and from NGOs, the per capita investment costs to be borne by the communities will be in a range of US$2.0-0.7 for construction of a new ComHC, and of US$0.4-0.1 for facility renovation. In the KBK area, which is among the poorest in Mali, these costs were entirely borne by community contributions, including remittances from abroad. For recurrent costs, depending on the population and utilization rate (from 0.3 to 0.7), the fee per disease episode required to cover entirely the operation of a 3-staff ComHC will be in a range of US$1.15-0.25. Once the price of the average EDs prescription is added, the cost per disease episode to the patient will be US$2.65-1.75. At present wage and exchange rates, the US$2.65 upper limit is equivalent to the daily wage of unskilled labor, or to about two days' rural income during the low agricultural season and less than

one day during the high season. These are within the commonly accepted thresholds for affordability. However, these amounts might still be beyond the reach of, say, workers in the informal sector or some of the poorest farmers (Mali had a per capita GDP of US$230 in 1989). This is why (a) the project proposes a cautious approach under which the matching grant ratio (50:50 on average) could be modified to increase the project's subsidy element (with a concomitant reduction in the infrastructure program), (b) the scope of ComHCs services and staffing ComHCs will be tailored to the population's ability to pay and (c) the local development tax and NGOs will complement the communities' contribution, as is already frequently the case.

3.55 Impact on employment. The project involves about 400 new positions (nurses, midwives, clerks to staff the ComHCs and to reinforce public and private FP services, and village pump caretakers). These positions will be either filled through redeployment from MSPAS or MIHE (in line with the proposed SAL) or financed by the communities themselves. Qualified candidates should be easy to find, given the large pool of unemployed graduates. Additionally, more favorable regulations and incentives and the opening up of the drug market will stimulate the development of private medical practice and pharmacies outside Bamako, although the precise impact of these measures is difficult to estimate.

3.56 Links with programs of special emphasis. Macro-economic adjustment: the project will complement the proposed SAL in its emphasis on lifting long-term human resource and population constraints, on promoting the private sector, on improving public resources management and on mobilizing private resources for health. Women and children will be the main beneficiaries of the project. Women are expected to play a prominent role in the community health and water committees. The integrated health care package offered at the primary and first referral levels will include the key elements for safe motherhood (pre-natal care, obstetrical care, FP), as well as simple procedures to improve child health (malaria treatment, growth monitoring, IEC on nutrition and hygiene, immunization, oral rehydration). By 1996 an estimated 175,000 couples countrywide will use modern contraception, up from about 21,000 in 1990. Finally, the rural water supply component will reduce the distances walked by women to fetch water, resulting in substantial time savings; the improved water quality will translate into a reduced prevalence of water-borne diseases. AIDS: through IEC and integrated health care, the project will increase the level of awareness of the AIDS threat, the use of preventive practices against sexually transmitted diseases (STDs) (condoms, blood transfer precautions, etc.); and the treatment of STDs. This will be complemented by setting up an AIDS IEC capability evaluation system under an IDA-financed Special Project Preparation Facility (SPPF).

3.57 Environmental impact. As disposal of hospital refuse is becoming a serious issue in developing countries, IDA supervision missions will monitor the situation when visiting health centers. Under the rural water supply component, the project will either construct new water points or rehabilitate existing ones; they consist of a small-diameter village borehole, equipped with a hand-pump, and will be built only if the villagers so desire and at locations indicated by them. The yield of a borehole and hand-pump is very small and provides only for the basic needs of a village. Construction is not expected to have any adverse environmental impact, as no over-ground disturbance will occur except for a small pump platform and a

drainage pump to ensure cleanliness around each water point. Substantial environmental benefits are expected from this component, which will not only provide the communities concerned with a clean source of water, but also educate them on the hygienic aspects of the transport, storage, use and consumption of water through community development activities.

IV. PROJECT IMPLEMENTATION

A. Status of Project Preparation and Readiness

4.1 Following a national workshop that evaluated lessons learned from the first project in the context of sectoral strategies, project preparation started in 1987 and was entrusted to local task forces under the coordination of the Project Unit. The population and health components were prepared by staff from MSPAS and the Ministry of Planning, and the rural water supply component, by the Ministry of Industry, Water and Energy (MIHE) with only short-term external assistance. Preparation took a long time, and two appraisal missions, principally because initial conditions were not ripe for a successful population dialogue. The cost of this two-stage approach was amply recouped in terms of policy and implementation readiness. The extra time allowed the Government to develop its population policy, while mobilizing the broad commitment which is a sine qua non condition for effective project implementation.

4.2 Under the ongoing first project and on a trial basis, three ComHCs were opened and became fully operational by end of 1989 in the Districts of Kita, Bafoulabe and Kenieba (KBK). The KBK experience is being used as a model by MSPAS. District Health Development Plans (DHDP) are currently being finalized for these Districts and others in the project area and the criteria for District eligibility are expected to be met before credit effectiveness. The rural water supply component is ready for implementation, as it will complete and expand the work sucessfully begun in the KBK area under the Rural Water Supply Project (para 2.12).

4.3 Implementation plans and schedules for all components have reached an advanced stage of preparation. The number of ComHCs, DHCs and Regional Directorates to be rehabilitated and/or constructed were determined on the basis of a national survey. Construction standards for ComHCs have been agreed, and site selection for the first year will be available by effectiveness. A consultant firm has been selected for preparation of construction guides. Furniture and equipment lists have been reviewed by IDA and found acceptable; final designs and technical specifications will be refined by consultants and bidding documents will be ready for tendering prior to the estimated date of credit effectiveness. Detailed management arrangements for the POPFUND (para 3.42) and full appraisal of the first group of sub-projects will also be completed before project start-up.

B. Project Coordination, Monitoring and Evaluation

4.4 Taking into account lessons learned from the first health project (para 2.37), each project component will be implemented by the relevant Ministry Directorates or District Health Teams (DHTs) under the overall guidance and supervision of a Project Monitoring Committee, while the PCU will be responsible for project coordination and support. The Monitoring

Committee, chaired by the Minister of Health and including representatives of DNSP/DSF, DAF, CEPRIS and DNHE, will (a) meet each quarter to discuss and resolve any outstanding issues; (b) review semi-annual project progress reports; (c) conduct joint annual project reviews with the donors; and (d) meet at least twice a year to examine and adopt the DHDPs (including pre-screened applications for grants to ComHCs), which will be consolidated and transmitted by the Regional Directorates.

4.5 Each component will be coordinated by a technical staff of the implementing Directorate. The PCU will act as liaison with IDA in all matters related to project coordination/execution and will assist the responsible Directorates in case of implementing difficulties. Basic health services will be delivered by communities under the guidance of the DHTs with support from NGOs and the Regional Health Teams (RHTs) and under DNSP's overall supervision. DAF (formerly DNPFSS) will supervise all project-related training, evaluate project impact, and coordinate donor support. The construction program will be supervised by the existing Technical Division of MSPAS (CEPRIS) with assistance from consultants for studies and from the Regional Urban Planning and Construction Directorates (DRUCs), in particular for the construction/remodeling of DHCs and Regional offices. DSF will also have overall supervisory responsibility for the population component, except for the Population Unit (Ministry of Plan) and the POPFUND.

4.6 DNHE, as the executing agency for the rural water supply component, will second personnel to the Water Supply Project Unit, which will be assisted by a consulting firm for technical and financial supervision of implementation. Before the signing of the consultant's contract, DNHE will submit to IDA a list of personnel to be seconded to this unit and will ensure, to IDA's satisfaction, that they are adequate in numbers, qualifications and experience. The Water Supply Project Unit will liaise with the PCU, particularly on matters concerning disbursement, procurement, action plans, and regular reporting. The Unit Chief will attend the regular meetings of the Monitoring Committee for information and coordination. While procurement in the water sector remains the responsibility of MIHE and DNHE, the Water Supply Project Unit will liaise with the PCU to ensure observance of the procurement procedures set out in the Credit Agreement. An agreement between MSPAS and MIHE, defining their respective responsibilities in the implementation of the rural water supply component has been signed.

4.7 Monitoring and Evaluation (M&E). As many of the project activities are innovative, M&E will be given special attention and be carried out during the entire life of the project. The system calls for the monitoring of activities by each implementing agency at all levels of the health pyramid which will in turn report to its supervisor. Readily measurable indicators, to be consolidated into a project "Tableau de Bord" have been defined for the various levels of the M&E system. Additionally, specific evaluations will be undertaken during project implementation.

4.8 M&E at critical stages of the project cycle will comprise the activities outlined below:

(a) An initial baseline survey, covering health, FP, water supply, and financial and management data in the project Regions, will be conducted by the DHTs with assistance from the RHTs and CERPOD and

under the supervision of DAF; this will be a two-phased exercise conducted, first, at an aggregate level (the eligible Districts as part of the DHDP) and, second, at a more detailed level once the communities have been selected; the baseline data will be computerized and used to monitor project impact (MIS, para 3.18).

(b) To complement this broad data base, more focused qualitative evaluations will be conducted, especially for FP, in the form of an initial and regular beneficiary assessments (every two years) and knowledge, attitude and practice (KAP) surveys limited to two ComHCs; the results will be analyzed by DAF and fed back to the field for follow-up action.

(c) Each year, a joint Government donors review of the project will be held on the basis of a report prepared by the Ministry with assistance from an independent agency (such as the Bamako-based Institut National de Recherche sur la Santé-INRS); using the baseline data, this report will compare project objectives and achievements by component and make recommendations to correct problems that arise.

(d) An external mid-term evaluation (funded by the IDA credit) will also be conducted after three full years of implementation to review overall progress, particularly the effectiveness of FP activities, the quality of basic health services delivery, and the efficiency of cost recovery at the ComHC level in at least two Regions and in Bamako. The review will help to assess whether the strategies and implementation arrangements being followed are producing the expected outputs and what the potential is for expansion in other Districts or Regions under additional financing from other donors.

4.9 Regular monitoring will comprise:

(a) For PHC, monthly reports from the ComHCs concerned and regular field supervision by the DHTs; the results of this monitoring will be consolidated by the DHTs and transmitted to the RHT and eventually the DAF for analysis and feedback to field staff (Annex 3-3).

(b) For referral services, similarly, monthly reports submitted by the DHTs to the RHTs and DAF.

(c) Yearly evaluation of District Health Development Plans, conducted each year by each concerned RHT; the results will be transmitted to DAF and the PCU for review and comparison with control Districts.

(d) FP-specific monitoring (CPR, effectiveness, etc.), conducted by DSF on the basis of the above reports from the DHTs, health centers and maternities outside the project area, and concerned NGOs and private practitioners; the results will be discussed at least once a year at the joint seminars (para 3.34).

4.10 Indicators, as well as the above-described M&E arrangements, have been agreed with Government. During negotiations, the Government gave assurances that it will organize by November 30 of each year, beginning in 1991, a joint review with IDA of all aspects of project implementation and that by September 30 of each year, beginning in 1991, it will transmit to IDA a preparatory report for the annual review showing (a) performance in project achievements based on a quarterly "Tableau de Bord"; a work program for the upcoming project year; (c) progress on policy reform indicators, as per the Development Policy Letter (Annex 3-1); and (d) the draft health budget for the upcoming fiscal year for review. The preparatory report will be prepared with the assistance of an independent institution, acceptable to IDA.

C. Consultant Services and Training

4.11 The project will provide a total of 101.2 man-years of short and long term consultants (of which 68% will be local), estimated altogether at US$6.4 million equivalent, as well as US$3.1 million equivalent for technical fees comprising architectural services and engineering services for studies and supervision of construction (including the rural water supply component). Terms of reference have been prepared and contracts for the major consulting services and technical fees (especially for the drug reform and the rural water supply component) will be signed before credit effectiveness. Details on specialist services and studies are given in Annex 4-1.

4.12 A total of 81 man-years of training (of which 93% locally arranged) will be provided during project implementation. Training modules have reached an advanced stage of preparation, and final details were be settled at negotiations.

D. Procurement

4.13 Table 5 below shows expected procurement by category of expenditure. A detailed description of the procurement procedures is at Annex 4-2.

TABLE 5 AMOUNTS AND METHODS OF PROCUREMENT (US$ MILLION INCLUDING CONTINGENCIES)

No.	Category of Expenditure	ICB	LCB	Other	N/A	Total Cost
1.	Civil Works Contracts	7.12	1.65	-	5.34 /a	14.11
	(Excluding Parts B and C)	(7.12)	(1.65)	-	(--)	(8.77)
2.	Grants for Self-Help Construction	-	-	-	3.95 /b	3.95
					(--)	(--)
3.	Furniture and Equipment	5.19	0.96	-	2.38 /c	8.53
		(5.19)	(0.96)	-	(--)	(6.15)
4.	Medical Supplies & Equipment					
	a. Medical Equipment	0.77	-	-	1.19 /d	1.96
	(Part A only)	(0.77)	-	-	(--)	(0.77)
	b. Essential Drugs & Contraceptives	0.84	-	-	6.25 /e	7.09
	(Part A only)	(0.84)	-	-	(--)	(0.84)
	c. Iodine Modules	-	-	-	1.52 /f	1.52
		-	-	-	(--)	(--)
5.	Consultants Services					
	a. Local Specialists	-	-	0.51	2.13 /g	2.64
		-	-	(0.51)	(--)	(0.51)
	b. International Specialists	-	-	2.29	1.44 /h	3.73
		-	-	(2.29)	(--)	(2.29)
	c. Technical Fees	-	-	2.74	0.38 /i	3.12
	(Parts A, and D only)	-	-	(2.74)	(--)	(2.74)
6.	Training					
	a. Local Training	-	-	1.07	2.62 /j	3.69
		-	-	(1.07)	(--)	(1.07)
	b. Fellowships	-	-	0.18	0.72 /k	0.90
		-	-	(0.18)	(--)	(0.18)
7.	Population Fund (POPFUND)	-	-	-	5.28 /l	5.28
		-	-	-	(0.57)	(0.57)
8.	Operating Costs	-	-	1.26	3.60 /m	4.86
	(Excluding Part D)	-	-	(1.00)	(1.71)	(2.71)
	Total Costs	13.92	2.61	8.05	36.60	61.38
	Total Financed by the IDA credit	(13.92)	(2.61)	(7.79)	(2.28)	(26.60)

Note: Figures in parentheses are the respective amounts financed by the IDA credit.

The capital letters show the following project components as follows:
Part A: Coverage and quality of health services
Part B: Increase the efficiency of resource use
Part C: Population and Family Planning
Part D: Rural water supply
Part E: Project Coordination Unit (PCU)

Footnotes with small letters indicate amounts financed by other donors and procured under their procedures:

(a) US$5.34 (b) US$1.97 (c) US$2.38
(d) US$1.19 (e) US$6.25 (f) US$1.52
(g) US$2.13 (h) US$1.44 (i) US$0.38
(j) US$2.62 (k) US$0.72 (l) US$4.78
(m) US$0.25

Figures may not add up to total due to rounding.

4.14 ICB. Contracts for boreholes drilling (estimated at about US$7.1 million) piping equipment (estimated at about US$0.5 million), water pump installation (estimated at about US$1.8 million), goods, including furniture, office supplies, vehicles, teaching materials (estimated at about US$2.9 million), drugs, medical supplies and equipment (estimated at about US$1.6 million), totalling US$13.9 million equivalent and representing 84% of the total value of contracts for civil works and goods financed by IDA, will be grouped into five packages, estimated at more than US$200,000 each. These items, which are suitable for international competitive bidding (ICB) will be procured in accordance with the Bank's Guidelines for Procurement Under IBRD Loans and IDA Credits (May 1985). Contractors for borehole drilling and pump installation will be subject to pre-qualification. A preferential margin of 7.5% for civil works and 15% for goods manufactured locally, or the existing customs duty, whichever is less, over the c.i.f. prices of competing goods, will be given to domestic contractors and manufacturers in accordance with IDA's guidelines.

4.15 LCB. The remaining goods and civil works contracts financed by IDA (totalling US$2.6 million equivalent or 16% of the total) will be grouped into about 10 packages, suitable for procurement other than ICB. The exceptions to ICB procurement will be for: (a) contracts for goods (limited to office supplies and furniture) estimated to cost less than US$200,000 equivalent each, which in the aggregate will not exceed US$1.0 million; and contracts for civil works, which are small in size and scattered on 5 different Regions, totalling US$1.6 million. These items, which are not expected to attract foreign bidders because ot their small size and the

diversity of site delivery, will be awarded on the basis of competitive bidding advertised locally (LCB) in accordance with procedures acceptable to IDA, provided that (a) bidders are allowed sufficient period for submission of bids (45 days'minimum); (b) evaluation criteria are clearly specified (price, capacity and capability to perform, adequacy of equipment and personnel, and financial capacity); (c) no preference margin is granted to domestic contractors, suppliers and manufacturers; and (d) eligible foreign firms are not precluded from participation and are not required to be incorporated in Mali in order to participate in the bidding.

4.16 Other methods of procurement. Items under category "operating costs", not exceeding US$20,000 and totalling a maximum of US$1.2 million equivalent, could be purchased through international or local shopping on the basis of price quotations obtained from at least three reliable suppliers to ensure competitive prices.

4.17 "Grants" (totalling US$1.9 million equivalent) will be provided to match the financial efforts of communities, local governments and/or NGOs for construction/rehabilitation/extension of ComHCs. These grants are expected to be funded by other donors, especially by the Republic of Germany. They will be paid upon evidence that tranches of work, pre-agreed in terms of quantity and quality have been delivered and prefinanced in accordance with procedures consistent with those set by other donors. Contracts for works between communities and small contractors will be based on commercial practices, including a comparison of price quotations obtained from at least three contractors. The PCU will be responsible for certifying that this procedure is followed.

4.18 Review. For contracts for civil works and goods estimated at more than US$200,000 equivalent each, the bidding documents, advertisements and proposed contract awards will be reviewed by IDA prior to the tendering of bids and the decision on final awards. It is estimated that this review will cover about 84% of the total value contracted for goods and works financed by IDA. The remaining 16% of the value contracted for goods and works will be subject to either (a) post-review for contracts estimated at between US$20,000 and US$200,000 equivalent, or random post-award review for contracts estimated at less than US$20,000. For the latter, expenditures will be made out of certified Statements of Expenditure (SOEs), and documentation will be retained at the PCU for random review by IDA staff and for annual audits.

4.19 Consultants and training financed by IDA, totalling US$6.8 million (US$0.5 million for national specialists, US$2.3 million for international specialists, US$2.7 million for technical fees, mostly for rural water, and US$1.3 million for training), will be contracted in accordance with the Bank's Guidelines for the Use of Consultants (August 1981). During negotiations the Government gave assurances that it will apply the procurement procedures and arrangements outlined above.

E. Disbursement

4.20 The IDA credit will be disbursed in accordance with the country disbursement profile for all sectors over a period of seven years on the basis of the categories shown in Table 6 below. The closing date will be

December 31, 1997. Given the availability of the Special Account, the minimum application for direct payments will normally be for the equivalent of US$20,000. The amounts to be financed under each category are shown below. The estimated quarterly disbursement schedule for the IDA credit is shown in Annex 4-3.

TABLE 6

Allocation and Disbursement of the IDA Credit
(US$ million)

Category of Expenditure	Proposed IDA Allocation	% of Expenditure Financed by IDA
1. Civil Works	7.8	100%
2. Furniture and Equipment	4.3	100%
3. Medical Supplies and Equipment	2.5	100%
4. Consultant Services	4.9	100%
5. Training	1.1	100%
6. POPFUND	0.6	100%
7. Incremental Operating Costs	2.6	80%
8. Unallocated	2.8	-
Total:	26.6	

4.21 Special Account, Counterpart Funds. To facilitate disbursement, US$0.4 million equivalent, denominated in CFA francs, will be advanced from the IDA credit and deposited into a Special Account opened by the Government in a local commercial bank. The amount is estimated to cover about three months of expenditures. The Special Account will be replenished through the submission of fully documented withdrawal applications (WAS) to IDA. However, expenses related to contracts valued at less than US$20,000 equivalent each will be reimbursed against Certified Statements of Expenditure (SOEs), for which documentation will be retained at the PCU for post-review by IDA staff during supervision missions and for regular semi-annual audits. Reimbursement applications submitted against the Special Account will include a bank statement showing account movements since the last application, with the balance certified by the bank holding the Special Account and a reconciliation statement showing that the balance represented is the original amount less any payments awaiting reimbursement. The Government will submit replenishment requests to the Special Account on a monthly basis, or whenever the account is diminished by one-third, whichever comes first. The Government will deposit each year the equivalent of US$0.2 million in a commercial bank account. These funds will represent Government's 20% share of operating costs as well as monies to make small advance payments to implementing agencies.

F. Accounting, Auditing and Reporting

4.22 Accounting and auditing. PCU's accounting system is being strengthened to meet the requirements of the second project. The PCU will maintain, to the satisfaction of IDA, separate accounts and records to be used exclusively for the project. All project-related receipts and payments will aggregate expenditures incurred by project component and will be recorded in accordance with accounting principles and procedures consistently applied. Beginning in 1991, the PCU will furnish to IDA as soon as available, but in any case not later than March 31 of each year (four months after the end of the Government's fiscal year): (a) annual financial statements on project accounts and records (including a separate SOE audit

and semi-annual statements in the case of the Special Account and the POPFUND); separate opinion reports, satisfactory to IDA, from a competent and independent auditor, acceptable to IDA, as to the accuracy and authenticity of such financial statements; and (c) certificates, satisfactory to IDA and from the same auditor, that the value and quantity of services are adequately reflected in such financial statements. An auditor acceptable to IDA will also issue a management letter and furnish to IDA annual performance audit reports on PPM, and such other information concerning such accounts and records, audits and certificates as IDA may from time to time reasonably request.

4.23 Reporting. The PCU will submit to IDA: (a) semi-annual reports on project implementation by June 30 and December 31 of each year, beginning in June 1991; by September 30 of each year, beginning in 1991, a preparatory report for the annual review as described in para 4.10; and (c) a completion report within six months of the credit closing date.

V. PROJECT BENEFITS AND RISKS

A. Benefits

5.1 By increasing the utilization of primary health services, the project will address the basic needs of some of the most vulnerable segments of Malian society, improve the productivity of sectoral investment, and strengthen the supply response of the economy to the on-going adjustment process. The health component has been designed to directly benefit 2.4 million people (31% of Mali's population) who will gain access to quality health care. For this target population, by 1997, the proportion of disease episodes treated will double, to reach 60%; that of children fully immunized before age 1 will increase from 25% to 40%; 60% of pregnancies will receive prenatal care (at least two visits), against 38% today; the proportion of diarrhea episodes treated with oral rehydration will rise from 3% to 50%; the growth of 50% of children ages 0 to 2 will be monitored; and 50% of the estimated new cases of tuberculosis and leprosy will be detected and treated. The impact on mortality and morbidity is expected to be substantial, although it cannot be quantified. In addition to these direct beneficiaries, Mali's entire population will benefit indirectly from the project, insofar as it will reinforce MSPAS's capacity to plan, manage and coordinate sectoral development programs.

5.2 The population component will have broad benefits in terms of increased awareness of population issues and experience gained on how best to tackle them. The Government's capacity to plan, manage and coordinate the implementation of population and FP programs will be strengthened, increasing the effectiveness of these programs. Through the development of a variety of information programs and delivery channels, by 1997 75% of urban women and half of rural women should be fully informed on modern FP methods and the modern contraceptive prevalence rate should rise from 1.2% to 10% in the Regions of project concentration and to about 8.5% countrywide.

5.3 The rural water supply component will reinforce the impact of the health component by providing access to safe water for about 180,000 people living in the project area. These benefits will be enhanced by the iodination program, which will eliminate iodine deficiency among about 240,000 people

(50% of the population) in the Districts of KBK, where one third of the inhabitants presently show clinical signs of goiter.

B. Risks

5.4 The project faces three major risks. The first risk is that the expected improvements in drug procurement and distribution may be slow to materialize. This risk is being addressed through up-front introduction of the required policy reform, its monitoring on the basis of objective indicators, and the gradual development of alternative supply channels. The second risk is that the attitudinal change required--for instance, to effectively decentralize health care management or for government services and NGOs to cooperate fully (e.g., in FP)--may also be slower than expected. This risk is mitigated by the Government's strong commitment to decentralization and by the emphasis put on complementary and well-defined responsibilities among the various operators. The third risk is that the proposed approach to health care, which depends for success on community sensitization and participation and on significant cost recovery, could, after an initial period of enthusiasm, suffer setbacks in some project areas. This risk will be reduced through carefully phased implementation, close monitoring of key activities (including the cost-recovery scheme), and the opportunity for corrective action offered by the annual reviews.

VI. AGREEMENTS TO BE REACHED AND RECOMMENDATION

6.1 During negotiations, the Government gave assurances that it will:

(a) Apply the criteria agreed with IDA for selection of the Districts and communities to be supported under the project (para 3.12);

(b) Review the hospital and health graduate labor market studies and action plans with IDA by September 30, 1991, and implement the agreed recommendations within six months thereafter (para 3.23);

(c) Ensure that during project implementation three agreed indicators are met to monitor (i) PPM's purchase of EDs in generic form at the most competitive price (as published by UNIPAC); (ii) PPM's margin, to be agreed with IDA and specified in the Contrat-Plan between government and PPM; and (iii) the availability of EDs at the District level (para 3.26);

(d) Each FY as of 1991, review with IDA, prior to approval, MSPAS' draft investment budget, as well as its three-year rolling investment program, based on the agreed criteria (para 3.30);

(e) Ensure that the contracts between the village communities and DNHE, defining community responsibilities and financial participation in the rural water supply component, are signed and that the cash contributions (CFAF 135,000 per water point) is paid one month before arrival of the borehole siting team (para 3.44);

(f) Ensure that the positions of Project Director, Deputy Director, Procurement specialist, and accountants (6) are filled at all times

by persons with experience and qualifications acceptable to IDA (para 3.49);

(g) Organize by November 30 of each year, beginning in 1991, a joint review with IDA on all aspects of project implementation and after three full years of implementation, a mid-term review of the project; and by September 30 of each year, beginning in 1991, transmit to IDA a preparatory report for the annual review (para 4.10); and

(h) Apply the agreed procurement procedures and arrangements during project implementation (para 4.19).

6.2 The following will be conditions of credit effectiveness:

(a) Signing between Government and PPM of a Contrat-Plan acceptable to IDA (para 3.25);

(b) Signing of the grant agreements with EDF and USAID (para 3.51); and

(c) Issuance of new drug import regulations (para 3.25).

6.3 Disbursements against the POPFUND will be conditional upon (i) creation of the BUNACOP; and (ii) establishment of POPFUND management and staffing arrangements fully satisfactory to IDA (para 3.42).

6.4 Recommendation. Subject to the above terms and conditions, the proposed project will be suitable for an IDA credit of US$26.6 million to the Republic of Mali on standard IDA terms, with 40 years' maturity.

c:xsar

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

BASIC DATA SHEET AND COMPARATIVE INDICATORS 1\

GENERAL a\	
GNP PER CAPITA	US$ 230 (1989)
LAND AREA	1.2 million km^2
POPULATION	7.7 million b\
OF WHICH URBAN	19%
POPULATION DENSITY	6 per km^2
POPULATION GROWTH RATE	
NATURAL	2.7%; 3.7% b\
NET (ALLOWING FOR EMIGRATION)	2.5%; 1.8% b\
CRUDE BIRTH RATE	46.6 per thousand
CRUDE DEATH RATE	19.5 per thousand
INFANT MORTALITY RATE	170 per thousand
INFANT/CHILD MORTALITY RATE	296 per thousand
LIFE EXPECTANCY AT BIRTH	45 years
TOTAL FERTILITY PREVALENCE RATE	6.7
MODERN METHODS	1.2% c\
TRADITIONAL METHODS	4.6% c\
HEALTH SECTOR EXPENDITURES d\	
(ORGANIZED HEALTH SERVICES) 2\	
TOTAL PER CAPITA	US$7.8
OF WHICH: PUBLIC	US$2.7
PRIVATE	US$2.9
FOREIGN AID	US$1.8
HEALTH SERVICES e\	
NATIONAL HOSPITALS	3
REGIONAL HOSPITALS (7 REGIONS)	6 (all except Koulikoro)
HEALTH CENTERS	
CAPITAL AREA OF BAMAKO	6
DISTRICTS (46)	46 (1 per District)
SUBDISTRICTS (286)	264 (92.3%)
POPULATION WITHIN 15 KM OF HEALTH FACILITY	45%
HEALTH PERSONNEL	
TOTAL HEALTH CARE PERSONNEL	2 675
OF WHICH: PHYSICIANS	249
REGISTERED NURSES	562
MID-WIVES	256
NURSES-AIDES	749
COMMUNITY DEVELOPMENT WORKERS	65
SANITATION WORKERS	194
TOTAL MINISTRY OF HEALTH PERSONNEL f\	6 [illegible]

1\ All figures are for 1987 unless otherwise indicated.
2\ Excluding expenditure on traditional health care, clandestine providers, payment for drugs outside organized services, informal payments to health workers, and the time and transportation costs for using the health care system.

a\ Source: Bank estimates, unless otherwise indicated
b\ Source: 1987 Census
c\ Source: 1987 Demographic and Health Survey
d\ Source: "Recurrent Costs in the Health Sector", WHO, 1988
e\ Source: Ministry of Public Health and Social Affairs (MSPAS), 1989
f\ Source: Ministry of Labor and Civil Service, 1988

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

COMPARATIVE SOCIO-ECONOMIC INDICATORS a\

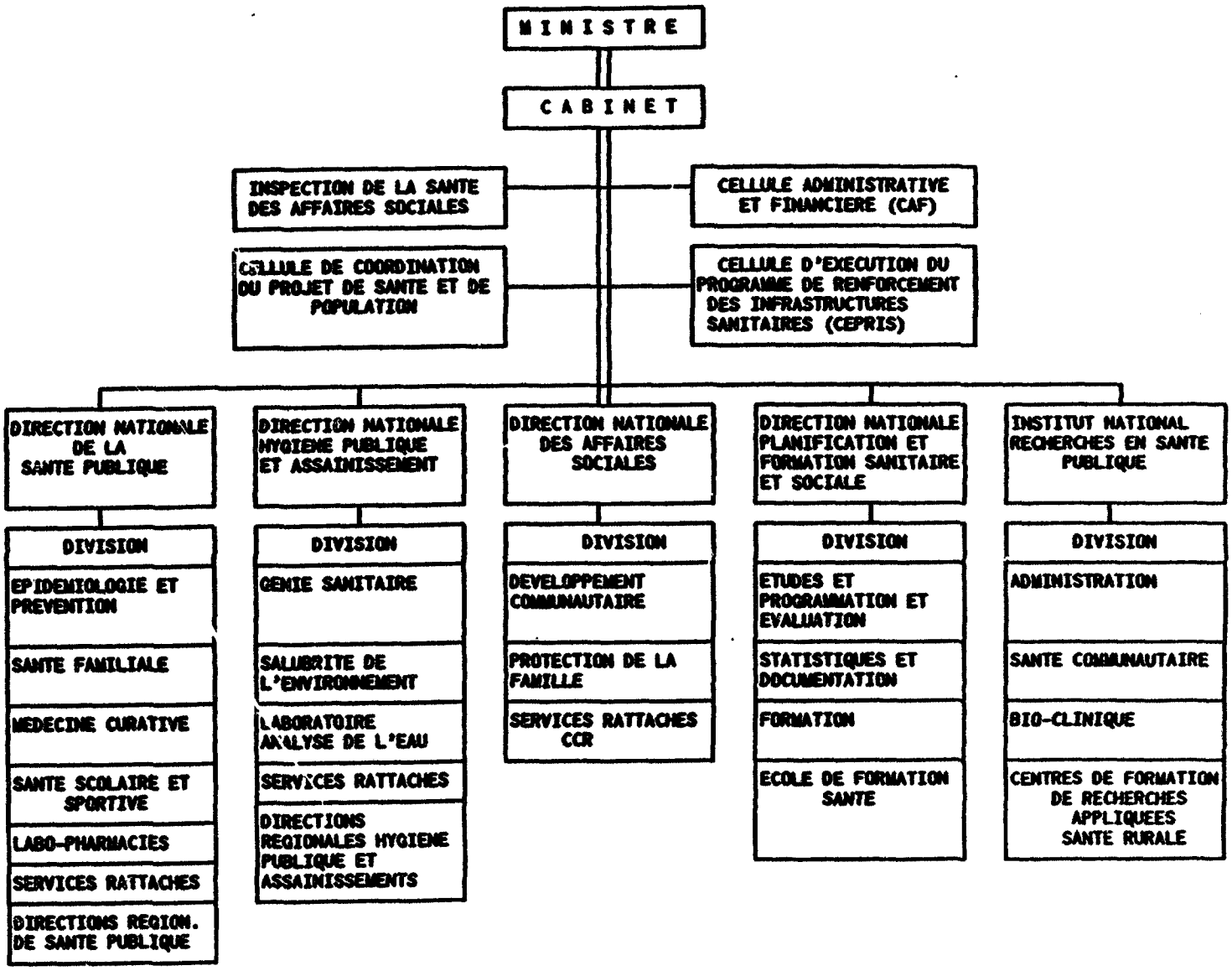
	NIGERIA	CAMEROON	GHANA	COTE D'IVOIRE	BURKINA FASO	KENYA	MALI
TOTAL POPULATION	103	10.5	13.2	10.7	8.1	21.2	7.6
URBAN POPULATION (%) (1985)	36	42	32	45	8	20	20
CRUDE BIRTH RATE	50	28	45	49	47	52	48
CRUDE DEATH RATE	16	13	13	14	19	12	19
AVERAGE ANNUAL GROWTH POPULATION (1965-1985 IN %)	3.3	.3	.1	3.6	2.9	3.9	2.3
TOTAL FERTILITY RATE	6.9	6.9	6.3	7.1	6.5	7.7	6.5
INFANT MORTALITY RATE	104	90	89	90	140	74	144
LIFE EXPECTANCY AT BIRTH	51	56	54	52	47	57	46
POPULATION PER PHYSICIAN (1981)	12,000	13,000 c\	6,000	-	55,700	10,120	20,030
POPULATION PER NURSE (1981)	2,420	1,950	630	-	3,070	900	2,200
ACCESS TO SAFE WATER (1985)	-	20	35	19	25	17	39
DAILY PER CAPITA CALORIES SUPPLY AS % OF REQUIREMENT (1981)	90	102	90	112	95	93	90
ADULT LITERACY RATE (%) (1985)	34	-	-	35	5	47	15 d\
PER CAPITA INCOME	640 b\	910	390	730	150	300	200
AVERAGE GROWTH GDP 1965-1986 (%	1.9	3.9	-1.7	1.2	1.3	1.9	1.2
HEALTH EXPENDITURE AS PERCENT OF CENTRAL GOVERNMENT EXPENDITURE (1983)	-	3.7	5.0	-	6.0	7.0	1.7

a\ FOR MID-1986, UNLESS OTHERWISE INDICATED
b\ PER CAPITA INCOME 1987: $370
c\ 1986
d\ 1987

SOURCE: WORLD DEVELOPMENT REPORT, 1988
e:xls

Note: The above data are internally coherent but in the case of Mali show wide discrepancies with Government figures, highlighting the need to improve the sectoral data base.

REPUBLIC OF MALI
SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT



REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

Present Health Care System in Mali

La structure sanitaire du Mali

I. Description de la pyramide des soins

1. La structure nationale des soins de santé primaire peut être schématisée sous la forme d'une pyramide dont la base représente l'ensemble de la population et le sommet, le dernier recours médical du pays: les hôpitaux nationaux (voir Tableau A). Entre les deux ce trouvent les unités de recours du premier degré: Centre de Santé d'Arrondissement, du deuxième degré: Centre de Santé de Cercle et du troisième degré: Hôpitaux Régionaux.

2. En principe, l'équipe de santé de village est installée dans un gros village. Elle travaille dans une case construite en matériaux traditionnels par les villageois. Cette case comporte une salle pour les soins et une salle pour les accouchements. Le personnel comprend essentiellement un hygiéniste/secouriste et une accoucheuse traditionnelle. Il est prévu qu'ils seront secondés par une animatrice et que pourront s'y adjoindre des guérisseurs traditionnels. Pour réaliser une couverture de 80% il faudrait que 8.032 villages soient pourvus d'hygiénistes/secouristes et d'accoucheuses traditionnelles, pris en charge par la communauté villageoise.

3. Il existe 1376 secteurs de base constitués par la réunion de plusieurs villages, en général 6. Les secteurs sont dotés d'un dispensaire rural et/ou d'une maternité rurale. Le personnel est composé d'un aide soignant et d'une matrone, l'un et l'autre formés sur le tas pendant 6 mois. Bien que d'une capacité technique légèrement supérieure à l'équipe de santé de village, l'équipe du secteur de base ne peut être considérée comme une instance de recours. Elle constitue une forme d'assistance rapprochée pour l'équipe de santé de village.

4. C'est au niveau de l'Arrondissement que l'on trouve du personnel nettement plus compétent, un équipement technique et une gamme plus large de médicaments. L'Arrondissement est doté en principe d'un dispensaire de soins, d'une maternité-PMI, d'un centre de développement communautaire, d'un centre de récupération nutritionnelle et d'un bureau d'hygiène. Le personnel prévu est composé d'un infirmier d'Etat, d'une infirmière obstétricienne, d'un infirmier de santé, d'un infirmier de grandes endémies, de 2 agents d'assainissement, d'un technicien de développement communautaire et de 2 agents de développement communautaire. C'est le premier niveau où l'on trouve du personnel diplômé. En principe, l'infirmier d'Etat supervise des équipes de santé de villages, à partir de l'Arrondissement.

5. Au niveau du Cercle se trouve le Centre de Santé. Il est dirigé en principe par un médecin de Santé publique, responsable de la santé pour l'ensemble du Cercle. Avec lui travaille un autre médecin qui, souvent, a un

compétence chirurgicale. C'est le niveau le plus proche de la population où est affecté un médecin et où existent des moyens de diagnostic importants: laboratoires d'analyse médicale, examens radiologiques, etc. C'est aussi le lieu où l'on peut pratiquer une thérapeutique plus élaborée: médications sous surveillance médicale, interventions chirurgicales. Outre les médecins, le personnel du Centre comporte en principe 4 à 6 infirmiers d'Etat, 1 à 3 sages-femmes, des infirmières obstétriciennes, 6 infirmiers de santé, 2 techniciens sanitaires, 3 agents d'assainissement, etc. Un des deux médecins a la tâche de superviser le travail exécuté dans les arrondissements et dans les Villages, d'apporter son concours à la solution des problèmes difficiles et d'assurer la formation continue du personnel.

6. Les Hôpitaux régionaux sont sensés compléter cette infrastructure en apportant à distance raisonnable de la population des possibilités de diagnostic et de thérapeutique supérieures à celles des Centres de Santé de Cercle. Il devraient être équipés de services spécialisés: radiologie, laboratoire d'examens plus élaborés, gynécologies, obstétrique, urologie, traumatologie, maladies contagieuses, etc. avec les médecins ou techniciens spécialisés nécessaires à ses services. Mais, les locaux datent de nombreuses années et, souvent, sont mal adaptés à leurs fonctions.

7. C'est la Direction régionale qui assure la coordination de toutes les activités de santé de la Région et la liaison avec les autorités administratives et les autres secteurs d'activités. Le Médecin-Directeur régional supervise tous les hôpitaux et Centre de Santé de la région, recueille les données de statistiques sanitaires, est responsable de l'affectation du personnel paramédical et de son recyclage. Il est représentant du Ministre de la Santé dans la région. En principe, le personnel de la Direction régionale est constituée par 3 médecins de santé publique: le Directeur régional, un épidémiologiste, un spécialiste de santé familiale, de médecine scolaire et sportive; ils sont aidés d'un pharmacien, d'un ingénieur sanitaire, d'un économiste de la santé, de 9 techniciens divers et d'une jardinière d'enfants.

8. Au niveau national existent trois Hôpitaux nationaux: Point G, Gabriel Touré et Katio. Le Ministère de la Santé publique et de Affaires sociales comprend 5 directions nationales et 4 organismes rattachés au Cabinet du Ministre. L'organigramme est présenté en Annexe 2-1.

II. Les problèmes

9. L'organisation sanitaire pyramidale présente de nombreux problèmes, tant au niveau de l'offre de soins, qu'au niveau de leur gestion et de leur administration.

A. Problèmes au niveau de l'offre de soins

10. Disparité de l'offre de soins au niveau primaire. L'offre de soins primaire varie, en fonction de sa localisation dans un petit village, un gros village, un secteur, un arrondissement, un chef lieu de cercle, de région ou dans la capitale. Elle n'est pas organisée en ville, un peu comme si l'on

n'y installait pas d'écoles primaires, sous prétexte qu'il y a un collège. Par conséquent, les formations de référence sont encombrées de consultations primaires qui seraient mieux soignées, et à meilleur marché au niveau des quartiers.

11. Choix inapproprié du 1er échelon de soins. La pyramide sanitaire du Mali comporte pas moins de 2 échelons de personnel formé en 6 mois. Une formation de cette durée ne permet pas d'acquérir des connaissances et des compétences supérieures à celles que toute famille devrait posséder. Le ratio d'un infirmier d'Arrondissement pour 35 équipes de santé villageoise est insuffisant pour assurer une supervision et un appui logistique correct. Les villageois refusent souvent de payer les agents de santé villageois pour des services qu'ils estiment insuffisants, et les agents communautaires abandonnent rapidement leurs fonctions. De plus, la présence d'un premier niveau d'agents insuffisamment formés peut retarder inutilement la consultation à un niveau technique compétent.

12. Distance excessive du premier niveau technique compétent. Le premier niveau de soins habilité à vacciner ou à injecter des antibiotiques est constitué par le Centre de Santé d'Arrondissement. Ce centre ne peut raisonnablement pas fournir les soins au-delà d'un rayon de 15 km, où en moyenne 5-10.000 h résident. En pratique, les autres habitants sont livrés à eux-mêmes, et expriment par la construction de leur propre formation sanitaire, leur aspiration à obtenir les soins d'une équipe techniquement compétente.

13. Approche plus administrative que fonctionnelle de la planification de l'infrastructure sanitaire. Selon la pyramide sanitaire, le statut administratif d'une localité constitue le critère prépondérant pour y implanter une infrastructure d'un type particulier. De l'application systématique de ce critère administratif peut résulter la construction de bâtiments surdimensionnés dans des sites dépourvus de population. Par exemple, le premier projet de développement sanitaire a financé dans le Cercle de Kita la construction d'un Centre de Santé d'Arrondissement qui dessert 1.000 habitants dans un rayon de 15 km. La même formation installée ailleurs aurait pu en couvrir 5.000.

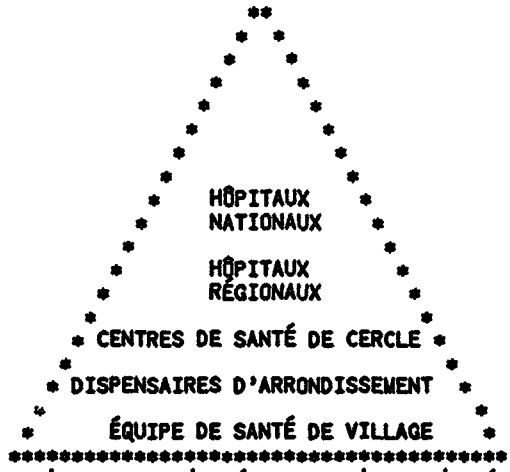
14. Complexité excessive des niveaux de référence. En comportant 3 types différents d'hôpitaux la pyramide sanitaire fournit une justification erronée aux investissements dans des formations sanitaires de référence sans cesse plus complexes. A un moment où la couverture par les soins aux premier et deuxième niveaux sont loin d'être terminés alors qu'ils ont le plus grand impact sur la santé, les investissements dans les soins de référence aux 2ème et 3ème échelons (régional et national) entraîneraient des coûts d'opportunité excessifs.

B. Problèmes au niveau de la gestion du système

15. Manque de différentiation des responsabilités. Selon la pyramide sanitaire, chaque responsable supervise les échelons inférieurs, leur alloue des ressources et représente le Ministère auprès des autorités locales. Cependant, le pouvoir de décision aux différents niveaux n'est pas défini. Il s'ensuit une centralisation excessive de la prise de décision.

16. Faiblesse de la gestion au niveau opérationnel. Le Cercle est le premier niveau qui englobe les échelons de soins primaires et celui de référence. Il s'agit aussi du niveau de plus périphérique où se trouve un médecin, qui peut assumer la responsabilité de l'ensemble des soins prodigués dans le Cercle. La pyramide sanitaire ne reflète pas l'importance stratégique de ce niveau, représenté par un médecin qui à lui seul est responsable du Centre de Santé et de la supervision dans le Cercle.

TABLEAU A LA PYRAMIDE SANITAIRE AU MALI



Le personnel prévu pour chacun des échelons est le suivant:

ÉCHELONS DES SOINS DE SANTÉ PRIMAIRE	ÉQUIPE DE SANTÉ DE VILLAGE	-NOMBRE TOTAL:10039 -NOMBRE D'UNITÉS LIÉES À L'UNITÉ DE RECOURS DU 1ER DEGRÉ: 35 -UN HYGIÈNISTE/SECOURISTE POUR 668 HABITANTS
UNITÉS DE RECOURS DU 1ER DEGRÉ	DISPENSAIRES D'ARRONDISSEMENT	-NOMBRE TOTAL: 281 -NOMBRE D'UNITÉ LIÉES À UNE UNITÉ DE RECOURS DU 2ÈME DEGRÉ: 6 -UN DISPENSAIRE POUR 31 000 HABITANTS
UNITÉS DE RECOURS DU 2EME DEGRÉ	CENTRES DE SANTÉ DE CERCLE	-NOMBRE TOTAL: 46 -UN CENTRE DE SANTÉ POUR 189 000 HABITANTS

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

HEALTH SECTOR FINANCING

TABLE 1 TOTAL INVESTMENT COST OF (ORGANIZED) HEALTH SERVICES (MILLION FCFA NOMINAL TERMS)

	1983	1984	1985	1986	1987	1988	1989	1990
PUBLIC FUNDING								
BUDGET (NATIONAL OR PROVINCIAL)	632	245	295	443	332	412	293	230
OTHER PUBLIC	135	106	96	79	57	150	300	350
DEVELOPMENT AGENCIES	3	11	3	7	4	-	-	-
SOCIAL SECURITY	122	159	18	22	52	-	-	-
SUBTOTAL	892	521	412	551	445	562	593	580
HOUSEHOLD BUDGETS								
USER CHARGES	2	-	-	7	44	-	-	-
OTHER PRIVATE	3	3	10	5	6	-	-	-
SUBTOTAL	5	3	10	12	50	0	0	0
EXTERNAL FUNDING								
BILATERAL COOPERATION	50	266	33	57	234	-	-	-
INT'L ORGANIZATIONS	30	101	1,610	1,530	1,511	1,500	1,500	1,500
NON GOVERNMENTAL ORGANIZATIONS	231	129	124	339	820	300	300	300
SUBTOTAL	311	496	1,767	1,926	2,065	1,800	1,800	1,800
TOTAL	1,208	1,020	2,189	2,489	2,560	2,362	2,393	2,380

TABLE 2 TOTAL RECURRENT COSTS OF (ORGANIZED) SERVICES (MILLION FCFA NOMINAL TERMS)

	1983	1984	1985	1986	1987	1988	1989	1990
PUBLIC FUNDING								
BUDGET (NATIONAL OR PROVINCIAL)	2,925	2,975	3,971	4,115	4,478	3,917	3,757	4,452
OTHER PUBLIC	60	78	81	91	78	100	140	180
DEVELOPMENT AGENCIES	3	1	1	8	7	-	-	-
SOCIAL SECURITY	647	295	450	378	456	450	450	450
SUBTOTAL	3,635	3,349	4,503	4,592	5,019	4,467	4,347	5,082
HOUSEHOLD BUDGETS								
USER CHARGES	146	158	158	236	149	165	185	200
OTHER PRIVATE	4,441	4,106	4,742	6,472	5,433	6,000	5,950	5,900
SUBTOTAL	4,587	4,264	4,900	6,708	5,582	6,165	6,135	6,100
EXTERNAL FUNDING								
BILATERAL COOPERATION	8	8	24	48	136	148	148	148
INT'L ORGANIZATIONS	81	108	179	254	287	300	300	300
NON GOVERNMENTAL ORGANIZATIONS	61	95	359	245	288	300	300	300
SUBTOTAL	145	206	562	542	711	748	748	748
TOTAL	8,367	7,819	9,965	11,842	11,312	11,372	11,222	11,922

SOURCE: MISSION ESTIMATE, 1990

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

HEALTH SECTOR FINANCING

PERCENTAGE DISTRIBUTION OF EXPENDITURE BETWEEN GOVERNMENT AND OTHER SOURCES, 1983-1987

TABLE 3

	1983	1984	1985	1986	1987
INVESTMENT EXPENDITURE					
GOVERNMENT	52.3	24.0	13.5	17.8	9.0
OTHER	47.7	76.0	86.5	82.2	91.0
RECURRENT EXPENDITURE					
GOVERNMENT	35.0	38.0	39.8	34.8	40.0
OTHER	65.0	62.0	60.2	65.2	60.0

RECURRENT EXPENDITURE ON ORGANIZED SERVICES BY TYPE, 1983-1987, EXCLUDING PATIENTS' PAYMENTS
(MILLION CFAF)

TABLE 4

TYPE	1983	1984	1985	1986	1987
PAY OR PERSONNEL	2 619	2 492	3 006	3 169	3 601
PHARMACEUTICALS	466	401	762	731	1 047
OTHERS	841	866	1 477	1 695	1 512
TOTAL	3 926	3 759	5 245	5 595	6 160

Note: The data presented in these tables are based (a) on implemented expenditures, generally amounting to about 85% of voted expenditures; (b) include the health expenditures of the Defense Ministry (about 7-8% of the total); (c) include the expenditures related to Institut National de la Protection Sociale (about 10%); (d) exclude the expenditures related to MSPAS's social affairs activities (about 10%), and (e) include Regional contributions (from the communes and sub-districts) to health expenditures.

Source: Health recurrent costs in Mali, WHO, 1988

TABLE 5

TOTAL PRIVATE EXPENDITURES ON HEALTH, 1989
(CFAF MILLION)

DRUGS	12,000
FEES	150
TRADITIONAL MEDICINE	2,000
PRIVATE MEDICINE	500
HEALTH-CARE RELATED TRANSPORT	300
TOTAL	14,950

Source: Mission estimates, 1989

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

HEALTH SECTOR FINANCING

TABLE 6 BREAKDOWN OF TOTAL SECTORAL EXPENDITURES ON ORGANIZED SERVICES, BY LEVEL AND SOURCE OF FINANCING (1987)

	EXPENDITURE	DISTRICTS		HOSPITALS		ADMINISTRATION		OTHER		SOCIAL SECURITY	
SOURCES	TOTAL INVESTMENTS & RECURRENT	AMOUNTS MILLION FCFA	PERCENTAGE %	AMOUNTS MILLION FCFA	PERCENTAGE %	AMOUNTS MILLION FCFA	PERCENTAGE %	AMOUNTS MILLION FCFA	PERCENTAGE %	AMOUNTS MILLION FCFA	PERCENTAGE %
PUBLIC FUNDING											
BUDGET	4,697	1,104	23.5	1,804	38.4	1,484	31.6	310	6.6	0	-
OTHER PUBLIC	135	129	95.6	6	4.3	0	-	0	-	0	-
DEVELOPMENT AGENCIES	11	11	100.0	0	-	0	-	0	-	0	-
SOCIAL SECURITY INSTITUTE	508	0	-	0	-	0	-	0	-	508	100.0
SUBTOTAL	5,351	1,244	23.2	1,809	33.8	1,484	27.7	310	5.8	508	9.5
HOUSEHOLD BUDGETS											
USER CHARGES	193	29	15.2	49	25.4	0	-	115	59.4	0	-
OTHER PRIVATE	5,439	5,434	99.9	5	0.1	0	-	0	-	0	-
SUBTOTAL	5,632	5,463	97.0	54	1.0	0	0.0	115	2.0	0	0.0
EXTERNAL FUNDING											
BILATERAL COOPERATION	370	41	11.1	73	19.8	118	31.8	138	37.2	0	-
INTERNATIONAL ORGANIZATIONS	1,798	642	35.7	61	3.4	904	50.3	191	10.6	0	-
NONGOVERNMENTAL ORGANIZATIONS	608	349	57.4	151	24.8	13	2.2	95	15.6	0	-
SUBTOTAL	2,776	1,032	37.2	285	10.3	1,035	37.3	423	15.2	2	0.1
TOTAL	13,759	7,739	56.2	2,149	15.6	2,520	18.3	848	6.2	510	3.7

TOTALS MAY NOT ADD DUE TO ROUNDING

Source: "Recurrent costs in the Health Sector" by Amadou Koita 1/, Joseph Brunet-Jailly 2/, Seydou Coulibaly 3/ and Kafin Diarra 3/, WHO, 1988

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GOUVERNEMENT DE LA REPUBLIQUE
DU MALI

REPUBLIQUE DU MALI
Un Peuple - Un But - Une Foi

MINISTERE DE LA SANTE PUBLIQUE
ET DES AFFAIRES SOCIALES

DECLARATION DE POLITIQUE SECTORIELLE DE SANTE ET DE POPULATION

1. La présente déclaration a pour objet d'exposer la politique de santé et de population du Gouvernement de la République du Mali qui sert de cadre à la réalisation des plans, projets et stratégies de développement du secteur.

I. Contexte

2. La Constitution de la République du Mali garantit le droit à la santé.

3. La politique sanitaire du Mali est conforme, d'une part, aux grands principes de l'Organisation Mondiale de la Santé dont il est membre et d'autre part à ses réalités socio-économiques et culturelles. Elle est fondée sur le principe d'universalité qui fait de la santé un droit fondamental de tout malien et de l'action sanitaire une oeuvre sociale de solidarité de l'Etat, des collectivités et de l'individu.

II. Orientation

4. La priorité de l'action sanitaire reste réservée au milieu rural et péri-urbain, à la prévention des maladies, à la promotion socio-sanitaire et au bien-être de la famille.

5. La santé étant une composante indissociable du développement socio-économique, elle représente donc un secteur d'investissement et devrait de ce fait obéir à la loi de l'utilisation rationnelle des ressources.

6. Afin d'assurer la pérennité du développement sanitaire, sa planification tiendra compte des ressources disponibles et mobilisera tous les acteurs - Etat, privés, ONG, bailleurs de fonds - et au premier chef, les populations bénéficiaires.

III. Objectifs de Politique de Santé

7. L'objectif majeur de la politique sanitaire du Mali est la réalisation de la santé pour tous sur un horizon aussi rapproché que possible.

8. La concrétisation de cet objectif passe par la réalisation des objectifs intermédiaires suivants:

(a) Améliorer l'état de santé des populations afin qu'elles participent plus activement au développement socio-économique du pays en:

- réduisant la mortalité maternelle et infantile;
- réduisant la morbidité et la mortalité dues aux principales maladies;
- développant les services de planification familiale;
- promouvant des attitudes et comportements sains favorables à la santé et au bien-être de la famille.

(b) Etendre la couverture sanitaire tout en rendant les services accessibles à la population en:

- implantant un dispositif de soins adapté aux réalités socio-économiques du pays et le plus rapproché possible des populations;
- assurant des services de santé de qualité géographiquement et économiquement accessibles y compris la disponibilité du médicament essentiel;
- intensifiant l'utilisation des services par des actions d'information, d'éducation et de communication.

(c) Rendre le système de santé viable et performant en:

- intégrant la politique socio-sanitaire dans celle du développement socio-économique du pays;
- rationalisant les services du secteur de la santé et leur expansion en rapport avec les ressources disponibles et mobilisables;
- améliorant l'efficacité du système de santé par une gestion rationnelle des ressources humaines, matérielles et financières;
- organisant la participation de l'Etat, des collectivités, des individus et des partenaires au développement à la prise en charge du système de santé;
- développant une approche multidisciplinaire et multisectorielle de l'action sanitaire.

IV. Stratégie Nationale de Développement de la Santé

9. La stratégie de développement sanitaire du Mali est basée sur le concept de soins de santé primaires adopté par la conférence mondiale d'Alma-Ata en 1978.

10. Afin d'accélérer la mise en oeuvre des soins de santé primaires, une quadruple stratégie a été adoptée dans le droit fil des principes énoncés dans l'Initiative de Bamako.

(a) faire évoluer la notion de pyramide sanitaire d'une conception hiérarchique et administrative vers une conception plus fonctionnelle qui différencie les niveaux opérationnel, d'appui et d'orientation. Le cercle représente le niveau opérationnel et constitue l'unité chargée de planifier le

développement de la santé, de le budgétiser et d'en assurer la gestion. Le niveau régional est chargé d'appuyer les cercles sur le plan technique. Le niveau central, chargé de l'appui stratégique, détermine les investissements et le fonctionnement du secteur, les standards qui tiennent compte des principes d'efficacité, d'efficience, d'équité et de viabilité. Il veille à l'application de ces standards par tous ses partenaires à l'action sanitaire. Il s'efforce de mobiliser les ressources privées, celles de l'Etat et celles des bailleurs de fonds pour le financement de soins de qualité accessibles à tous.

(b) assurer en permanence la disponibilité et l'accessibilité des médicaments essentiels à travers une série de mesures dont la réforme de la PPM et de l'UMPP, la levée du monopole d'importation, la rationalisation de la distribution et de la prescription, et le recouvrement des coûts du médicament.

(c) renforcer la participation communautaire à la gestion du système, les individus, les ménages et les communautés assurant leur propre santé. Malgré la modicité de leur pouvoir d'achat, ces derniers peuvent, grâce au développement de techniques nouvelles, peu coûteuses et efficaces favoriser grandement la survie de leurs enfants et réduire l'importance des maladies. Afin de garantir l'accessibilité aux soins et à l'information nécessaires à l'amélioration de la santé, les bénéficiaires seront associés à la gestion des services au niveau opérationnel.

(d) mobiliser les ressources nécessaires au financement du système de santé, y compris par le recouvrement des coûts dans les formations sanitaires, et rationaliser l'utilisation de ces ressources à tous les niveaux.

Le Gouvernement souhaite que l'ensemble des bailleurs de fonds soutienne cette stratégie.

V. Le Constat de Mise en Oeuvre de la Politique de Santé

11. La mise en oeuvre de la politique ci-dessus définie a connu certes des résultats encourageants. Cependant des besoins de santé et des problèmes de santé persistent toujours et dont la non satisfaction et la non résolution contrarient les efforts fournis. La situation sanitaire continue toujours d'être caractérisée par:

- la persistance d'une forte morbidité et mortalité en particulier, dans la population infantile et maternelle;
- la prédominance de maladies infectieuses, parasitaires et nutritionnelles au sein de la population.

12. Cette situation sanitaire est aggravée par:

- le fait que les populations ont été insuffisamment associées à la définition des politiques de santé;

- la faiblesse de la couverture sanitaire;
- une forte sous-utilisation et un fort sous-équipement des services de santé;
- un manque notoire de médicaments et de matériels de travail;
- une insuffisance dans l'intégration des activités;
- une capacité insuffisamment développée dans la gestion des ressources humaines, matérielles et financières;
- un resserrement des dépenses publiques de santé;
- un personnel quantitativement et qualitativement insuffisant, peu motivé et mal déployé;
- la faiblesse de l'accès à des sources d'eau salubre.

VI. Mises en Oeuvre de la Strategie

13. Devant cette situation, le gouvernement a entrepris une série de réformes de politique sectorielle, institutionnelles et d'investissements, visant à faire fortement et durablement progresser la réalisation de son objectif social de la santé pour tous.

14. Cette stratégie vise, par exemple, à faire passer de 25% à 80% la proportion d'enfants vaccinés avant l'âge d'un an, doubler la proportion de grossesses suivies pour atteindre environ 60%, et suivre la croissance de la moitié des enfants de moins de 2 ans.

15. Le Deuxième Projet de santé, population et hydraulique rurale est un outil privilégié, mais non le seul, de cette stratégie.

A. Santé

16. Pour améliorer l'état de santé de la population en général et de celui de la mère et de l'enfant en particulier, notre stratégie vise à (i) élargir l'accès aux services de santé, c'est-à-dire à en accroître la couverture et l'utilisation; (ii) en améliorer la qualité; et (iii) viabiliser le système de santé de cercle par l'utilisation rationnelle et efficiente des ressources (personnel, médicaments, finances, patrimoine) et l'organisation de la participation des populations.

17. Elargissement de l'accès. Pour accroître la couverture et l'utilisation des services, notre approche privilégie le développement de systèmes de santé de cercle et de commune et utilise un processus de planification, d'organisation et de gestion décentralisées selon une approche dite populationnelle qui s'articule autour des principes suivants:

(a) l'étude du milieu et l'élaboration de cartes sanitaires de cercle opérationnelles sur la base de concentrations optimales de populations dans des aires géographiques données appelées secteur de santé;

(b) la différenciation entre les fonctions de soins de santé primaires, de soins de santé de référence et de gestion du système;

(c) la réhabilitation et si nécessaire la construction de structures légères de soins comprenant dans un premier temps, un dispensaire, une maternité et un dépôt de médicaments essentiels au sein des secteurs de santé et dénommés centres de santé communautaires:

(d) l'organisation de la participation des populations dans la gestion des centres de santé de cercle et de commune et dans la réhabilitation/construction et la gestion des centres de santé communautaires.

18. Dans cette approche, la mise en oeuvre systématique et uniformisée est délaissée au profit de la capacité des cercles et des communautés en tant que partenaires, à remplir les conditions suivantes d'éligibilité au financement de l'Etat, canalisé à travers des opérations telles que le Deuxième Projet.

19. Les conditions d'éligibilité à ce type de financement sont les suivantes:

(a) constitution d'une équipe de santé de cercle suivant les normes convenues, notamment la présence de 2 médecins;

(b) élaboration d'un plan quinquennal de développement sanitaire de cercle (PDSC), précisant la situation sanitaire et les problèmes de santé du cercle, la stratégie sanitaire, les programmes et un plan de financement des dépenses d'investissement et de fonctionnement. Ce plan doit être approuvé par le Comité de développement du cercle (CLD) et entériné au niveau national par le Comité de suivi du projet;

(c) existence d'un centre de santé communautaire opérationnel suivant des critères de performance technique et financière convenus d'avance;

(d) engagement des communautés à contribuer financièrement et/ou physiquement pour 50% du coût de réhabilitation ou de construction des Centres de Santé Communautaires (CSCOM), l'Etat devant financer le complément;

(e) engagement du Comité Local de développement du cercle à consacrer à la santé au moins 7% des recettes produites par la taxe locale de développement;

(f) appui de la Direction Régionale de la Santé Publique et des Affaires Sociales aux cercles pour les aider à satisfaire aux conditions d'éligibilité.

20. La satisfaction des conditions d'éligibilité requiert une campagne soutenue d'information et de sensibilisation des populations en vue d'obtenir leur participation sur la base d'engagements contractuels entre les pouvoirs publics et les communautés organisées.

21. L'application de l'approche ci-dessus définie se traduira par la réalisation à l'intérieur des circonscriptions socio-sanitaires de cercle et de commune, d'un réseau de centres de santé communautaires le plus rapprochés possible des populations et capables de dispenser de soins de santé de base (curatifs, préventifs, SMI, FP, vaccination, pharmacie) intégrés. Un système de référence et d'appui sera créé au niveau des centres de santé de cercle et de commune qui seront renforcés en conséquence.

22. Amélioration de la qualité. Celle-ci sera obtenue par la définition d'un plateau technique, tant pour les soins de base que pour les soins de référence, la formation et la supervision du personnel sur la base de protocoles de traitement, eux-mêmes liés au plateau technique, et la disponibilité en médicaments essentiels à des prix abordables sur l'ensemble du territoire.

23. Gestion. L'équipe de santé de cercle garantira aux communautés éligibles un plateau minimum de soins de santé de base dans la mesure où la communauté acceptera de partager la prise en charge des autres coûts de fonctionnement de son centre de santé communautaire.

24. L'équipe de santé de cercle aura les responsabilités suivantes:

(a) assistance à la confection du plan de développement sanitaire du cercle, du plan de financement programme-budget, du programme d'exécution et du rapport d'exécution;

(b) l'obtention de la contribution du Comité de Développement au financement du plan de développement sanitaire du cercle;

(c) la gestion des ressources humaines, en particulier le recrutement, la formation, la supervision et le suivi de la carrière des agents; la confection de plans d'affectation et de mutation du personnel sanitaire de l'Etat et de plans de recrutement et formation d'agents de santé communautaires;

(d) assistance à la gestion des ressources physiques et en particulier les médicaments, des ressources financières mobilisées dans le cadre du système de recouvrement des coûts, des contributions des Comités de Développement et d'Organisations Non Gouvernementales;

(e) la préparation de rapports financiers et la réalisation d'activités de conseil aux centres de santé communautaires;

(f) la mobilisation et la formation des communautés dans le cadre de leur participation à la mise en place et au fonctionnement du système.

25. L'équipe de santé de cercle bénéficiera du soutien de l'équipe régionale dont les capacités seront renforcées et porteront sur:

- la réalisation par les cercles des conditions d'éligibilité au financement de l'Etat;

- l'appui à la confection et à l'exécution des plans de développement sanitaire de cercle, et l'examen des rapports annuels des cercles;

- la gestion des ressources dans le cadre du système d'information de gestion. Elle concernera les ressources humaines en matière de programmation des besoins, de déploiement, de formation et de suivi de carrière des agents. Les ressources physiques concerneront surtout la disponibilité en médicaments au niveau régional pour les cercles, l'inventaire et la maintenance de l'équipement par l'élaboration et la mise en oeuvre d'une capacité locale d'entretien et de réparation. Les ressources financières gérées par les cercles le seront avec l'appui de la région en conformité avec les directives de comptabilité élaborées au niveau de la Direction Administrative et Financière du Ministère de la Santé Publique et des Affaires Sociales dans le cadre du système d'information de gestion qui sera mis en place;

- le soutien aux équipes socio-sanitaires de cercles en matière d'information, éducation et communication.

26. Financement. La stratégie gouvernementale vise d'abord à rationaliser le financement du secteur afin de maximiser les économies possibles, puis d'augmenter ce financement.

27. En matière de financement public de la santé, une étude financière est en voie de réalisation qui aidera le Ministère de la Santé à examiner sa nomenclature budgétaire et à la rendre plus fonctionnelle, mettra en oeuvre des normes budgétaires pour le fonctionnement et l'investissement, et un système de suivi des coûts et les dépenses, préparera des budgets consolidés et des plans de financement intégrant les contributions du secteur public, privé et de l'apport extérieur et définira les principaux indicateurs financiers du tableau de bord.

28. Dans le cadre du Programme d'Ajustement Structurel, le Gouvernement augmentera progressivement la part du secteur dans son budget total de fonctionnement afin qu'elle passe de 6,6% en 1990 à 7,30% en 1991 et 8% en 1992. Après le PAS, le Gouvernement continuera à accroître la part de la santé dans son budget de fonctionnement de façon à atteindre 9% en 1995.

29. Au niveau des cercles, les pouvoirs publics ont défini les modalités de participation des communautés au financement des soins de santé primaires:

- participation physique à travers leurs contributions aux constructions et à la maintenance des centres de santé communautaires, à l'aménagement des points d'eau, à l'entretien et à la réparation des pompes;

- participation financière à travers la généralisation du système de recouvrement des coûts (vente de médicaments, tarification des actes, etc.) et la contribu-

tion effective des organismes locaux de développement et des ONG à la prise en charge du système de santé.

30. Le Gouvernement veillera à ce que les coûts de participation des populations n'entravent pas leur accès aux soins et ne compromettent pas le développement des services.

31. Le cadre de politique, les plans et les stratégies sanitaires ainsi définis doivent concourir à faciliter la mobilisation des financements extérieurs. L'utilisation efficiente de ces ressources nécessite leur coordination en rapport avec celles de l'Etat et des communautés. La présente déclaration de politique de santé et population, et la création de la Cellule de coordination santé et population sont des décisions prises par le Gouvernement dans ce sens. La coordination de l'aide extérieure sera ensuite assurée par des examens annuels conjoints Gouvernement-bailleurs (y compris ceux qui ne participent pas au financement du Deuxième Projet) au cours duquel le programme et le projet seront passés en revue.

32. Personnel. En application des cadres organiques, le Ministère se propose de prendre des mesures afin d'assurer une meilleure adéquation entre les profils des personnels et les postes à pourvoir ainsi qu'à assurer la priorité à donner aux zones rurales.

33. Médicaments. Le Gouvernement a choisi de faire de la Pharmacie Populaire du Mali (PPM) l'outil privilégié d'exécution de la politique qui vise à rendre les médicaments essentiels disponibles et abordables sur tout le territoire malien dans un délai d'un an à travers les mesures suivantes:

(a) adoption de textes juridiques fixant la liste des médicaments essentiels en noms génériques (189 présentement) qui seuls seront exonérés d'impôts et taxes douanières et interdisant l'importation par la Pharmacie Populaire du Mali de 350 équivalents en spécialités correspondant aux médicaments essentiels libellés en DCI;

(b) la levée du monopole d'importation de la PPM et la réglementation, dans ce contexte, des conditions d'importation par d'autres opérateurs (qualification de l'acheteur, contrôle par le Ministère, etc.);

(c) libéralisation des prix des médicaments;

(d) la mise en place de mécanismes de contrôle de qualité des médicaments essentiels et d'inspection des pharmacies;

(e) adoption d'un contrat plan dans lequel la Pharmacie Populaire du Mali s'engage, en particulier, à n'acheter des médicaments génériques que par appels d'offres ou par l'intermédiaire de l'UNIPAC, à limiter à 15% la marge préférentielle accordée à l'Usine Malienne de Produits Pharmaceutiques, à se retirer de la distribution et des activités non rentables et ne correspondant pas aux missions essentielles

de la PPM et à céder ses officines et succursales aux pharmaciens privés selon un programme établi, à réduire de façon correspondante son personnel et à réviser les prix des médicaments essentiels en fonction de la nouvelle structure des prix. La PPM pourra exceptionnellement avoir recours aux consultations restreintes en cas de menaces de ruptures de stock; les prix obtenus doivent être équivalents à ceux du dernier Appel d'Offres ou à ceux de l'UNIPAC; une programmation sera proposée pour l'élimination des équivalents de l'ensemble des 189 médicaments essentiels;

(f) mise en oeuvre d'un programme de formation et d'information pour promouvoir les medicaments essentiels auprès des prescripteurs, des pharmaciens et des consommateurs;

(g) planification des commandes sur plusieurs années de façon à assurer la disponibilité constante des 55 médicaments essentiels les plus critiques au niveau de tous les cercles;

(h) seuls les médicaments essentiels seront dispensés dans les formations sanitaires publiques et communautaires;

(i) la réalisation d'une étude sur l'Usine Malienne de Produits Pharmaceutiques dans le but d'adapter ses objectifs (ligne de produits coûts) à ceux de la politique des médicaments essentiels et ce d'ici à 1992.

34. Patrimoine. Concernant les infrastructures sanitaires, la stratégie adoptée met l'accent sur l'extension de la couverture sanitaire par le développement rationnel des établissements de santé et l'intégration des activités avec définition de normes de construction et de maintenance, d'équipement et de personnel, l'ouverture du secteur aux prestataires privés, la priorité donnée à la réhabilitation, à l'équipement et à l'extension éventuelle des infrastructures existantes sur les constructions nouvelles.

35. Le Sous-Secteur Hospitalier. Les hôpitaux constituent le sommet de la pyramide de soins. Ils sont classés en hôpitaux secondaires, régionaux et nationaux. Jusqu'à présent, ils dispensent de la même manière des soins de santé de base, des soins de technicité élevée, et le dernier niveau de référence pour les malades. La première de ces trois fonctions est appelée à disparaître à mesure du développement des réseaux de CSCOM urbains. C'est dans le cadre des deux autres fonctions que le Gouvernement a entrepris la restructuration du secteur hospitalier en érigeant les hôpitaux nationaux en établissements publics à caractère administratif dotés de l'autonomie budgétaire qui garantirait au Ministère chargé de la Santé Publique et celui chargé des Finances une gestion rigoureuse des ressources. Une expérience-test est en cours au niveau de l'hôpital du Point G avec le partenaire français dont les conclusions seront examinées avec les bailleurs et prises en compte dans la mise en oeuvre de la politique hospitalière.

36. Le Secteur Privé de la Santé. Convaincu que l'intégration des privés dans le secteur de la santé permettra d'accroître la couverture

de soins, l'efficacité et la qualité des services, le gouvernement a pris des mesures pour promouvoir le développement du secteur privé. Elles concernent l'assouplissement des conditions d'exercice des professions sanitaires notamment en matière de normes d'ouverture d'établissement, la révision dans le sens d'une libéralisation des tarifs et l'autorisation des privés à prendre part à l'intégration des activités de planification familiale dans leurs activités de soins, l'interrelation à créer entre secteur public et secteur privé sous l'égide du Ministre chargé de la Santé Publique avec le concours des ordres de santé.

37. Dans le cadre de la préparation des jeunes diplômés à l'accès à l'emploi, le Deuxième Projet servira de cadre à des stages rémunérés en vue de combler le déficit en personnel nécessaire au projet et en même temps de leur permettre d'acquérir de l'expérience avant leur installation dans le privé au niveau des communautés ou à leur propre compte. Le Gouvernement encourage les communautés urbaines et rurales à engager de jeunes diplômés pour réaliser en leur sein le programme de Centres de Santé Communautaires.

38. L'évaluation de ces différentes approches à tester dans le cadre de l'intégration du secteur privé dans la politique nationale de santé du Gouvernement permettra de définir des stratégies appropriées en la matière.

39. Hydraulique rurale. Afin de renforcer l'impact de sa stratégie de santé, le Gouvernement poursuivra sa stratégie basée sur la participation des villageois au financement, à l'exécution et au suivi systématique des points d'eau. En outre, le programme d'hydraulique villageoise servira de support à travers l'iodation, à la lutte contre les carences en iode.

B. Population et Planification Familiale

40. En juillet 1990 s'est tenu à Bamako un débat public sur la politique de population du Mali, dont les conclusions et recommandations devraient être approuvées début 1991. Cette politique se fixe pour objectifs:

(a) d'améliorer l'état de santé de la population, en particulier les femmes, les enfants et les personnes âgées;

(b) d'adopter la fertilité au potentiel de développement économique;

(c) d'améliorer les conditions de vie à travers la sécurité alimentaire, la protection de l'environnement, la valorisation des ressources humaines, la promotion féminine et la recherche démographique; et

(d) de faire de la migration un élément à part entière des plans de développement du pays.

41. A l'intérieur de cet ensemble, qui relève de plusieurs Ministères, la responsabilité du MSPAS porte plus particulièrement sur la planification familiale. Dans ce domaine, notre stratégie vise un développement intégré des services de planification familiale, l'amélioration du bien-être de la famille, et tout particulièrement la promotion de la femme. Elle a pour double objectif d'améliorer la santé de la mère et de l'enfant à travers l'espacement des naissances et pour le pays, d'adapter la fécondité à son potentiel socio-économique. A cet effet, les mesures suivantes ont été prises:

(a) élaboration et mise en oeuvre d'une stratégie nationale de planification familiale et d'information, éducation et communication mobilisant les services de santé publics, privés, communautaires ainsi que les Organisations Non Gouvernementales;

b) levée de l'interdiction d'accès aux services de planification familiale à une femme mariée ou non sans autorisation maritale ou parentale préalable. Toutes les parties prenantes à cette composante en seront informées par un texte réglementaire;

c) autorisation de distribution de contraceptifs non hormonaux par le personnel sanitaire des centres de santé d'arrondissement et communautaires tandis que pour les contraceptifs hormonaux la prescription est médicale avec distribution et suivi par le personnel sanitaire qualifié des centres de santé d'arrondissement et communautaires. Pour ce faire, des modules de formation et des normes et procédures ont été élaborés et serviront à la mise en oeuvre de cette stratégie.

42. Une fois les contraintes levées, les actions de développement des services de planification et d'information, éducation et communication réalisées, le Gouvernement vise que d'ici la fin de 1996, 75% des femmes urbaines et 50% des femmes rurales connaissent l'existence et l'utilité des moyens contraceptifs modernes et qu'un taux de prévalence contraceptive moderne de 10% soit atteint dans les régions de concentration du deuxième projet et de 8,5% pour l'ensemble du pays.

43. L'implantation géographique des activités de Planification Familiale suivra celle de l'Information, Education, Communication (IEC). Elle ira des capitales régionales vers la périphérie et suivra en principe la progression du deuxième projet, avec toutefois toute la souplesse voulue pour répondre à l'évolution plus au moins rapide de la demande. Pour ce faire, les services de planning seront renforcés en conformité avec la stratégie nationale de santé maternelle et infantile/planification familiale définie par le Gouvernement.

44. Les activités d'information-éducation-communication seront intensifiées en utilisant tous les canaux de communication appropriés afin de stimuler la demande de service de planning là où elle est faible.

45. En outre, un fonds autonome pour les activités en matière de population dont les mécanismes de gestion et le cadre juridique sont définis sera mis en place après la création du Comité National des Activités de Coordination (CONACOP) et permettra de financer avec souplesse mais selon des critères et règles de fonctionnement rigoureux, les sous-projets population et promotion féminine qui seront approuvés.

VII. Conclusion

46. La mise en pratique de l'ensemble de ces mesures devrait permettre au secteur de la santé d'augmenter le rendement de ses services et de favoriser la réalisation de l'objectif majeur de notre politique de santé dans les meilleurs délais.

47. L'application de la présente déclaration de politique de santé et population devrait se traduire par la relance de la confiance des populations dans les services de santé, leur mobilisation et leur participation au fonctionnement du système, la mise en oeuvre de la politique des médicaments essentiels, l'utilisation accrue des services de santé et de planification familiale, l'augmentation de la couverture sanitaire, le recentrage des fonctions des services centraux et l'augmentation de la part du budget d'Etat et sa réallocation en faveur des actions non prises en charge par le système de recouvrement des coûts.

48. La présente stratégie de la santé et de la population au Mali s'inscrit dans un processus de développement sanitaire à long terme. Elle servira de référence à l'ensemble des interventions nationales et extérieures en vue de la réalisation de l'objectif final de la santé pour tous.

Washington, le 15 décembre 1990

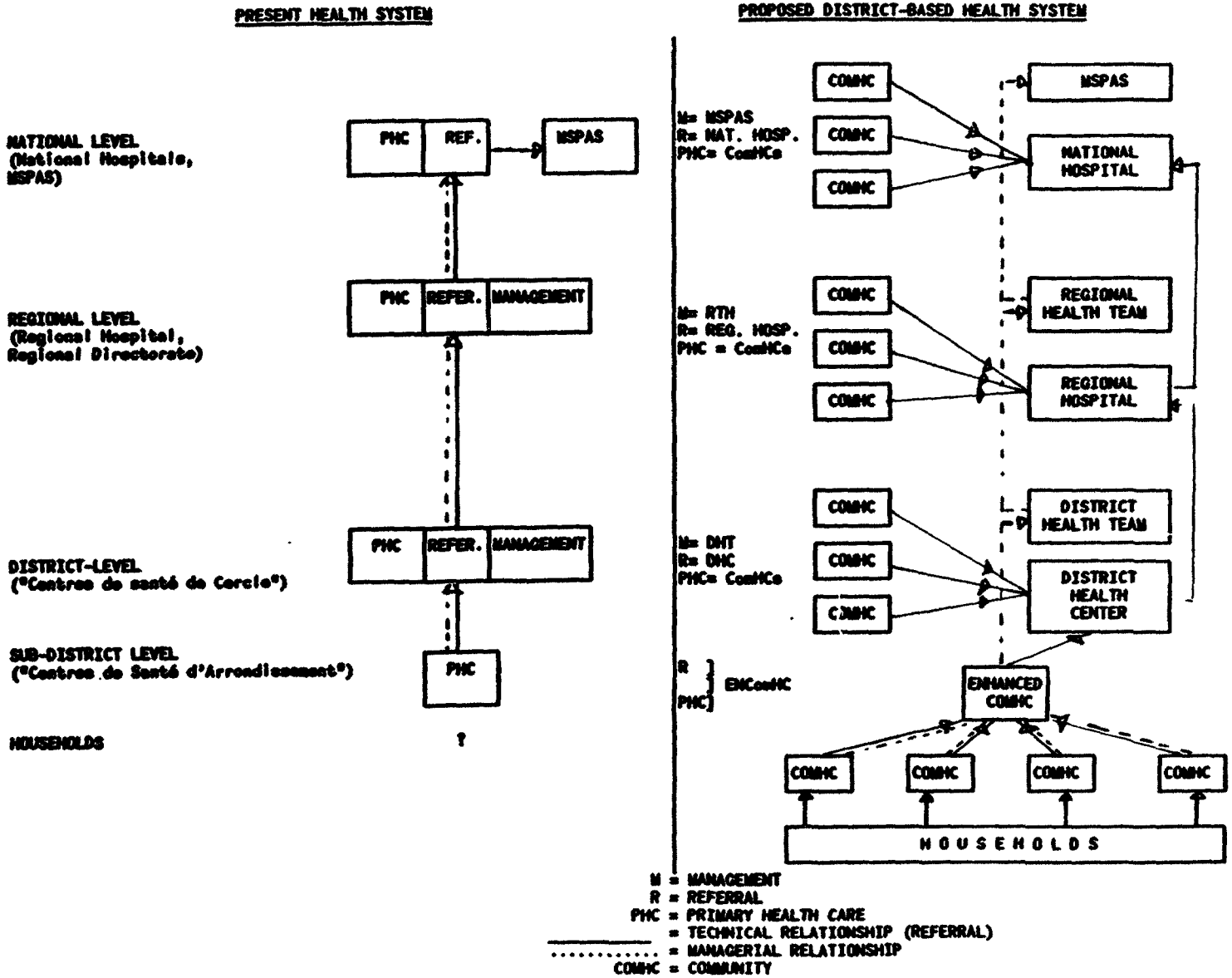
Pour le Gouvernement de la République du Mali
Le Ministre de la Santé Publique et des Affaires Sociales

TABLE 1

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

COMPARISON BETWEEN THE PRESENT AND PROPOSED HEALTH SYSTEMS



REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND WATER SUPPLY PROJECT

PROPOSED DISTRICT-BASED HEALTH CARE SYSTEM
ENTITY, STAFF, FUNCTIONS, INSTRUMENT

LEVEL	ENTITY	STAFFING	HEALTH CARE FUNCTIONS	COMMUNITY INVOLVEMENT	INSTRUMENTS
COMMUNITY	COMMUNITY HEALTH CENTER (COMHC) (AVERAGE 11 PER DISTRICT)	NURSE NURSE'S AIDE CLERK/PHARMACEUTICAL AIDE	PROVIDE BASIC HEALTH CARE PACKAGE - CURATIVE - VACCINATIONS - FHC - FAMILY PLANNING - PHARMACY - IDENTIFY COMHC STAFF - MEET WITH LDC ANNUALLY RE DHDP - DISCUSS DISTRICT CONTRIBUTIONS TO COMHC PROGRAM	- LOCAL DEV. COMMITTEE - MANAGE THE COMHC - IEC TO PROMOTE SELF-CARE - OUTREACH TO IMPROVE RESPONSIVENESS TO LOCAL NEEDS	- CONTRACT WITH DISTRICT IN CONTEXT OF DHDP - PROTOCOLS FOR DELIVERY OF HEALTH SERVICES - PERFORMANCE INDICATORS
SUB-DISTRICT (286 IN COUNTRY)	ENHANCED COMHC (2-5 PER DISTRICT) UNDER THE PROJECT	SAME AS COMHC, PLUS ONE PRATICAL NURSE (IDE)	SAME AS COMHC PLUS: - LIMITED REFERRAL SERVICES E.G. - MICROSCOPIC EXAMS IDE: - RESPOND TO URGENT HEALTH CARE NEEDS OF POPULATION NOT YET COVERED BY A COMHC	- SAME AS FOR COMHC	- SAME AS FOR COMHC
DISTRICT (46 IN COUNTRY)	DISTRICT HEALTH CENTER (DHC) (1 PER DISTRICT)	15 - 20 STAFF	- DELIVER A MINIMUM PACKAGE OF REFERRAL SERVICES FOR THE ENTIRE DISTRICT INCLUDING: HOSPITAL SERVICES: - MEDICAL - SURGICAL - PEDIATRIC - GYN.OBS TECHNICAL SERVICES: - LAB & RADIO SPECIALIZED SERVICES: - DENTAL & OPTHAMOLOGICAL		- PROTOCOLS FOR PROVIDING PREVENTIVE AND CURATIVE CARE - PERFORMANCE INDICATORS - DISTRICT HEALTH DEVELOPMENT PLAN (DHDP) - CONTRACTS BETWEEN COMHCS AND DHCS IN CONTEXT OF DHDP - STAFFING PLAN, REPORTS - PROTOCOLS
	DISTRICT HEALTH TEAM (DHT)	-CHIEF MEDICAL OFFICER -DEPUTY MEDICAL OFFICER -FIN./ADM. OFFICER -PUBLIC HEALTH NURSE -PHARMACEUTICAL NURSE -2 COMMUNITY DEVELOPMENT SPECIALISTS	- DEVELOP DISTRICT HEALTH DEVELOPMENT PLAN (DHDP) - MANAGE DISTRICT HEALTH CARE SYSTEM, INCLUDING: - P & B - STAFFING PLAN - PROCUREMENT AND DISTRIBUTION ESSENTIAL DRUGS - TRAINING AND SUPERVISION THROUGHOUT DISTRICT - MONITOR PROGRAM ACCEPTANCE AND PERFORMANCE	DISTRICT HEALTH COMMITTEE: - IDENTIFY COMHC STAFF TO BE RECRUITED BY THE DISTRICT UNDER A LOCAL CONTRACT - INVOLVE THE GENERAL PUBLIC IN THE MANAGEMENT OF BASIC SERVICES AND THE COMMUNITIES IN THEIR FINANCING AND MANAGEMENT - INFORM PBULIC ABOUT HEALTH CARE AND AVAILABLE SERVICES	- DISTRICT HEALTH DEVELOPMENT PLAN (DHDP) - CONTRACT WITH COMHC AND BETWEEN COMHCs AND DHCs - STAFFING PLANS, REPORTS, PROTOCOLS
REGION (7 IN COUNTRY)	REGIONAL HOSPITAL (ALL REGIONS EXCEPT KOULIKORO)	20 - 50 STAFF	- PROVIDE FULL RANGE OF 2ND LEVEL REFERRAL SERVICES		- FINANCIAL AUTONOMY
	REGIONAL HEALTH TEAM (RHT)	- DIR. OF PUBLIC HEALTH - CHIEF OF PUBLIC HYGIENE - CHIEF OF SOCIAL AFFAIRS - CHIEF OF FAMILY HEALTH (INCLUDING FP) - PHARMACIST - REGIONAL HEALTH ECONOMIST - MANAGER OF RESOURCES - HEALTH EDUCATOR (IEC SPECIALIST) - TRAINING SPECIALIST (PERIODIC SHORT-TERM)	- COORDINATE AND MANAGE PHYSICAL, PHARMACEUTICAL AND BUDGETARY RESOURCES FOR THE REGION - APPOINT MEMBER FO DHTS - REDEPLOY STAFF (MIS) - MANAGE TRAINING OF IEC PROGRAMS - SUPERVISION OF PROGAMMED ACTIVITIES AT THE DISTRICT LEVEL: REVIEW DISTRICT ANNUAL REPORT - RECOMMEND DISTRICT BUDGETARY ALLOCATIONS		- PERFORMANCE INDICATORS - MIS FOR CIVIL SERVANTS - PHYSICAL INVENTORY

Cont'd..

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND WATER SUPPLY PROJECT

PROPOSED DISTRICT-BASED HEALTH CARE SYSTEM
ENTITY, STAFF, FUNCTIONS, INSTRUMENT

CENTRAL	NATIONAL HOSPITALS MINISTRY OF PUBLIC HEALTH AND SOCIAL AFFAIRS (MOPHSA)	50-100 STAFF	- PROVIDE FULL RANGE OF TERTIARY REFERRAL SERVICES		FINANCIAL AUTONOMY
	- DNPFSS DIRECTION NATIONALE DE LA PLANIFICATION ET FORMATIO SOCIO-SANITAIRE		- RATIONALIZATION OF SECTOR RESOURCES HEALTH SECTORAL PLANNING, P & B TRAINING, IEC AND PERSONNEL ALLOCATION		- OPERATIONAL NORMS/GUIDELINES '2505'ANNUREPORTS
	- DNSP DIRECTION NATIONALE DE LA SANTE PUBLIQUE		- DESIGNS AND IMPLEMENT TRAINING AND IEC		
	- DSF DIRECTION NATIONALE DE LA SANTE FAMILIALE		- DESIGNS AND IMPLEMENT FP, TRAINING AND IEC		
	- DNHPA DIRECTION NATIONALE DE L'HYGIENE PUBLIQUE ET DE L'ASSAINISSEMENT		- TRAINING RELATED TO RURAL WATER SUPPLY		
	- DNAS DIRECTION NATIONALE DES AFFAIRES SOCIALES		- TRAINING FOR FAMILY PLANNING ACTIVITIES, WITH SIGNIFICANT SUPPORT FROM USAID		
	- DAF DIRECTION ADMINISTRATIVE ET FINANCIERE		- BUDGET MANAGEMENT - PERSONNEL MANAGEMENT - PROCUREMENT, ACCOUNTING		- MOPHSA BUDGET
	- DNAS AND DNHPA INSPECTION DE SANTE (WITHIN DNPFSS)		- DEVELOP GUIDELINES FOR COMMUNITY MOBILIZATION BY THE DNT AND KEY ELEMENTS OF THE HEALTH EDUCATION MESSAGES; STRENGTHEN PROGRAM STRATEGIES IN THE PROJECT REGIONS		
	- CEPRIS CELLULE D'EXECUTION DU PROGRAMME DE RENFORCEMENT DES INFRA. SANITAIRES		- CIVIL WORKS QUALITY CONTROL		
	- PROJECT COORDINATION UNIT		- LIAISE WITH DONORS		
	- COORDINATION WITH OTHER MINISTRIES MEN (MINISTRY OF EDUCATION) RE SCHOOL OF MEDICINE AND PHARMACY, FONCTION PUBLIQUE (CIVIL SERVICE) RE TRENDS IN EMPLOYMENT)		COORDINATE AND MONITOR PROJECT IMPLEMENTATION		

SOURCE: MSPAS, 1989

REPUBLIQUE DU MALI

DEUXIEME PROJET SANTE, POPULATION ET HYDRAULIQUE RURALE

Planification du développement sanitaire au niveau du cercle

1. Depuis 1981, Le Ministre de la Santé Publique et des Affaires Sociales s'est engagé dans un processus de programmation sanitaire décentralisé, qui a abouti à l'élaboration et à l'expérimentation d'un plan régional de développement sanitaire au niveau de certaines régions du pays. L'objectif de ce processus est de rapprocher le pouvoir de décision et les structures qui le sous-tendent au niveau opérationnel et de l'exécution. Etant donné qu'au Mali, le niveau administratif qui réalise le plus ce rapprochement est le cercle ou la commune, il est proposé de transférer à ce niveau les compétences de planification et les pouvoirs de gestion du développement sanitaire à la base.

2. Le canevas ci-dessous est une adaptation du plan régional actuellement testé par la DNPFSS (DAF) au niveau de certaines régions du Mali. Le plan de développement socio-sanitaire du cercle proposé pour le deuxième projet de développement sanitaire comporte les points suivants:

(A) Analyse de situation
- Définition - but
- Procédures
- Fiches de recueil des données

(B) La concertation avec les partenaires au développement socio-sanitaire

(C) Les objectifs généraux de développement du cercle (ou de la commune en matière de santé

(D) Les stratégies de développement sanitaire

(E) Élaboration des volets du plan
- Définition du volet
- Les volets du plan
- Volets sanitaires spécifiques (prioritaires)
  Les soins curatifs
  La santé familiale
  La lutte contre les endémies locales
  La vaccination
  L'amélioration de la qualité de l'eau et l'hygiène du milieu
- Volets organisation du système de santé
  Développement des CSCOM
  Développement du CSC
  Développement des structures techniques d'appui
  Volets mobilisation sociale
  Organisation et participation communautaire
  Information et éducation pour la santé
  Appui aux initiatives de base

(F) Le plan de financement
- Compte d'investissement
  Évaluation des besoins d'investissement/volet
  Plan de prise en charge des frais d'investissement
- Les budgets de fonctionnement
  Évaluation des frais de fonctionnement/volet
  Plan de prise en charge des frais de fonctionnement/volet

(G) La gestion et le pilotage du plan de développement sanitaire
- L'autonomie de gestion de la circonscription et ses limites
- Les appuis au pilotage de la circonscription
- Évaluation

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

DECENTRALIZED HEALTH MANAGEMENT INFORMATION SYSTEM

Le système local d'information pour la santé

I. Le problème

1. Un système centralisé. Jusqu'à présent, le système d'information pour la santé du Mali a été conçu pour répondre en priorité aux besoins d'information des directions et programmes nationaux, ainsi qu'à ceux des organismes de coopération. Par conséquent, ce système est peu adapté à la gestion décentralisée des services de santé.

2. Un système plus administratif que fonctionnel. Le système actuel renseigne sur les activités des services et les ressources utilisées sans se référer aux objectifs et aux normes à atteindre. Sans cette référence, les responsables au niveau local (Centre de santé) ne sont pas en mesure d'interpréter les données qu'ils recueillent et transmettent à un niveau supérieur. Pour prendre les mesures correctrices qui s'imposent, ils dépendent totalement d'une rétro-information souvent hypothétique et toujours tardive.

3. Un système peu fiable. Parce que le système n'est pas conçu en priorité pour servir à l'auto-évaluation par les responsables locaux des services, ces derniers tendent à se désintéresser d'un système dont ils ne perçoivent pas les avantages. Par conséquent, les rapports sont peu fiables, souvent incomplets et peu ponctuels.

II. La stratégie adoptée

4. Décentralisation. Le système servira d'abord aux responsables locaux, afin qu'ils corrigent sans délai les programmes qu'ils gèrent. Ces responsables locaux, Centre de santé communautaire-CSCOM-: (i) définiront les responsables de l'unité de production de soins de base, le CSCOM, dont le bon fonctionnement est déterminant pour obtenir un impact sur la situation sanitaire; et (ii) l'équipe de santé de cercle qui aidera les responsables des CSCOM à analyser les progrès et les échecs, et comparera les performances des différents centres.

5. Fonctionnalité. L'objectif principal est de répondre aux questions de gestion que les responsables du CSCOM se posent:

a. les résultats constatés correspondent-ils à l'attente?

b. les soins offerts sont-ils utilisés dans une proportion suffisante?

c. les activités de soins et de gestion ont-elles la qualité voulue?

d. les moyens mis en oeuvre pour le fonctionnement du CSCOM sont-ils adéquats?

6. Les questions clés seront posées aux quatre niveaux (résultat, couverture, activité, moyens) au sujet des programmes prioritaires et du fonctionnement général du CSCOM.

7. La réponse objective à chaque question est fournie par un indicateur. Chaque indicateur est constitué d'un numérateur (NU) et d'un dénominateur (DE). La valeur de l'indicateur (VI) est déterminée régulièrement, et comparée à une valeur seuil (VS) et à une valeur-cible (VC). Au cas où la VI n'atteint pas la VS, les responsables du CSCOM en analyseront les causes et prendront les mesures correctrices appropriées.

8. Efficience. Parce que les supports sont conçus pour recueillir les données nécessaires aux calculs des indicateurs, les données inutiles ne sont pas enregistrées. Il s'ensuit une économie considérable de papier et de temps administratif du personnel.

III. Le Système d'information du CSCOM au Mali

9. Les Tableaux A à D présentent le système d'information du CSCOM au Mali. Test du système. Le système est actuellement dans les 3 CSCOM lancés de la Zone KBK. Il sera pleinement opérationnel avant la fin 1990.

10. Définition du centre de santé opérationnel. Pour qu'un Cercle obtienne le financement de son Plan de Développement Sanitaire, il devra faire la preuve qu'il comporte un CSCOM "opérationnel". Par convention, un CSCOM sera appelé "opérationnel" lorsque la valeur de tous les indicateurs trimestriels sera située entre la valeur seuil et la valeur-cible.

Examen annuel du Projet. Chaque Cercle présentera la performance de ses CSCOM à la revue annuelle du Projet. (Voir Tableau D). Afin d'être éligible pour le financement de la tranche suivante de son Plan de Développement Sanitaire du Cercle, ce dernier devra: 1) présenter le rapport d'activité d'au moins 80% de ses CSCOM. Chaque rapport de CSCOM devra être complet à au moins 80%; 2) présenter une analyse des problèmes de performance communs, et un programme d'actions correctrices qui satisfassent l'IDA.

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TABLEAU A

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

INDICATEURS DE RESULTAT

QUESTION	NUMERATEUR	DENOMINATEUR	VALEUR SEUIL	VALEUR CIBLE	NOMBRE DE MESURES ANNUELLES	SOURCE
LES MAMANS CONNAISSENT-ELLES LE MODE DE REHYDRATATION ORALE PAR LA SSS ET LES CRITERES DE REFERENCE AU CSCOM?	NOMBRE DE MAMANS CAPABLES DE REPRODUIRE LE MESSAGE LORS DE L'ENQUETE SEMESTRIELLE	NOMBRE DE MAMANS INTERROGEES LORS DE L'ENQUETE	0.3	0.6	2	NU+DE: ENQUETE
LES MAMANS CONNAISSENT-ELLES LES MESURES A PRENDRE EN CAS DE FIEVRE CHEZ UN ENFANT DE 0 A 4 ANS?	NOMBRE DE MAMANS CAPABLES DE REPRODUIRE LE MESSAGE LORS DE L'ENQUETE SEMESTRIELLE	NOMBRE DE MAMANS INTERROGEES LORS DE L'ENQUETE	0.3	0.6	2	NU+DE: ENQUETE
LA SITUATION NUTRITIONNELLE DES ENFANTS EST-ELLE SATISFAISANTE?	NOMBRE D'ENFANTS DONT LE POIDS EST SUFFISANT PAR RAPPORT A LEUR TAILLE (OU A LEUR AGE)	NOMBRE D'ENFANTS 0-4 ANS MESURES LORS DE L'ENQUETE TRIMESTRIELLE	A DETERM.	A DETERM.	4	NU+DE: ENQUETE
LA MORBIDITE ROUGEOLEUSE EST-ELLE REDUITE?	NOMBRE DE CAS DE ROUGEOLE CHEZ LES ENFANTS COUVERTS PAR LE CSCOM, CUMULES DURANT UN AN	NOMBRE DE CAS DE ROUGEOLE ATTENDUS SANS PROGRAMME	0.3	0.2	1	NU SURVEILLANCE AU CSCOM + RAPPORT DU COMITE DE SANTE. DE CALCULE SUR LA BASE DE LA POPULATION COUVERTE
LA POPULATION COUVERTE PAR LE CSCOM EST-ELLE SATISFAITE DES SERVICES?	NOMBRE DE PERSONNES SATISFAITES PARMI LES ENQUETEES	NOMBRE DE PERSONNES ENQUETEES	0.5	0.8	2	NU+DE: ENQUETE

TABLEAU B

INDICATEURS D'UTILISATION

LES SERVICES CURATIFS SONT-ILS UTILISES COMME PREVU?	NOMBRE TOTAL PAR AN DE CONSULTANTS CURATIFS PROVENANT DE LA POPULATION COUVERTE PAR CSCOM	POPULATION COUVERTE PAR LE CSCOM DIVISE PAR QUATRE	0.3	0.6	4	NU: REGISTRE DE CONSULTATION DE: DENOMBREMENT ANNUEL DE LA POPULATION COUVERTE: 4
LES MALADES TUBERCULEUX PULMONAIRES BACILLIFERES SONT-ILS DETECTES COMME PREVU?	NOMBRE DE NOUVEAUX TUBERCULEUX BACILLIFERES DEPISTES	POPULATION COUVERTE PAR LE CSCOM X INCIDENCE	0.3	0.6	1	NU: CAHIER DES TUBERCULEUX DE: POPULATION COUVERTE X 0.03
LES FEMMES ENCEINTES CONSULTENT-ELLES A TEMPS LA CONSULTATION PRENATALE?	NOMBRE DE FEMMES ENCEINTES CONSULTANT LA PRENATALE AVANT LE 8E MOIS	NOMBRE ATTENDU DE FEMMES ENCEINTES, PARMI LA POPULATION COUVERTE	0.3	0.6	4	NU: REGISTRE PRENATAL DE: POPULATION X 0.01
LES FEMMES SONT-ELLES ASSISTEES PAR UNE MATRONE FORMEE AU MOMENT DE LEUR ACCOUCHEMENT?	NOMBRE DE FEMMES ASSISTEES	NOMBRE ATTENDU D'ACCOUCHEMENT PARMI LA POPULATION COUVERTE	0.3	0.6	4	NU: REGISTRE DES ACCOUCHEMENTS DE: POPULATION X 0.01
LES NOURRISSONS SONT-ILS INSCRITS A TEMPS A LA CONSULTATION PREVENTIVE?	NOMBRE DE NOURRISSONS INSCRITS AVANT L'AGE DE 3 MOIS	NOMBRE ATTENDU DE NOURRISSONS PARMI LA POPULATION COUVERTE	0.3	0.6	4	NU: REGISTRE DE LA CONSULTATION DES NOURRISSONS DE: POPULATION X 0.01
LES PERSONNES COUVERTES PAR LE CSCOM ASSISTENT-ELLES EN PROPORTION SUFFISANTE AUX SEANCES D'EDUCATION POUR LA SANTE?	NOMBRE DE PERSONNES ASSISTANT AUX EPS	POPULATION COUVERTE PAR LE CSCOM	0.3	0.6	1	NU: CAHIER EPS DE: POPULATION COUVERTE MISE A JOUR ANNUELLEMENT
LES FEMMES EN AGE DE PROCREER UTILISENT-ELLES LE PF?	NOMBRE DE CONSULTANTES PF	NOMBRE TOTAL DE FEMMES EN AGE DE PROCREER DIVISE PAR 4	0.3	0.6	4	NU: CAHIER PF DE: POPULATION COUVERTE MISE A JOUR ANNUELLEMENT: 4

TABLEAU C

INDICATEURS DE QUALITE DES ACTIVITES

LES ENFANTS TERMINENT-ILS LEUR SERIE DE VACCINATION?	NOMBRE D'ENFANTS VACCINES PAR LE DTC I	NOMBRE D'ENFANTS VACCINES PAR LE DTC III	0.5	0.8	4	NU + DE: FEUILLE DE POINTAGE
LES MALADES TUBERCULEUX ACHEVENT-ILS LEUR TRAITEMENT?	PARMI LES TUBERCULEUX DEPISTES, NOMBRE DE TUBERCULEUX GUERIS OU EN TRAITEMENT, 12 MOIS PLUS TARD	NOMBRE DE TUBERCULEUX DEPISTES AU COURS DE L'ANNEE PRECEDENTE	0.3	0.6	1	NU + DE: CAHIER TBC
LES FEMMES ENCEINTES SONT-ELLES ASSIDUES A LA CONSULTATION PRENATALE?	NOMBRE DE CONSULTATIONS PRENATALES AU 8E MOIS	NOMBRE DE NOUVELLES CONSULTANTES A LA PRENATALE	0.5	0.8	4	NU + DE: CAHIER CPN
(450' LES FEMMES CONSULTANT LE PF SONT-ELLES ASSIDUES?	NOMBRE DE RENDEZ-VOUS AUXQUELS LES CONSULTANTS PF ONT REPONDU	NOMBRE DE RENDEZ-VOUS	0.5	0.8	4	NU + DE: CAHIER PF
LES ENFANTS SONT-ILS VACCINES CORRECTEMENT?	NOMBRE D'OBSERVATIONS REPONDANT AUX CRITERES DE CORRECTION	LORS DE LA SUPERVISION, NOMBRE D'OBSERVATIONS DE CONSULTATIONS DE VACCINATION	0.5	0.8	1	NU + DE: FORMULAIRE DE SUPERVISION
LES CONSULTATIONS CURATIVES SONT-ELLES ASSUREES CORRECTEMENT?	NOMBRE D'OBSERVATIONS REPONDANT AUX CRITERES DE CORRECTION	LORS DE LA SUPERVISION, NOMBRE D'OBSERVATIONS DE CONSULTATIONS CURATIVES	0.5	0.8	1	NU + DE: FORMULAIRE DE SUPERVISION
LES CONSULTATIONS PRENATALES SONT-ELLES ASSUREES CORRECTEMENT?	NOMBRE D'OBSERVATIONS REPONDANT AUX CRITERES DE CORRECTION	LORS DE LA SUPERVISION, NOMBRE D'OBSERVATIONS DE CONSULTATIONS PRENATALES	0.5	0.8	1	NU + DE: FORMULAIRE DE SUPERVISION
LES CONSULTATIONS DE PF SONT-ELLES REALISEES CORRECTEMENT?	NOMBRE D'OBSERVATIONS REPONDANT AUX CRITERES DE CORRECTION	LORS DE LA SUPERVISION, NOMBRE D'OBSERVATIONS DE CONSULTATIONS DE PF	0.5	0.8	1	NU + DE: FORMULAIRE DE SUPERVISION
LES DOCUMENTS COMPTABLES DU CSCOM SONT-ILS MAINTENUS CORRECTEMENT?	NOMBRE DE CRITERES DE CORRECTION REMPLIS	NOMBRE DE CRITERES DE CORRECTION A REMPLIR	0.8	1.0	4	NU: DOCUMENTS COMPTABLES DE: FORMULAIRE DE SUPERVISION
LES FICHES DE STOCK DES MEDICAMENTS SONT-ELLES BIEN TENUES?	NOMBRE DE CRITERES DE CORRECTION REMPLIS	NOMBRE DE CRITERES DE CORRECTION A REMPLIR	0.8	1.0	4	NU: DOCUMENTS COMPTABLES DE: FORMULAIRE DE SUPERVISION
LE CSCOM EST-IL PROPRE?	NOMBRE DE CRITERES DE CORRECTION REMPLIS	NOMBRE DE CRITERES DE CORRECTION A REMPLIR	0.6	1.0	4	NU: DOCUMENTS COMPTABLES DE: FORMULAIRE DE SUPERVISION

TABLEAU D

INDICATEURS DE DISPONIBILITE DES RESSOURCES

LES MEDICAMENTS ESSENTIELS SONT-ILS DISPONIBLES EN PERMANENCE AU CSCOM?	NOMBRE DE JOURS OU ET LA PENICILLINE ET LA CHLOROQUINE ET LA SRO ET LES TUBERCULESTATIQUES SONT EN STOCK	NOMBRE DE JOURS DANS LE TRIMESTRE	0.8	1.0	4	FICHES DE STOCK
L'APPROVISIONNEMENT EN VACCIN EST-IL SATISFAISANT?	POUR CHAQUE VACCIN, NOMBRE DE DOSES RECUES	POUR CHAQUE VACCIN, NOMBRE DE DOSES REQUISES	0.8	1.0	4	FORMULAIRE DE REQUISITION
LES CONTRACEPTIFS SONT-ILS DISPONIBLES EN PERMANENCE AU CSCOM?	NOMBRE DE JOURS OU ET LA PILULE ET LE DEPROVERAS ET LES PRESERVATIFS SONT DISPONIBLES	NOMBRE DE JOURS DANS LE TRIMESTRE	0.8	1.0 0.6	4 4	FICHES DE STOCK
LA MARGE BENEFICIAIRE DU CSCOM EST-ELLE SUFFISANTE POUR GARANTIR SA CONTINUITE?	CHIFFRE D'AFFAIRE DU CSCOM	DEPENSES DU CSCOM	1.0	1.2	4	COMPTE D'EXPLOITATION
LE PERSONNEL DU CENTRE DE SANTE EST-IL PRESENT LES JOURS PREVUS?	NOMBRE DE JOURS DE PRESENCE AU COURS DU TRIMESTRE	NOMBRE DE JOURS DE PRESENCE ATTENDUS	0.9	1.0	4	FEUILLE DE PRESENCE

TABLEAU D

INDICATEURS DE DISPONIBILITE DES RESSOURCES

QUESTION	NUMERATEUR	DENOMINATEUR	VALEUR SEUIL	VALEUR CIBLE	NOMBRE DE MESURES ANNUELLES	SOURCE						
LES MEDICAMENTS ESSENTIELS SONT-ILS DISPONIBLES EN PERMANENCE AU CSCOM?	NOMBRE DE JOURS OU ET LA PENECILLINE ET LA CHLOROQUINE ET LA SRO ET LES TUBERCULOSTATIQUES SONT EN STOCK	NOMBRE DE JOURS DANS LE TRIMESTRE	0.8	1.0	TRIM 1 2 3 4 ANNEE	CSCOM A	CSCOM B	CSCOM C	CSCOM D	CSCOM E	CSCOM F	MOY. CERCLE
L'APPROVISIONNEMENT EN VACCIN EST-IL SATISFAISANT?	POUR CHAQUE VACCIN, NOMBRE DE DOSES RECUES	POUR CHAQUE VACCIN, NOMBRE DE DOSES REQUISES	0.8	1.0	TRIM 1 2 3 4 ANNEE	CSCOM A	CSCOM B	CSCOM C	CSCOM D	CSCOM E	CSCOM F	MOY. CERCLE
LES CONTRACEPTIFS SONT-ILS DISPONIBLES EN PERMANENCE AU CSCOM?	NOMBRE DE JOURS OU ET LA PILULE ET LE DEPROVERAS ET LES PRESERVATIFS SONT DISPONIBLES AU CSCOM	NOMBRE DE JOURS DANS LE TRIMESTRE	0.8	1.0 0.6	TRIM 1 2 3 4 ANNEE	CSCOM A	CSCOM B	CSCOM C	CSCOM D	CSCOM E	CSCOM F	MOY. CERCLE
LA FREQUENTATION DU CSCOM EST-ELLE SUFFISANTE POUR GARANTIR SA CONTINUITE? LE PERSONNEL DES CENTRES DE SANTE EST-IL PRESENT LES JOURS PREVUS?	NOMBRE DE JOURS DE PRESENCE AU COURS DU TRIMESTRE	NOMBRE DE JOURS DE PRESENCE ATTENDUS	0.9	1.0	TRIM 1 2 3 4 ANNEE	CSCOM A	CSCOM B	CSCOM C	CSCOM D	CSCOM E	CSCOM F	MOY. CERCLE

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

POPULATION COVERED BY THE COMHC PROGRAM

POPULATION COUVERTE PAR LE PROGRAMME DE CENTRES DE SANTE COMMUNAUTAIRES

REGION	POPULATION 1990	POPULATION MOYENNE (1990) PAR CERCLE/COMMUNE	POPULATION MOYENNE (1990) COUVERTE PAR CSCOM	NOMBRE DE CERCLES APPUYES PAR LE PROJET	POPULATION DES CERCLES APPUYES PAR LE PROJET	NOMBRE DE CSCOM 1990	POPULATION TOTALE COUVERTE PAR LES CSCOM	TAUX DE COUVERTURE PAR LES CSCOM DANS LES CERCLES APPUYES PAR LE PROJET	TAUX DE COUVERTURE CSCOM DANS CES REGIONS
KAYES	1,289,321	184,189	8,692	4	736,756	88	286,836	0.39	0.22
MOPTI	1,536,364	192,046	10,664	5	960,230	81	330,584	0.34	0.22
BAMAKO	865,858	144,310	15,000	4	577,236	20	300,000	0.60	0.4
SEGOU	1,476,451	210,922	13,198	4	843,688	16	211,168	0.25	0.14
KOULIKORO	1,437,335	205,333	9,693	4	821,332	20	193,860	0.25	0.14
TOTAL	6,605,329	187,360	11,449	21	3,939,242	120	1,332,448	0.34	0.20

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REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

FINANCING OF THE DISTRICT-BASED HEALTH CARE SYSTEM

1. Principles. Under the system described in this report, primary health care (PHC) is to be provided by self-financed Community Health Centers (ComHCs), be they in urban areas ("communes"), district or sub-district capitals ("chef lieux de cercle et d'arrondissement"), or village groups ("secteurs"). The ComHcs would receive assistance from their local Government (through an existing Local Development Tax, which is retained at the local level for local initiatives) and from NGOs. Government's responsibility would be to finance priority programs and to ensure the quality of care through the provision of technical staff, in-service training and supervision of these ComHcs. The ComHcs to be supported under the project will include new rural centers to be established at the initiative of the communities, existing sub-district health centers and the PHC window of existing District and Commune Health Centers (the DHCs and the CHCs will be refocused exclusively onto their referral function). The decision to mobilize community participation was prompted by the recognition, not only of Government's persisting budgetary constraints, but also of the desirability of increasing the responsiveness of the health system to the concerns and needs of its users. In order to be effective, the system needs to be well defined while maintaining enough flexibility to match individual circumstances.

2. The financing framework proposed for the district-based health system is summarized in Table 1. Although similar cost sharing arrangements are being implemented in a number of countries (e.g. Zaire) and are under experimentation in Mali, it is essential, prior to extending them, to seriously review their affordability as well as their sustainability from the viewpoint of both the communities and the Government. As background for this analysis, Tables 2 (investment) and 3 (recurrent costs) present for each level of the new system (ComHc, DHC, DHT, RHT) (a) the breakdown of costs by type of expenditures and source of funding, and (b) the total costs for the five project regions and for nationwide extension. The base case used here for the ComHc is a staff of three (nurse, midwife, clerk), which could be reduced to two. The minimum target population is 5,000, although the average is expected to be 8,000-10,000.

3. Level of community participation required to cover Investment costs. Table 2 shows that, based on an investment cost-sharing arrangement (for the building) of 50% for Government (through the proposed project), 25% through the local Development Tax (retained at the local level precisely to support initiatives of this type) and 12.5% each for the communities and NGOs, the investment cost per person would be a range of CFAF 280 for 5,000 population-140 for 10,000 for a new ComHc and 60-30 for a renovated one. The level of NGO contribution assumed (CFAF 1.3 million) is not rare in Mali, where several donors envisage to systematically channel towards projects of this type the large influx of private charity funds. Furniture and equipment, an initial stock of drugs and start-up operating costs are expected to be financed through the project.

4. Level of community participation required to cover Recurrent costs. Based on the same assumptions, and on the principle that the Local Development would finance the salary of the nurse, Table 3 shows that the p.c. recurrent cost for ComHc would be CFAF 95-45 p.a. Medical supplies and amortization would be included in the District's budget. Drugs, with the exception of program-related medicines (against leper, TB, goiter, etc, which would continue to be paid for by donors) would be charged to users (at cost) plus a margin determined by the LHC.

5. Financing options. Payment of the community share of investment cost would be a one shot operation, and could be in-kind, (e.g., partly in the form of labor); the procedures are described in para 11. Payment of the recurrent costs of the ComHC by the community would be based on a cost-recovery system which would separate drugs from service fees.

(a) Service Fees. In order to assess the fee requirements, during project preparation a putative budget for a 3 (base case) and a 2 - staff ComHC was prepared (Table 4). Different fee formulae were envisaged, based on the KBK case: a yearly tax-based contribution (with an assumed 20% recovery rate), a yearly family membership (9 people/family), and a fee per visit. Population was prudently assumed at 5,000 per ComHc. The impact of various options on family budgets is presented in Table 5. Further sensitivity analyses were conducted based on the projectwide data. The results are in Table 6. Both sets show that (i) the annual membership fee is the least-cost solution; (ii) whatever the fee option retained, the fee level will vary broadly (up to a ratio of 1:5) depending on the population served and the utilization rate;

(b) Drugs (generics procured under ICB) would be paid at price based on a formula acceptable to IDA to cover administration, depot management (incl. the salary of the nurse) and distribution. Table 7 compares the average cost of a PPM-based prescription to that obtained in the " Médecins sans frontières and Médecins du monde" experiments, which already sell generics procured under ICB. These figures give a sense of the savings which could be achieved through introduction of the essential drug policy.

6. Affordability. If, for illustrative purposes, the cost of drugs following the PPM reform is estimated at CFAF 400 per prescription, and the fee per episode ranges from CFAF 305 to 65, the total cost per episode of illness would range from CFAF 705 to 465. A generally accepted threshold for affordability is that the cost per episode should not exceed the daily salary of a modern sector wage earner, or the equivalent of 2-4 days of rural income. Based on the salary range indicated in a recent IDA-financed study (Lachaud:"Le marché du Travail au Mali: analyse et politiques, February 1990"), costs of these magnitude would be affordable for most urban wage earners, down to the unskilled labor level in the modern sector (CFAF 21,000/month). The same study estimates daily rural wages as ranging from CFAF 500 during the low season to CFAF 800 during the high season. The proposed arrangements therefore meet the affordability criterion. However, the fact that modern sector apprentices, large segments of the urban informal sector work force, and the first decile civil servants do not satisfy it, suggests the need for a safety net (para 9).

7. On the local Government side, the financing of the nurses salaries (at CFAF 360,000 p.a. for 120 ComHC by the end of the project), plus maintenance of the DHT and the DHC, out of the Local Development Tax is amply feasible. The 1990 total revenues from the Tax amounted to CFAF 6 billion, of which about CFAF 450 millions (7.5%), plus CFAF 100 millions from the "communes", are to be paid as contributions to the operation of the health sector. These amounts are to be compared to the portion of the system's recurrent costs expected to be financed out of the tax, estimated at about CFAF 225 million for the project area, and 334 million following nationwide extension.

8. Sustainability. Additional financial inputs required to ensure sustainability of the proposed district/based health system are : (i), from the Central Government budget, an operating budget for the DHTs estimated at about CFAF 2.3 million p.a/district. This is equivalent, for 21 districts , to about CFAF 50.0 million, or 1 % of 1990 health recurrent budget; and (ii) from the donor community, a grant equivalent to about US$ 1.1 million p.a. in the form of vaccines, contraceptives, etc. This figure should be compared to the CFAF 12 billion external programs actually implemented in 1988. Both targets appear easily feasible, especially as domestic health spending is rationalized.

9. Safety nets. Four levels of protection have been envisaged for the poor at the individual, community and national levels. First, building on Mali's rich tradition of solidarity, the Communities themselves (through their elected Health Committees) would determine the criteria based on which their poorest members would receive free care. This approach has proven effective in Timbuktu, where only 4% of the population was declared eligible (to be compared with a nationwide 30%, consisting mostly of civil servants). Second, if a whole community experienced difficulties in sustaining its ComHc, it would receive increased supervision/assistance from the district for one year only, while possible solutions would be sought, namely either increased allocations from the district budget (or NGOs), or a reduction in the minimal package offered. Third, the Social Dimension of Adjustment (SDA) program, which will start in 1990 in Mali, will monitor closely the impact of cumulated cost-recovery on the poor through a battery of surveys. Fourth, in case of a major disaster such as the 1984 drought, resulting in a drastic decline in national output, income, and fiscal revenues, the proposed system would not be viable and would require emergency assistance from the international community.

10. Cost recovery arrangements. Responsibilities. The community Health Committee elected as a precondition for community eligibility would, with assistance from the DHT, determine the health, population and nutrition activities to be undertaken by the ComHC, the resulting civil works, staffing and operational needs, budget and financial plan, including the fee levels and options, criteria for identifying the indigents, and possible sources of additional funding such as NGOs. It would also select the staff of the ComHc and elect a small executive Health Management Committee (HMC) (consisting of a Chairman, a Treasurer, one Secretary, and possibly others). The Health Committee would meet once a month to discuss the community health situation, the community-based and outreach activities, and the technical and financial performance of the ComHc. Twice a year all the Health Committees heads would meet with the Chief of the District to discuss inter alia the District's

contribution to the ComHc program. The HMC Treasurer would, jointly with the ComHc's nurse, approve expenditures, and would keep the ComHC's accounts. Accounts would be audited twice a year.

11. Procedures. For investment costs, once the community applications for project support in constructing/rehabilitating ComHcs had been screened at the District and Regional levels, and approved by a Ministerial Project Monitoring Committee, a simple agreement specifying the obligations of both parties would be signed by the DHT and the communities. Projects contributions towards the cost of the investment would be released in a maximum of four tranches upon satisfactory completion of pre-agreed phases of civil works and technical requirements certifications. For the recovery of recurrent cost, the financial plan approved at the beginning of the fiscal year between the district and the community, specifying the contributions expected from the Local Development Tax, the community itself, and possibly NGOs, would be binding on all parties. The bulk of transactions at the ComHc would be based on membership cards or tickets per visit, so that the amount of cash kept would mostly consist of payments against drugs at the community pharmacy. These funds would be deposited at least once a week in the nearest bank.

12. The above findings point to the importance of: (i) sensitizing the communities on the reasons for decentralization/cost recovery, and on the long term implications of that policy; (ii) proceeding cautiously with the opening of ComHcs, especially new ones, and the size of the facility/basic package retained, on the principle that it is easier to let a ComHc grow organically than to have to close it down; and (iii) involving the communities on the decision, the concept, the management and the monitoring of the program.

TABLE 1

	INVESTMENT/ AMORTISSEMENT	SALARIES	NON-WAGE OPERATING COSTS	DRUGS	MISCELLANEOUS
DISTRICT HEALTH TEAM (MANAGEMENT)	GOV'T THROUGH EXT.FINANCING (PROJECT)	GOV'T	GOV'T	N.A.	GOV'T
DISTRICT HEALTH CENTER (REFERRAL)	GOV'T THROUGH EXT. FINANCING (PROJECT)	GOV'T	USERS (FEES)	USERS	GOV'T
COMMUNITY HEALTH CENTER (PHC)	GOV'T THROUGH EXTERNAL FINANCING 50% COMMUNITIES + LOCAL DEVLPT TAX+NGOs = 50%	NURSE = LOCAL DEVLPT TAX OTHER 2 = COMMUNITIES	USERS (FEES)	USERS	COMMUNITIES

A:TABLE1 (MALI GENERAL)

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TABLE 2

INVESTISSEMENTS DU PROGRAMME COMPLETEMENT REALISE
(EN MILLIERS DE FCFA)

			CONTRIBUTIONS LOCALES											
	VALEUR UNITAIRE		CAPITAL EXISTANT		TOTAL		COMMUN. LOCALES		TAXES LOCALES		ONG		BUDGET INVESTISST. (ETAT+EXT)	TOTAL INVESTISST.
A) ELEMENTS DU SSC	FCFA	%	FCFA	%	FCFA	%	FCFA	%	FCFA	%	FCFA	%	FCFA	FCFA
CENTRE COMMUNAUTAIRE (CSCOM)														
BATIMENT (CONSTR.)	10,700	0%	0	50%	5,350	13%	1,391	25%	2,675	12%	1,284	50%	5,350	10,700
BATIMENT (REHAB.)	10,700	78%	8,346	50%	1,177	13%	306	25%	589	12%	282	50%	1,177	2,354
EQUIPEMENT/MOBILIER	450	0%	0	0%	0	0%	0	0%	0	0%	0	100%	450	450
FONDS DE ROUL. MEDIC	1,800	0%	0	0%	0	0%	0	0%	0	0%	0	100%	1,800	1,800
FRAIS DE LANCEMENT	475	0%	0	0%	0	0%	0	0%	0	0%	0	100%	475	475
FORMATION INITIALE	45	0%	0	0%	0	0%	0	0%	0	0%	0	100%	45	45
COUT D'1 CSCOM			..		-									
NEUF	13,470	0%	0	40%	5,350	10%	1,391	20%	2,675	10%	1,284	60%	8,120	13,470
REHABILITATION	13,470	62%	8,346	23%	1,177	6%	306	11%	589	6%	282	77%	3,947	5,124
CENTRE DE SANTE DE CERCLE (CSC)														
BATIMENT (CONSTR.)	90,400	0%	0	0%	0	0%	0	0%	0	0%	0	100%	90,400	90,400
BATIMENT (REHAB.)	90,400	78%	70,512	0%	0	0%	0	0%	0	0%	0	100%	19,888	19,888
EQUIPT/MOBIL.(CONST.)	33,700	0%	0	0%	0	0%	0	0%	0	0%	0	100%	33,700	33,700
EQUIPT/MOBIL.(REHAB.)	33,700	75%	25,275	0%	0	0%	0	0%	0	0%	0	100%	8,425	8,425
MAT MED/CHIR. (CONST.)	15,600	0%	0	0%	0	0%	0	0%	0	0%	0	100%	15,600	15,600
MAT MED/CHIR. (REHAB.)	15,600	50%	7,800	0%	0	0%	0	0%	0	0%	0	100%	7,800	7,800
FONDS DE ROUL. MEDIC	5,391	0%	0	0%	0	0%	0	0%	0	0%	0	100%	5,391	5,391
PRODUITS DE LABOR.	408	0%	0	0%	0	0%	0	0%	0	0%	0	100%	408	408
FORMATION INITIALE	0	0%	0	0%	0	0%	0	0%	0	0%	0	100%	0	0
COUTS D'1 CSC														
NEUF	145,499	0%	0	0%	0	0%	0	0%	0	0%	0	100%	145,499	145,499
REHABILITATION	145,499	71%	103,587	0%	0	0%	0	0%	0	0%	0	29%	41,912	41,912
EQUIPE DE SANTE DE CERCLE (ESC)														
BATIMENT (CONSTR.)	12,900	0%	0	0%	0	0%	0	0%	0	0%	0	100%	12,900	12,900
BATIMENT (REHAB.)	12,900	80%	10,320	0%	0	0%	0	0%	0	0%	0	100%	2,580	2,580
EQUIPT/MOBILIER	19,250	0%	0	0%	0	0%	0	0%	0	0%	0	100%	19,250	19,250
STOCK TAMPON DE MEDIC	2,145	0%	0	0%	0	0%	0	0%	0	0%	0	100%	2,145	2,145
FORMATION INITIALE	3,750	0%	0	0%	0	0%	0	0%	0	0%	0	100%	3,750	3,750
TOTAL D'1 ESC														
NEUF	38,045	0%	0	0%	0	0%	0	0%	0	0%	0	100%	38,045	38,045
REHABILITATION	38,045	27%	10,320	0%	0	0%	0	0%	0	0%	0	73%	27,725	27,725
B) COUTS MOYENS PAR CERCLE														
CSCOM: 6 CONST + 5 REHA	148,170	28%	41,730	36%	37,985	9%	9,876	16%	18,993	9%	9,116	64%	68,455	106,440
CSC: 1	145,499	58%	83,856	0%	0	0%	0	0%	0	0%	0	100%	61,643	61,643
ESC: 1	38,045	22%	8,354	0%	0	0%	0	0%	0	0%	0	100%	29,691	29,691
COUTS MOYENS D'UN CERCLE	331,714	40%	133,940	19%	37,985	5%	9,876	10%	18,993	5%	9,116	81%	159,789	197,774
C) COUTS APPUIS PAR DIRECTION REGIONALE														
AMELIORATION LOCAUX	79,920	45%	35,964	0%	0	0%	0	0%	0	0%	0	100%	43,956	43,956
EQUIPEMENT/MOBILIER	18,248	75%	13,686	0%	0	0%	0	0%	0	0%	0	100%	4,562	4,562
FORMATION INITIALE	4,550	0%	0	0%	0	0%	0	0%	0	0%	0	100%	4,550	4,550
COUTS APPUIS D'UNE REGION	102,718	46%	49,650	0%	0	0%	0	0%	0	0%	0	100%	53,068	53,068
D) COUTS TOTAUX PAR REGION														
BAMAKO (6 COMMUNES)	2,003,002		853,293		227,910		59,257		113,955		54,698		1,011,799	1,239,709
KAYES (7 CERCLES)	2,424,716		987,233		265,695		69,133		132,948		63,815		1,171,588	1,437,483
MOPTI (8 CERCLES)	2,756,430		1,121,173		303,680		79,009		151,940		72,931		1,331,377	1,635,257
SEGOU (7 CERCLES)	2,424,716		987,233		265,695		69,133		132,948		63,815		1,171,588	1,437,483
KOULIKOURO (7 CCLES)	2,424,716		987,233		265,695		69,133		132,948		63,815		1,171,588	1,437,483
SOUS-TOTAL ZONE PROJET	12,123,580	41%	4,936,165	18%	1,329,475	5%	345,664	5%	664,738	4%	319,074	82%	5,857,940	7,187,415
SIKASSO (7 CERCLES)	2,424,716		987,233		265,695		69,133		132,948		63,815		1,171,588	1,437,483
GAO (5 CERCLES)	1,761,288		719,352		189,925		49,381		94,963		45,562		852,011	1,041,936
TOMBOUCTOU (5 CCLES)	1,761,288		719,352		189,925		49,381		94,963		45,582		852,011	1,041,936
SOUS-TOTAL HORS PROJET	5,947,292	41%	2,425,937	18%	645,745	5%	167,894	9%	322,873	4%	154,979	82%	2,875,610	3,521,355
TOTAL NATIONAL	18,070,872	41%	7,362,102	18%	1,975,220	5%	513,557	9%	987,610	4%	474,053	82%	8,733,550	10,708,770
E) TOTAL NATIONAL REPARTI PAR NIVEAU														
CSCOM	7,704,840	28%	2,169,960	36%	1,975,220	9%	513,557	16%	987,610	9%	474,053	64%	3,569,660	5,534,880
CSC	7,565,948	58%	4,360,519	0%	0	0%	0	0%	0	0%	0	100%	3,205,429	3,205,429
APPUI REGIONAL	821,744	48%	397,200	0%	0	0%	0	0%	0	0%	0	100%	424,544	424,544
ESC	1,978,340	22%	434,423	0%	0	0%	0	0%	0	0%	0	100%	1,543,917	1,543,917
TOTAL ('000 FCFA)	18,070,872	41%	7,362,102	18%	1,975,220	5%	513,557	9%	987,610	4%	474,053	82%	8,733,550	10,708,770
TOTAL ('000 US$)	$63,185		$25,742		$6,906		$1,796		$3,453		$1,656		$30,537	$37,443

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COUTS RECURRENTS ANNUELS DU PROGRAMME COMPLETEMENT REALISE
(EN MILLIERS DE FCFA PAR ANNEE)

TABLE 3

			CONTRIBUTIONS LOCALES								
	VALEUR UNITAIRE		TOTAL	UTILISATEURS COMM. LOCALES			TAXES LOCALES		BUDGET FONCTIONT. ETAT	CONTRIBUTIONS EXTERIEURES	
	FCFA	%	FCFA	%	FCFA	%	FCFA	%	FCFA	%	F CFA
A) SOINS DE SANTE DE CERCLE											
CENTRE COMMUNAUTAIRE (CSCOM)											
SALAIRE INFIRMIER	360	100%	360	0%	0	100%	360	0%	0	0%	0
SALAIRE MATRONNE	180	100%	180	100%	180	0%	0	0%	0	0%	0
SALAIRE COMMIS	180	100%	180	100%	180	0%	0	0%	0	0%	0
MED. & FOURN. MEDICALES	2,061	100%	2,061	100%	2,061	0%	0	0%	0	0%	0
CONTRACEPTIFS	216	0%	0	0%	0	0%	0	0%	0	100%	216
VACCINS	48	0%	0	0%	0	0%	0	0%	0	100%	48
TUBERCULOSTATIQUES	291	0%	0	0%	0	0%	0	0%	0	100%	291
FONCTIONNEMENT COURANT	96	100%	96	100%	96	0%	0	0%	0	0%	0
TOTAL POUR 1 CSCOM	3,432	64%	2,677	73%	2,517	10%	360	0%	0	16%	556
CENTRE DE SANTE DE CERCLE (CSC)											
SALAIRES	12,960	0%	0	0%	0	0%	0	100%	12,960	0%	0
MEDICAMENTS, FOURNIT.	7,588	100%	7,588	100%	7,588	0%	0	0%	0	0%	0
MAINTENANCE	1,808	100%	1,808	0%	0	100%	1808	0%	0	0%	0
FONCT. COURANT	2,217	0%	0	0%	0	0%	0	100%	2,217	0%	0
TOTAL POUR 1 CSC	24,573	38%	9,396	31%	7,588	7%	1,808	62%	15,177	0%	0
EQUIPE DE SANTE DE CERCLE (ESC)											
SALAIRES	10,080	0%	0	0%	0	0%	0	100%	10,080	0%	0
MAINTENANCE	645	100%	645	0%	0	100%	645	0%	0	0%	0
CARB. & ENTRET. VEH.	1,300	0%	0	0%	0	0%	0	100%	1,300	0%	0
FOURNITURES	800	0%	0	0%	0	0%	0	100%	800	0%	0
FORMATION CONTINUE	200	0%	0	0%	0	0%	0	100%	200	0%	0
TOTAL POUR 1 ESC	13,025	5%	645	0%	0	5%	645	95%	12,380	0%	0
B) COUTS MOYENS PAR CERCLE											
CSCOM: 11	37,757	84%	31,645	73%	27,685	10%	3,960	0%	0	16%	6,112
CSC: 1	24,573	38%	9,396	31%	7,588	7%	1,808	62%	15,177	0%	0
ESC: 1	13,025	5%	645	0%	0	5%	645	95%	12,380	0%	0
TOTAL	75,355	55%	41,686	47%	35,273	9%	6,413	37%	27,557	8%	6,112
C) COUTS APPUI PAR DIRECTION REGIONALE											
SALAIRES	3,600	0%	0	0%	0	0%	0	100%	3,600	0%	0
MAINTENANCE	800	0%	0	0%	0	0%	0	100%	800	0%	0
FOURNITURES	1,600	0%	0	0%	0	0%	0	100%	1,600	0%	0
FORMATION CONTINUE	400	0%	0	0%	0	0%	0	100%	400	0%	0
TOTAL APPUIS REGION	6,400	0%	0	0%	0	0%	0	100%	6,400	0%	0
D) COUTS TOTAUX PAR REGION											
BAMAKO (6 COMMUNES)	458,528		250,117		211,639		38,478		171,742		36,669
KAYES (7 CERCLES)	533,883		291,803		246,912		44,891		199,299		42,781
MOPTI (8 CERCLES)	609,237		339,499		282,195		51,304		226,856		48,893
SEGOU (7 CERCLES)	533,883		291,803		246,912		44,891		199,299		42,781
KOULIKORO (7 CCLES)	533,883		291,803		246,912		44,891		199,299		42,781
SOUS-TOTAL ZONE PROJET	2,669,414	55%	1,459,014	46%	1,234,559	8%	224,455	37%	996,495	8%	213,905
SIKASSO (7 CERCLES)	533,883		291,803		246,912		44,891		199,299		42,781
GAO (5 CERCLES)	383,173		208,431		176,366		32,065		144,185		30,558
TOMBOUCTOU (5 CCLES)	383,173		208,431		176,366		32,065		144,185		30,558
SOUS-TOTAL	1,300,230	55%	708,664	46%	599,643	8%	109,021	38%	487,669	8%	103,897
TOTAL NATIONAL	3,969,643	55%	2,167,677	46%	1,834,201	8%	333,476	37%	1,484,164	8%	317,802
E) TOTAL NATIONAL REPARTI PAR NIVEAUX											
CSCOM	1,963,343	84%	1,645,541	73%	1,439,621	10%	205,920	0%	0	16%	317,802
CSC	1,277,600	38%	488,596	31%	394,580	7%	94,016	62%	789,204	0%	0
APPUI REGIONAL	51200	0%	0	0%	0	0%	0	100%	51200	0%	0
ESC	677,300	5%	33,540	0%	0	5%	33,540	95%	643,760	0%	0
TOTAL ('000 FCFA)	3,969,643	55%	2,167,677	46%	1,834,201	8%	333,476	37%	1,484,164	8%	317,802
TOTAL ('000 US$)	13,880		7,579		6,413		1,166		5,189		1,111
1US$ = CFAF 286											

TABLE 4

SALARIES	RECURRENT BUDGET ILLUSTRATIVE FOR A 3 STAFF COMHC (CFAF) MONTHLY	YEARLY	% OF TOTAL	RECURRENT BUDGET ILLUSTRATIVE FOR A 2 STAFF COMHC (CFAF) MONTHLY	YEARLY	% OF TOTAL
NURSE	30,000	360,000	38.0%	30,000	360,000	47%
MIDWIFE	15,000	180,000	19.0%	15,000	180,000	24%
AIDE	15,000	180,000	20.0%			
TOTAL	60,000	720,000	77.0%	45,000	540,000	71%
OPERATING COSTS	8,000	96,000	10%	8,000	96,000	13%
MOTORCYCLE OPERATIONS/ MAINTENANCE	4,000	48,000	5%	4,000	48,000	7%
MOTORCYCLE AMORTIZATION	6,000	72,000	8%	6,000	72,000	9%
TOTAL	78,000	936,000	100%	63,000	756,000	100%

TABLE 5

	FEE RANGE TO COVER THE COST OF A COMHC, BASED ON GOVERNMENT SALARIES 3 STAFF COMHC (CFAF FRANCS) PESSIMISTIC SCENARIO (CALL COSTS PAID BY THE COMMUNITY)	MIDDLE SCENARIO (MIDWIFE PAID BY LDC)	OPTIMISTIC SCENARIO (NURSE PAID BY LDC)	FEE-RANGE TO COVER THE COST OF 2 STAFF COMHC, BASED ON GOVERNMENT SALARIES 2 STAFF COMHC (CFAF FRANCS) PESSIMISTIC SCENARIO (ALL COSTS PAID BY THE COMMUNITY	MIDDLE SCENARIO (MIDWIFE PAID BY LDC)	OPTIMISTIC SCENARIO (NURSE PAID BY LDC)
-YEARLY TAX-BASED CONTRIBUTION (20% RECOVERY RATE)	936/TAX PAYER	616/TAX PAYER	576/TAX PAYER	576/TAX PAYER	456/TAX PAYER	216/TAX PAYER
-YEARLY FAMILY MEMBERSHIP	1686/FAMILY	1470/FAMILY	1038/FAMILY	1038/FAMILY	822/FAMILY	389/FAMILY
-FEE PER VISIT						
- WITH 0.2 UTILIZATION RATE	682/VISIT	762/VISIT	522/VISIT	522/VISIT	402/VISIT	162/VISIT
- WITH 0.3 UTILIZATION RATE	598/VISIT	508/VISIT	348/VISIT	348/VISIT	268/VISIT	108/VISIT
- WITH CHILD DELIVERY	750	750	750	750	750	750

SOURCE: MISSION ESTIMATE

TABLE 6

RANGE OF FEES TO BE APPLIED TO COVER A TYPICAL COMHC RECURRENT COSTS

A) FEE PER EPISODE OF ILLNESS

UTILIZATION RATE .. POPULATION	5 000	6 000	7 000	8 000	9 000	10 000
0.3	1 500	1 800	2 100	2 400	2 700	3 000
0.4	2 000	2 400	2 800	3 200	3 600	4 000
0.5	2 500	3 000	3 500	4 000	4 500	5 000
0.6	3 000	3 600	4 200	4 800	5 400	6 000
0.7	3 500	4 200	4 900	5 600	6 300	7 000

COST PER EPISODE

0.3	304	253	217	190	169	152
0.4	228	190	163	143	127	114
0.5	182	152	130	114	101	91
0.6	152	127	109	95	84	76
0.7	130	109	93	81	72	65

B) ANNUAL FEE

PARTICIPATION RATE LEVEL OF ANNUAL FEE PER PERSON	5 000	6 000	7 000	8 000	9 000	10 000
0.7	130	109	93	81	72	65
0.8	114	95	81	71	63	57
0.9	101	84	72	63	56	51

TABLE 7

PRESCRIPTION COSTS, MALI, 1988

AVERAGE PPM-BASED PRESCRIPTION.....CFAF 2,690
MÉDECINS SANS FRONTIÈRES
* TOMBOUCTOU..... 196
* GAO..... 243
MÉDECINS DU MONDE
* BANKASS..... 364
* KORO..... 426

SOURCE: "LE FINANCEMENT DES COÛTS RÉCURRENTS DE LA SANTÉ AU MALI", INRSP

A:Xn3-6.N

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

INFRASTRUCTURE PROGRAM/INFRASTRUCTURES SANITAIRES

I. DIAGNOSTIC DU CONTEXTE ACTUEL

1.1 La structure du réseau sanitaire existant. Depuis les trois dernières années, pour pallier l'insuffisance de la couverture sanitaire des soins de base, de nouvelles structures se sont créées à l'initiative des collectivités locales (au total 45 en milieu rural et 6 en milieu urbain, notamment dans le district de Bamako). Dans ces centres de base, les soins primaires (soins curatif-préventifs, consultations pré/postnatales et parfois accouchements assistés) sont délivrés par du personnel employé directement par les centres eux-mêmes qui fonctionnent selon des principes privés ou de coopératives.

1.2 Au niveau des Arrondissements couvrant une population moyenne de 25.000 habitants (50% des arrondissements comptent entre 14.000 et 31.000 habitants), les Centres de Santé d'Arrondissement (CSA), implantés dans les Chefs Lieux des Arrondissements, délivrent les mêmes soins primaires que décrits ci-dessus, mais actuellement avec du personnel de la Fonction Publique, et dans des structures appartenant à l'Etat. Ces CSA n'ont en général pas les moyens d'offrir un appui technique aux centres de soins ouverts par les collectivités, alors que le besoin s'en fait ressentir, notamment pour des soins référés de la compétence de ces CSA ou des analyses rudimentaires n'exigeant pas d'installations de laboratoire autres qu'un microscope.

1.3 Au niveau des Cercles couvrant une population moyenne de 128.000 habitants (50% des Cercles comptent entre 98.000 et 183.000 habitants), les Centres de Santé de Cercle (CSC), installés dans les Chefs Lieux des Cercles, sont sensés offrir des soins de référence, dont la technicité demandent des moyens matériels et du personnel non disponibles dans les CSA. Ces soins comprennent la consultation par un médecin, des services hospitaliers de médecine générale ou de chirurgie simple faite par un médecin, des services de laboratoire, ainsi que des accouchements référés. Le personnel appartient à la Fonction Publique et les installations sont la propriété de l'Etat. Les études sur les activités du personnel de santé conduites durant la phase de préparation du projet ont montré qu'en l'absence de centres de soins primaires accessibles aux populations, ces CSC sont sollicités en permanence pour des soins primaires, et ne peuvent pas en conséquence répondre à leurs missions essentielles en matière de soins de référence.

1.4 Au niveau régional et national, les soins tertiaires sont assurés par les centres hospitaliers; en réalité, ces centres sont surtout utilisés pour les soins au premier niveau, par manque d'infrastructure sanitaire urbaine de base.

1.5 La répartition du réseau sanitaire existant. 25% de la population totale du Mali habite à moins de 15 km de plus de 52% des structures de soin.

Par ailleurs la population urbaine s'adresse en masse aux hôpitaux pour les soins primaires, ce qui dévie ceux-ci de leur vocation principale. Les centres de soins primaires sont très inégalement répartis entre les régions, ainsi qu'à l'intérieur d'une même région entre les cercles: le ratio varie de 2.500 à 25.000 habitants/CSA. En conclusion, seule une répartition plus équitable et une meilleure décentralisation de l'offre de soins primaires permettrait d'augmenter l'accessibilité aux soins.

1.6 Les programmes des infrastructures existantes. Chaque projet sanitaire applique ses propres normes pour la programmation du volet infrastructure, ce qui conduit très souvent à des sur-dimensionnements importants par rapport à la demande potentielle (les surfaces de CSC oscillent entre 270 et 3.800 m2, selon la source de financement). Sur la base de l'échantillon de 20 CSA, 5 CSC et 2 CS de communes à Bamako (représentant 8% des CSA, 11% des CSC du pays et 33% des CS de Bamako), les résultats des études, confirmés par des sondages durant les visites de terrain au cours de la mission d'évaluation ont permis de dresser le bilan suivant:

(a) Environ 25% des centres de soins de base disposent d'une petite infrastructure en général bien dimensionnée par rapport au taux d'utilisation et aux moyens de fonctionnement.

(b) Dans 85% des CSA, le programme d'espace construit dépasse de 170 m2 (ou 90%) la surface optimale, ce qui entraîne des charges additionnelles d'entretien. Les CSA disposent dans 75% des cas d'un dispensaire et d'une maternité, et dans 25% des cas il existe un logement pour l'infirmier d'Etat. En général, la collectivité met un logement à la disposition de la matrone.

(c) Dans 90% des CSC, le programme d'espace construit dépasse de 1.000 m2 (ou 117%) la surface optimale, et dans 50% des cas le dépassement atteint 2.000 m2 (ou 235%). Le logement du médecin chef n'existe que dans 50% des cas.

Cette situation révèle l'absence de véritables normes nationales permettant de dimensionner les infrastructures sanitaires en prenant en compte la nature des soins et le potentiel de la demande basée sur le nombre d'habitants ayant accès aux soins. Il est également important de souligner qu'aucune disposition administrative ne prévoit les conditions d'ouverture, d'extension et de fermeture de centres de soins primaires. Cependant le Ministère dispose de techniciens qui pourraient examiner les dossiers techniques et conseiller efficacement les collectivités qui entreprennent la création de centres de soins primaires.

1.04 L'état du patrimoine. L'étude portant sur un échantillon représentatif a mis en évidence que pour rattraper le retard d'entretien, il faut déployer un budget de réhabilitation équivalent à environ 10 ans du coût d'entretien normal, ou équivalant à 25% du coût d'une construction neuve. Actuellement, il n'y a pas de stratégie pour l'entretien des infrastructures sanitaires. Il en résulte un retard d'entretien dont les conséquences, dans le cas où aucune solution ne serait apportée, entraîneraient l'abandon

d'environ 50% des bâtiments actuels dans les 10 années à venir, et augmenteraient sensiblement le coût de la réhabilitation des 50% restant.

II. OBJECTIFS.

2.1 Le volet infrastructure de la composante "Appui au programme des cercles" comprend dans les régions du projet les objectifs suivants:

(a) L'appui aux actions visant à introduire un programme de santé communautaire couvrant 60% des communautés de 5,000 h situés dans un rayon de 15 km. Selon les régions, de 60 à 100% des ménages appartiennent à des communautés qui répondent à ce critère.

(b) L'appui aux projets communautaires éligibles pour la réalisation des investissements nécessaires en matière de réhabilitation des installations existantes et/ou de constructions neuves.

(c) La mise en oeuvre du programme de rationalisation du réseau sanitaire et l'application de normes permettant de répondre d'une façon optimale à l'offre minimum de soins.

(d) L'amélioration et le maintien, à un niveau acceptable du point de vue technique et financier, des conditions physiques des infrastructures.

(e) Le renforcement et la réhabilitation des infrastructures des CSC, dans les cercles des régions du projet qui répondent aux critères d'éligibilité.

(f) L'extension et la réhabilitation des infrastructures des Directions Régionales de la Santé, dans les régions du projet.

III. STRATEGIE.

3.1 Pour atteindre les objectifs énoncés ci-dessus, la stratégie du projet comprend: (i) l'application de normes pour dimensionner les programmes de construction; (ii) l'application aux communautés de conditions d'éligibilité aux appuis accordés par le projet; (iii) l'adoption de mécanismes souples et innovateurs de financement de ces programmes de construction; (iv) le renforcement et la mise en valeur des acquis (encouragement des traditions d'initiatives de base des communautés, utilisation des structures existantes au niveau des CSC, notamment les techniciens de Développement Communautaire (TDC) pour la sensibilisation et l'information des communautés, et les capacités techniques du secteur de la construction); et (v) un mécanisme de programmation annuelle suffisament flexible pour s'adapter aux initiatives communautaires.

3.2 L'application des normes. Les programmes architecturaux pour les infrastructures sanitaires seront basés sur des normes correspondant à une offre minimale de soins. Les études de préparation du projet ont permis de convenir que les normes suivantes représentent la réponse optimale aux conditions présentes sur le terrain:

(a) Les centres créés ou réhabités avec l'appui des communautés seront appelés Centres de Santé Communautaires (CSCOM) en milieu rural et Centre de Santé de Quartier (CSQ) en milieu urbain, à Bamako. La surface nette ne devrait pas excéder 124 M^2.

(b) Le CSCOM ayant des activités de référence équivalent à ce qui est appelé aujourd'hui le Centre de Santé d'Arrondissement offrira le même programme de soins communautaires. En outre, chaque fois que sa localisation le justifie, il offrira une gamme limitée de soins de référence pour les CSCOM des environs. La surface nette des CSA ne devrait pas excéder 144 M^2 pour les soins, et 53 M^2 pour le logement de l'infirmier d'Etat (hors project).

(c) Les Centres de Santé de Cercle et de Commune auront pour seule fonction d'offrir les soins de référence pour les malades du Cercle ou de la Commune. Les communautés habitant le chef-lieu du Cercle auront accès à un ou plusieurs CSCOM ou CSQ. La surface nette des CSC ne devrait pas excéder 753 M^2 dont 150 M^2 pour l'hébergement des accompagnants et le logement du médecin chef. La surface nette des CSCommune ne devrait pas excéder 915 M^2.

(d) Chaque cercle sera doté de bureaux (surface nette de 97 M^2) afin d'héberger l'Equipe de santé de Cercle, chargée de coordonner l'ensemble des activités de soins.

Le Tableau 1 (Dossier du projet) dresse l'inventaire des locaux pour chacun des types de centres de santé.

3.3 Les conditions d'éligibilité des communautés. Les conditions auxquelles devront satisfaire les communautés pour être éligibles au programme d'appui sont les suivantes:

(a) Regrouper au moins 5.000 habitants dans un périmètre de 15 km.

(b) Avoir constitué un comité représentant la communauté.

(c) Participer à 50% des frais de réhabilitation/construction soit sur fonds propres, soit avec l'appui d'ONG ou d'organisation de ressortissants.

(d) Avoir mené avec succès d'autres initiatives de développement.

(e) Se trouver dans un District selectionné pour le projet.

3.4 Site d'implantation des nouveaux CSCOM/Q. Autant que possible les nouveaux Centres de Santé Communautaires seront implantés de manière à: (1) réduire les distances entre les 5.000 membres de la communauté et le centre; (2) être proches des autres infrastructures socio-économiques (marché, école, etc.) et à; (3) être situés sur un axe de communication permettant la supervision du personnel et la référence des malades.

3.5 Les mécanismes de financement des appuis aux communautés. Afin de promouvoir et d'encourager la prise en charge des soins primaires par les collectivités locales, le programme prévoit les étapes suivantes:

(a) L'équipe de Santé Régionale renforcera la capacité de gestion et de programmation du Cercle, afin que ce dernier remplisse les conditions pour le financement par le Projet du Plan de Développement Sanitaire de Cercle (PDSC), à savoir: (1) un PDSC conforme aux normes nationales; (2) au moins un CSCOM opérationnel.

(b) Lorsque le Cercle aura rempli les conditions d'éligibilité, il sera doté chaque année des moyens financiers pour mettre en oeuvre la tranche annuelle de son PDSC. L'objectif à long terme du PDSC est de couvrir l'ensemble des communautés physiquement accessibles (5.000 h dans un rayon de 15 km) par un CSCOM opérationnel. L'objectif à 5 ans est de réaliser 60% du programme de CSCOM.

(c) Les tranches annuelles des PDSC seront consolidées au niveau Régional et intégrées dans le Programme national de Développement Sanitaire. Ce programme annuel sera révisé chaque année par un Comité Ministériel de coordination, et soumis aux bailleurs de fonds au mois d'août de chaque année. Il sera accompagné du rapport d'exécution de l'année précédente.

(d) Les travaux de réhabilitation et de construction des CSCOM/Q et des CSA pourront être préfinancés par les Comités Locaux de Développement. Ces derniers seront remboursés après certification des travaux par la CEPRIS (Cellule d'Exécution du Programme de Renforcement de l'Infrastructure Sanitaire). Ces travaux seront exécutés par des tâcherons et des petites entreprises engagées par le Cercle, et formés/encadrés par les agents de la Direction Régionale de l'Urbanisme et de la construction.

(e) Les travaux de réhabilitation et de construction des directions régionales de la santé ainsi que des CSC et des bureaux de Santé de Cercle seront financés à 100% par le projet et seront réalisés par des entreprises après appels d'offres.

3.6 Calendrier de mise en oeuvre

(a) Les cercles de la Zone KBK développent dès à présent leurs Plans de Développement Sanitaire de Cercle, et un CSCOM par Cercle. Au cours des négociations, il sera procédé à l'examen de leur dossier, afin qu'ils reçoivent l'appui du projet pour la mise en oeuvre de leur plan de Développement Sanitaire dès la mise en vigueur du Projet.

(b) Au cours de l'an 1 du Projet, les Régions de Kayes, de Mopti et le district de Bamako seront dotés des moyens pour assister l'ensemble de leurs cercles à remplir les conditions d'éligibilité. Les Régions de Segou et de Koulikoro suivront au courant de la deuxième année.

(c) Il est escompté qu'au cours du Projet, 60% des Cercles de chaque Région rempliront les conditions d'éligibilité.

(d) Il est prévu que dans les Cercles appuyés par le Projet dans les Régions de Kayes, Mopti et dans le District de Bamako pourront réaliser 60% de leur programme de CSCOM contre 40% dans les deux autres Régions.

IV. MOYENS ET MODALITES DE MISE EN OEUVRE

4.1 La zone et le volume d'intervention. La zone d'intervention du projet comprend, à partir de la première année, les régions de Kayes, Mopti et le district de Bamako, et à partir de la seconde année, les régions de Ségou et de Koulikoro. L'ensemble des secteurs, des arrondissements et des cercles représentent la zone potentielle d'intervention. En tenant compte du réseau actuel d'infrastructures, de l'état général des locaux existants, et des objectifs proposés, le Tableau No 2 présente le volume d'interventions réalisables durant le projet.

4.2 La nature des interventions. Le projet comprend les volets suivants:

(a) Le renforcement de l'équipe de la santé du Cercle pour lui permettre de réunir les conditions d'éligibilité du Cercle.

(b) L'appui à l'Equipe de Santé de Cercle et aux communautés pour: (i) la préparation du programme annuel et la mise au point des dossiers de demande de financement pour la réhabilitation et/ou la construction des CSCOM, CSA et CSQ; (ii) la construction et l'ameublement de Centres par l'octroi de subventions forfaitaires fixées à 6 millions de FCFA pour les CSCOM, les CSA et les CSQ; (iii) la réhabilitation et l'ameublement de centres existants, par l'octroi de subventions forfaitaires fixées à 1,5 millions de FCFA pour les CSCOM, les CSA et les CSQ; (iv) les extensions de Centres existants estimées sur la base du coût de 72.000 FCFA/M^2; (v) la dotation des équipements spécialisés et du stock initial de médicaments essentiels; (vi) l'encadrement du suivi des travaux par les techniciens (Techniciens du Développement Communautaire, et interventions des Directions Régionales de l'Urbanisme et de la Construction) en place au niveau des Cercles et des régions.

(c) Le financement des études, des travaux et des équipements pour la réhabilitation et/ou la construction des CSC des Cercles actifs et des Directions Régionales de la Santé (DRS), situés dans les régions du projet. Les DRS de Bamako et de Mopti devront être entièrement reconstruites compte tenu de leur dispersion dans plusieurs bâtiments dont certains sont en location. Par contre, pour les autres DRS, les travaux se limiteront à une réhabilitation simple à Ségou et avec extension des locaux existants à Kayes.

4.3 Les coûts du volet infrastructures sanitaires sont basés sur des coûts unitaires qui ont été reconstitués à partir de sous-détails de prix calculés pour des techniques classiques de construction fréquemment utilisées au Mali. La comparaison de ces coûts unitaires avec des bordereaux de prix de marchés récents a permis d'établir une fourchette de prix réalistes selon la taille et le type des entreprises. Les coûts unitaires indiqués sur le tableau No 4 ci-dessous s'appliquent à des petites entreprises pour les

CSCOM/CSQ, et à des entreprises de taille moyenne pour les DRS/CSC. Le tableau No 5 résume les coûts du volet des infrastructures sanitaires.

4.4 Le nombre des interventions prévues chaque années dans les différentes régions est donné à titre indicatif sur le calendrier des interventions (voir Tableau 6).

4.5 Les Tableaux 7 et 8 indiquent les coûts par nature des dépenses et par année.

Rappel: Les Tableaux 1, 1-2, 1-3 et 3 sont consignés dans le dossier du projet. Seuls sont repris dans cette Annexe les Tableaux 2, 4, 5 et 6.

TABLEAUX 1, 1-2, 1-3 (cf Dossier du projet)

TABLEAU No 2 IMPLEMENTATION SCHEDULE/CALENDRIER DES ACTIVITES

REGIONS D'INTERVENTIONS DU PROJET			STRUCTURES		COUVERTURE 96 PAR CSCOM (b)		INTERVENTIONS PREVUES SUR LE PROJET								NATURE INTERVENTION		
1ERE PHASE	POPULATION EN 1987	POPULATION EN 1996 (a)	EXISTANTES	POTENTIELLES	%	EN 1996	1991	1992	1993	1994	1995	1996	TOTAL	% (c)	A CONSTR	A REHAB.	A COMPL
REGION DE KAYES	1,058,556	1,289,321															
DRSP			1	1				1					1	100%		1	1
Equipe Sante de Cercle			0	7				1	1	1	1		4	6J%		4	1
CSC (soins de reference)			7	7				1	1	1	1		4	60%		4	1
Equipe Terrain (IDE)			48	48				10	10	8			28	60%			
Soins de ref. intermediaires			0	22				4	4				8	36%	8		
CSCOM			57	89	60%	773,593	5	7	7	8	6		33	36%	16	17	6
REGION DE MOPTI	1,261,383	1,536,364															
DRSP			1	1				1					1	100%	1		
Equipe Sante de Cercle			0	8				1	1	2	1		5	60%		5	1
CSC (soins de reference)			8	8				1	1	2	1		5	60%		5	1
Equipe Terrain (IDE)			47	47				10	10	8			28	60%			
Soins de ref. intermediaires			0	21				4	4				8	36%	8		
CSCOM			59	85	59%	906,455	1	6	8	8	8		31	36%	12	19	10
BAMAKO	648,163	865,858															
DRSP			0	1					1				1	100%	1		
Equipe Sante de Cercle			0	6				1	1	1	1		4	60%	2	2	1
CSCommune (soins de ref.)			6	6				1	1	1	1		4	60%	2	2	1
Equipe Terrain (IDE)													0				
Soins de ref. intermediaires													0				
CSQ			6	57	100%	865,858	1	4	5	6	4		20	36%	16	2	
2IEME PHASE																	
REGION DE SEGOU	1,212,193	1,476,451															
DRSP			1	1						1			1	100%		1	1
Equipe Sante de Cercle			0	7					1	1	1	1	4	60%	1	3	1
CSC (soins de reference)			7	7					1	1	1	1	4	60%	1	3	1
Equipe Terrain (IDE)			34	34					5	5	5	5	20	60%			
Soins de ref. intermediaires			0	16					2	2			4	24%	4		
CSCOM			43	66	59%	871,106			2	4	4	6	16	24%	7	9	5
REGION DE KOULIKORO	1,180,078	1,437,335															
DRSP			1	1						1			1	100%		1	
Equipe Sante de Cercle			0	7					1	1	1	1	4	60%	1	3	
CSC (soins de reference)			7	7					1	1	1	1	4	60%	1	3	
Equipe Terrain (IDE)			34	34						6	6	8	20	60%			
Soins de ref. intermediaires				21						2	3		5	24%	5		
CSCOM			47	66	54%	776,161			3	6	5	6	20	24%	11	9	6
TOTAL	5,35c,373	6,605,329															
DRSP			4	5			0	2	1	2	0	0	5	100%	2	3	2
Equipe Sante de Cercle			0	35			0	3	5	6	5	2	21	60%	4	17	4
CSC/SCommune (Soins ref.)			35	35			0	3	5	6	5	2	21	60%	4	17	4
Equipe Terrain (IDE)			161	161			0	20	25	27	11	13	96	60%	0	0	0
Soins de ref. intermediaires			0	80			0	8	10	4	3	0	25	31%	25	0	0
CSCOM/CSQ			212	383	63%	4,193,172	7	17	25	32	27	12	120	31%	64	56	27

(a): Taux annuel d'accroissement de la population: 2,5% pour l'ensemble du territoire, et 3,7% pour Bamako;

(b): Proportion de la population physiquement accessible par un CSCOM (5.000 habitants dans un rayon de 15 Km);

(c): Le financement du Projet est prevu pour renforcer:
- 100% des directions regionales (DRSP);
- 60% des cercles de chaque region (CSC);

Dans les cercles retenus, le projet prevoit de:
- installer l'equipe de cercle;
- renforcer la supervision par les Infirmiers d'Etat (IDE);
- rehabiliter les CSC/CSCommune; et
- realiser le potentiel de CSCOM/CSQ a 60% pour la phase 1 et a 40% pour la phase 2;

• 25% des CSCOM seront dotes d'equipement et de fournitures medicaux pour servir de centres de reference intermediaire;

• 100% des CSQ seront dotes de ces equipements et fournitures

TABLEAU 3 (cf Dossier du projet)

COUTS UNITAIRES EN FCFA x 1,000

TABLEAU 4

	SURFACES NETTES M²	SURFACES BRUTES M²	CONSTRUCTION FCFA/M²	CONSTRUCTION U	REHABILITATION FCFA/M²	REHABILITATION U	COMPLEMENT FCFA/M²
DRSP	450	720	111	79,920	22	15,840	111
Equipe Sante de Cercle	97	116	111	12,876	22	2,552	100
CSC (Soins de reference)	753	904	100	90,400	22	19,888	100
Equipe Sante de Commune	97	116	111	12,876	22	2,552	100
CSCommune (Soins de reference)	915	1,099	100	109,900	22	24,178	100
CSC (KBK)	-	-	-	-	-	-	-
Equipe Sante Terrain (IDE) /a	53	64	72	4,608	16	1,024	72
Soins de ref. intermediaires	20	24	72	1,728	16	384	72
CSCOM/CSQ	124	149	72	10,728	16	2,384	72

/a: le logement de l'IDE n'est pas compris dans le projet

TABLEAU 5

COUTS DU VOLET INFRASTRUCTURE EN '000 FCFA

TRAVAUX GENIE CIVIL

	CONSTRUCTION U	CONSTRUCTION FCFA	REHABILITATION U	REHABILITATION FCFA	COMPLEMENT M²	COMPLEMENT FCFA	TOTAL FCFA
DRS	2	159,840	3	47,520	582	12,804	220,164
Equipe Sante de Cercle	2	25,752	15	38,280	288	6,345	70,377
CSC (Soins ref.)	2	180,800	15	298,320	1,731	38,082	517,202
Equipe Sante de Commune	2	25,752	2	5,104	0	0	30,856
CSCommune (Soins ref.)	2	219,800	2	48,356	0	0	268,156
CSC (region KBK)	0	0	0	0	0	0	0
Equipe Terrain (IDE)	0	0	0	0	0	0	0
Soins de ref. intermediaires	25	43,200	0	0	0	0	43,200
CSCOM/CSQ	64	686,592	56	133,504	795	12,720	832,816
TOTAL		1,341,736		571,084		69,951	1,982,771

TABLEAU 6

CALENDRIER DES INTERVENTIONS

REGIONS	1991	1992	1993	1994	1995	1996	TOTAL	
KAYES								
Rehabilitation	5	6	4	2	0	0	17	
Construction	0	1	3	6	6	0	16	
Extension	0	3	2	1	0	0	6	b\
Total	5	7	7	8	6	0	33	
MOPTI								
Rehabilitation	2	4	7	6	0	0	19	
Construction	0	1	1	2	8	0	12	
Extension	0	2	4	4	0	0	10	b\
Total	2	5	6	8	8	0	31	
BAMAKO								
Rehabilitation	1	1	0	0	0	0	2	
Construction	0	3	5	6	4	0	18	
Extension	0	0	0	0	0	0	0	
Total	1	4	5	6	4	0	20	
SEGOU								
Rehabilitation	0	0	2	3	2	2	9	
Construction	0	0	0	1	2	4	7	
Extension	0	0	1	2	1	1	5	b\
total	0	0	2	4	4	6	16	
KOULIKORO								
Rehabilitation	0	0	3	5	1	0	9	
Construction	0	0	0	1	4	6	11	
Extension	0	0	2	3	1	0	6	b\
Total	0	0	3	6	5	6	20	
PROJET								
Rehabilitation	8	11	16	16	3	2	56	
Construction	0	5	9	16	24	10	64	
Extension	0	5	9	10	2	1	27	b\
TOTAL GENERAL	8	16	25	32	27	12	120	

b\ Les travaux d'extension sont liés aux travaux de réhabilitation et ne sont pas totalisés dans le nombre des interventions.

REPUBLIC OF MALI
SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT
TABLE 1. 120 COMMUNITY HEALTH CENTERS
DETAILED COST TABLE
(CFAF '000)

	Unit	Quantity 1992	1993	1994	1995	1996	1997	Total	Unit Cost	Breakdown of totals for Local (US$) for Exch	Local (Excl Taxes)	Duties & Taxes	total
I. INVESTMENT COSTS													
A. UPGRADING OF EXISTING HEALTH CENTERS													
1 KAYES REGION	UNIT	5	6	4	2		-	17	2,250 573	64,661 1	116,987 6		181,648 3
2. KOPTI REGION	UNIT	2	4	7	6	-	-	19	2,250 573	74,279 5	133,554 2		207,833 6
3. BARAKO	UNIT	1	1	-	-			2	2,250 573	7,408 9	13,486 5		20,895 4
4. SEGOU REGION	UNIT	-	-	2	3	2	2	9	2,250 573	37,331 2	66,233 8		103,565 0
5. KOULIKORO REGION	UNIT	-	-	3	5	1	-	9	2,250 573	36,379 8	64,920 3		101,300 1
Sub-Total UPGRADING OF EXISTING HEALTH CENTERS										220,060 5	395,182 4		615,242 9
B. CONSTRUCTION OF NEW HEALTH CENTERS													
1 KAYES REGION	UNIT	-	1	3	6	6	-	16	10,033,806	291,588 2	518,994 8		810,583 0
2. KOPTI REGION	UNIT	-	1	1	2	8	-	12	10,033,806	221,688 3	393,358 4		615,047 7
3. BARAKO	UNIT	-	3	5	6	4		18	10,033,806	322,470 1	576,183 5		898,653 5
4 SEGOU REGION	UNIT	-	-	-	1	2	4	7	10,033,806	134,310 3	236,387 9		370,698 2
5. KOULIKORO REGION	UNIT	-	-	-	1	4	6	11	10,033,806	211,258 2	371,735 7		582,994 9
Sub-Total CONSTRUCTION OF NEW HEALTH CENTERS										1,181,317 1	2,096,660 3		3,277,977 4
C. EXTENSION OF EXISTING HEALTH CENTERS													
1. KAYES REGION	UNIT	-	3	2	1		-	6	441 675	4,562 1	8,219 9		12,782 0
2. KOPTI REGION	UNIT	-	2	4	4	-	-	10	441 675	7,760 3	13,915 5		21,677 8
3 SEGOU REGION	UNIT	-	-	1	2	2	-	5	441 675	4,031 5	7,167 5		11,199 0
4. KOULIKORO REGION	UNIT	-	-	2	3	1	-	6	441,675	4,770 1	8,508 0		13,278 1
Sub-Total EXTENSION OF EXISTING HEALTH CENTERS										21,124 0	37,812 9		58,936 9
D. EQUIPMENT													
1. EQUIPMENT AND FURNITURE	UNIT	7	17	25	32	27	12	120	378 523	204,681 3	27,051 9		231,733 2
2. MEDICAL EQUIPMENT AND SUPPLIES													
HEALTH MATERIALS	UNIT	7	17	25	32	27	12	120	287,647	176,885 1		-	176,885 1
ESSENTIAL DRUGS (INITIAL STOCK) FOR 18 MONTHS	UNIT	7	17	25	32	27	12	120	1,548 36	952,147 1			952,147 1
Sub-Total MEDICAL EQUIPMENT AND SUPPLIES										1,129,032 2			1,129,032 2
Sub-Total EQUIPMENT										1,333,713 5	27,051 9		1,360,765 4
E. OPERATING EXPENDITURES OF FIRST SIX MONTHS	UNIT	7	17	25	32	27	12	120	408 727	183,317 3	54,513 7		237,830 9
F STUDIES AND CONTROL /a	-	-	-	-	-	-	-	-		34,685 9	27,683 0		62,368 1
G. INITIAL PRACTICAL TRAINING BY THE DISTRICT	MANMONTH	21	51	75	96	81	36	360	15 225		25,822 3		25,822 3
H. COURT IN SERVICE TRNG AT DISTRICT	MANDAY	315	917	1,734	2,714	3,115	2,820	11,615	1,523		84,818 5		84,818 5
Total INVESTMENT COSTS										2,974,217 4	2,749,544 9		5,723,762 3
II RECURRENT COSTS													
A SALARIES OF NURSES	POSITIONS	7	24	49	81	108	120	389	309 772	464,803 9	137,259 0		602,062 9
B. SALARIES OF MIDWIFES SUPPORT	POSITIONS	14	28	98	162	216	240	758	154 886	453,992 8	133,993 1		587,985 9
Total RECURRENT COSTS										918,796 7	271,252 1		1,190,048 8
Total										3,893,014 1	3,020,797 1		6,913,811 2

/a ARSN IBN FEES

REPUBLIC OF MALI
SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT
TABLE 2. QUALITY OF REFERRAL SERVICES
DETAILED COST TABLE
(CFAF '000)

	Unit	Quantity						Total	Unit Cost	Breakdown of Total Cost (US$)			
		1992	1993	1994	1995	1996	1997			for Each	Total Direct Foreign	Duties & Taxes	Total
I INVESTMENT COSTS													
A DISTRICT HEALTH CENTERS													
1 UPGRADING OF EXISTING HEALTH CENTERS													
KAYES REGION	UNIT		1	1	1	1		4	18 276 629	165 914 8	197 813 9		363 727 8
MOPTI REGION	UNIT		1	1	2	1		5	18 276 629	208 166 0	247 975 1		456 131 1
SEGOU REGION	UNIT			1	1			2	22 047 166	98 135 5	117 521 4		215 656 9
SIKASSO REGION	UNIT		1	1	1			3	18 276 629	172 026 3	148 145 9		288 172 2
KOULIKORO REGION	UNIT				1	1	1	3	18 276 629	131 685 2	155 046 2		286 731 4
Sub-total UPGRADING OF EXISTING HEALTH CENTERS										725 917 7	864 501 6		1 590 419 3
2 CONSTRUCTION OF NEW HEALTH CENTERS													
KAYES REGION	UNIT												
MOPTI REGION	UNIT		1		1			2	83 075 49	355 788 7	429 730 7		785 539 4
BAMAKO	UNIT		1		1			2	100 934 35	432 510 8	522 675 7		955 886 5
SEGOU REGION	UNIT				1			1	83 075 49	184 686 7	221 235 3		405 921 9
KOULIKORO REGION	UNIT				1			1	83 075 49	184 686 7	221 235 3		405 921 9
Sub-total CONSTRUCTION OF NEW HEALTH CENTERS										1 157 852 8	1 394 718 9		2 552 268 8
3 EXTENSION OF EXISTING HEALTH CENTERS													
KAYES REGION	UNIT		1					1	8 729 824	18 879 8	22 572 1		41 452 0
MOPTI REGION	UNIT		1					1	8 729 824	18 879 8	22 572 1		41 452 0
BAMAKO	UNIT		1					1	8 729 824	18 879 8	22 572 1		41 452 0
SEGOU REGION	UNIT		1					1	8 729 824	18 879 8	22 572 1		41 452 0
Sub-total EXTENSION OF EXISTING HEALTH CENTERS										74 719 7	90 288 5		165 008 2
4 EQUIPMENT													
EQUIPMENT AND FURNITURE /a	UNIT	2		2				4	70 347 170	477 454 2	64 005 3		541 539 5
EQUIPMENT AND FURNITURE /b	UNIT		4	3	5	2		14	7 005 704	438 758 4	58 198 8		496 958 2
Sub-total EQUIPMENT										916 213 6	122 204 1		1 038 497 7
5 MEDICAL EQUIPMENT													
MEDICAL / SURGICAL EQUIP /c	UNIT		4	3	5	2		14	5 610 000	452 888 2			452 888 2
MEDICAL / SURGICAL EQUIPT /d	UNIT	2		2				4	12 820 815	205 574 0			205 574 0
ESSENTIAL DRUGS	UNIT		3	5	6	5	2	21	4 849 00	582 536 5			582 536 5
LABORATORY REAGENTS AND SUPPLY	UNIT		3	5	6	5	2	21	840 350	30 238 0			30 238 0
Sub-total MEDICAL EQUIPMENT										1 271 090 5			1 271 090 5
Sub-total DISTRICT HEALTH CENTERS										4 149 333 3	2 471 981 1		6 617 324 4
B TRAINING OF PARAMEDICAL STAFF (4 PER 5 MONTHS PER DISTRICT)	MONTHS		72	120	144	120	48	504	171 8	-	200 607 8		200 607 8
C SUPERVISION (5 DAYS PER YEAR)	DAYS		15	40	70	95	105	325	63 342	-	100 388 9		100 388 9
D ENHANCED COMMUNITY HEALTH CENTERS (REFERRAL SERVICES)													
1 EXTENSION OF ENHANCED CENTRES	UNIT		8	10	4	3		25	1 561 32	87 154 7	106 288 9		191 454 5
2 EQUIPMENT AND FURNITURE	UNIT		8	10	4	3		25	2 350 295	236 388 0	34 357 6		272 745 6
3 MEDICAL MATERIALS	UNIT		8	10	4	3		25	164 300	30 507 0			30 507 0
Sub-total ENHANCED COMMUNITY HEALTH CENTERS (REFERRAL SERVICES)										354 048 6	138 857 5		504 707 1
E STUDIES AND CONTROL /e										81 556 7	65 092 5		146 649 2
Total INVESTMENT COSTS										4 583 137 [illegible]	3 066 340 8		7 650 488 4
II RECURRENT COSTS													
A OPERATING EXPENDITURES	PER DISTRICT		3	8	14	19	21	85	516 287	130 066 4	38 369 4		168 435 8
Total RECURRENT COSTS													
Total													

/a FOR NEW CSC
/b FOR CSC TO BE RENOVATED
/c FOR CSC TO BE RENOVATED
/d FOR NEW CSC
/e AREA HOS FEES

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REPUBLIC OF MALI
SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT
TABLE 3. IEC AT DISTRICT LEVEL
DETAILED COST TABLE
(CFAF '000)

		Quantity								Breakdown of totals incl Cont (US$)			
	Unit	1992	1993	1994	1995	1996	1997	Total	Unit Cost	for Exch	local (Excl Taxes)	Duties & Taxes	Total
I INVESTMENT COSTS													
A. SUPPORT FOR IEC													
1 MATERIAL FOR COMMUNITY MOBILIZATION													
PER DISTRICT	DISTRICT	3	5	6	5	2	-	21	1.150 586	114.369 4			114.369 4
5 PER CSCOM	CSCOM	7	17	25	32	27	12	120	67 529	33.769 0	-		33 769 0
Sub-Total MATERIAL FOR COMMUNITY MOBILIZATION										148. 138 4			148. 138 4
Sub-Total SUPPORT FOR IEC										148. 138 4	-	-	148. 138 4
B. WEIGHT BALANCE PER CSCOM (5 PER CSCOM)	CSCOM	7	17	25	32	27	12	120	64 515	37. 869 5	-	-	37. 869 5
C. MOTORCYCLES (2 PER DISTRICT)	UNIT	6	10	12	10	4	-	42	452 016	94. 140 8			94. 140 8
D. SUPPORT TO COMMUNITY INITIATIVES	PER DISTRICT	3	5	6	5	2	-	21	1.441 925	67. 182 3	80. 510 3		147. 692 6
E. TRANSPORT OF TOC /a	DISTRICT	6	16	28	38	42	-	130	1.218	-	745. 036 3	-	745. 036 3
Total INVESTMENT COSTS										347. 330 9	825. 546 6		1. 172. 877 6
II. RECURRENT COSTS													
A VEHICLE OPERATIONS	PER YEAR	6	16	28	38	42	-	130	240 934	116. 877 4	34. 768 4		151. 645 8
Total RECURRENT COSTS										116. 877 4	34. 768 4		151. 645 8
Total										464. 208 4	860. 315 0	-	1. 324. 523 4

/a 6 MONTHS PER YEAR PER TOC

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REPUBLIC OF MALI
SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT
TABLE 4. DISTRICT HEALTH TEAMS
DETAILED COST TABLE
(CFAF '000)

	Unit	Quantity						Unit Cost	Breakdown of Totals Excl Taxes (US$)			
		1992	1993	1994	1995	1996	1997	Total		for Each	Local Elect Taxes	Duties & Taxes	Total
I INVESTMENT COSTS													
A OPERATIONS OF EXISTING OFFICES	UNIT		3	2	6	4	2	17	2 296 050	90 303 0	107 201 7		197 504 7
B CONSTRUCTION OF NEW OFFICES	UNIT			3		1		4	11 847 664	107 514 2	128 202 9		235 717 2
C EXTENSION OF EXISTING OFFICES	UNIT	-	1	1	1	1		4	1 669 478	13 338 9	15 904 6		29 244 4
D EQUIPMENT													
1 EQUIPMENT AND FURNITURE													
VEHICLES	UNIT		6	10	12	10	4	42	5 752 93	1 246 757 7			1 246 757 7
FURNITURE	UNIT	-	3	5	6	5	2	21	5 510 541	266 733 8	316 913 3		583 647 1
COMMUNICATION EQUIPMENT	UNIT	-	3	5	6	5	2	21	4 109 236	444 556 3			444 556 3
MOTORCYCLES	UNIT		3	5	6	5	2	21	452 016	48 901 2			48 901 2
Sub-Total EQUIPMENT AND FURNITURE										2 004 949 0	316 913 3		2 321 862 3
2. STOCKS OF ESSENTIAL GOODS	UNIT		3	5	6	5	2	21	1 935 45	209 286 0			209 286 0
Sub-Total EQUIPMENT										2 214 235 1	316 913 3		2 531 248 3
E. STORES AND CONTROL /a		-	-		-					15 936 4	12 719 2		28 655 6
F TECHNICAL SUPERVISION OF DISTRICT HEALTH TEAM /b	PER DISTRICT	-	3	8	14	19	21	85	1 015		310 744 8		310 744 8
G ADMINISTRATIVE SUPERVISION OF IEC /c	PER CSA	-	20	45	72	83	96	316	263		388 792 3		388 792 3
H FIELD TEAM (IEC)													
1. EQUIPMENT													
MOTORCYCLES	UNIT	-	20	25	27	11	13	96	452 016	221 986 3			221 986 3
FURNITURE / OFFICE SUPPLY	UNIT		20	25	27	11	13	96	168 233	72 673 9	9 663 5		82 727 3
Sub-Total EQUIPMENT										294 530 2	9 663 5		304 133 6
Sub-Total FIELD TEAM (IEC)										294 530 2	9 663 5		304 133 6
I TRAINING OF MEDICAL OFFICERS													
1 THREE MONTHS PUBLIC HEALTH ABROAD	FELLOWSHIP			4	5	6	6	21	1 548 36	184 562 4			184 562 4
2. OBSERVATORY VISITS	MONTH	-	3	6	5	6		20	1 032 24	100 715 5			100 715 5
Sub-Total TRAINING OF MEDICAL OFFICERS										285 277 9			285 277 9
J TRAINING OF DISTRICT HEALTH MANAGER AND PHARMACIST													
1 THREE MONTHS IN THE REGION	FELLOWSHIP			8	10	12	12	42	920 016	197 474 9			197 474 9
2 OBSERVATORY VISITS	MONTH		3	5	6	5	2	21	1 032 24	106 596 5			106 596 5
Sub-Total TRAINING OF DISTRICT HEALTH MANAGER AND PHARMACIST										304 071 4			304 071 4
K TRAINING OF IEC (BAMAKO)	YEAR			6	6	6	6	24	637 42		73 650 6		73 650 6
L LAUNCH SEMINARS FOR LOCAL AUTHORITIES (50 PARTICIPANTS)	UNIT	3	5	6	5	2		21	253 35		24 474 8		24 474 8
M ANNUAL WORKSHOPS FOR ACTION PLAN	UNIT	-	3	8	14	19	21	65	121 8		38 369 4		38 369 4
Total INVESTMENT COSTS										3 305 308 0	1 356 576 9		4 661 884 9
II RECURRENT COSTS													
A VEHICLE OPERATING AND MAINT / DISTRICTS)		-								455 232 4	108 737 1		563 969 5
B. OPERATING EXPENDITURES (DISTRICTS)	UNIT	-	3	8	14	19	21	65	172 986	43 355 5	12 789 8		56 145 3
C MOTORCYCLES OPERATING AND MAINT (IEC)	PER YEAR		20	45	72	83	96	316	77 642	94 419 0	77 681 3		172 100 4
D SALARIES	PER DISTRICT		3	8	14	19	21	65	215 119	54 194 3	15 987 2		70 181 6
Total RECURRENT COSTS										647 201 2	165 195 4		812 496 6
Total										3 952 509 3	1 521 972 3		5 474 481 6

/a ARCH AND FEES

/b 3 PERSONS, 5 DAYS PER MONTH
/c 5 DAYS PER MONTH

REPUBLIC OF MALI
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TABLE 6. REGIONAL SUPPORT IN 5 REGIONS
DETAILED COST TABLE
(CFAF ' 000)

	Unit	Quantity 1992	1993	1994	1995	1996	1997	Total	Unit Cost	For Each	Local (Incl. Duties & Taxes)	Import	Total
I INVESTMENT COSTS													
A. PROGRAM MANAGEMENT													
I. HOUSES AND PROCEDURES													
HOUSEHOLDS	UNIT	15						15	91 842	2	2 909 5	3 564 0	6 513 5
ROOMS	UNIT	5						5	492 168	2	11 797 8		11 797 8
Sub-Total HOUSES AND PROCEDURES											14 747 3	3 564 0	18 311 3
2. ANNUAL PROGRAMMING													
INITIAL TRAINING (WORKSHOP)													
WORKSHOP	MONTH	800	1 260				-	2 100	10 15		94 168 2		94 168 2
MATERIAL	DAYS	490	490	490	490	490		2 450	2 03		22 913 3		22 913 3
	UNIT	2	5	5	5	5	5	27	164 389		22 767 3		22 767 3
Sub-Total ANNUAL PROGRAMMING											22 767 3	117 060 0	139 827 3
3 MEETINGS / SEMINARE	MAN-MONTH				3		-	3	3 096 32		96 068 6		96 068 6
Sub-Total PROGRAM MANAGEMENT											81 603 2	120 624 0	202 227 2
B. REGIONAL IEC SUPPORT													
1. RADIO QUALITY KIT	UNIT	6	10	10	10	10	10	56	26 695		7 057 3		7 057 3
2. AUDIO - VISUAL EQUIPMENT	UNIT	3	2				-	5	239 662		17 298 2		17 298 2
3. VEHICLES (MOTO)	UNIT	2	3				-	5	852 016		10 852 3		10 852 3
4. TRAINING IN COMMUNITY DEV	PROGRAM	6	6	6				18	493 108		40 561 5		40 561 5
5 TRAINING IN COMMUNICATION	TRAINING DAY		2	3				5	121 8			2 770 6	2 770 6
6. PREP OF IEC MESSAGES	UNIT		2	3				5	306 5		6 926 5		6 926 5
7 COMMUN. CHANNELS	UNIT	2						2	493 108		6 962 0		6 962 0
8. TEST OF MESSAGES	UNIT		2	3				5	268 556		6 017 0		6 017 0
9. DEV COUNCIL WORKSHOP	TRAINING DAYS	100	250	250	250	250	250	1 350	12 18		77 531 8		77 531 8
Sub-Total REGIONAL IEC SUPPORT											86 168 3	87 228 9	173 397 2
C RESOURCES MANAGEMENT													
1 MAINTENANCE OF VEHICLES AND EQUIPMENT													
GARAGE SERVU - MAT	UNIT	2	1					3	1 377 635		8 027 0	10 484 4	19 111 4
GARAGE SERVU - MAT	UNIT	2	1					3	13 776 354		86 269 6	104 840 4	191 110 1
ELEC / MECH TRAINING	TRAINING MONTH	16	24					40	77 018		12 922 2		12 922 2
EQUIPMENT INVENTORY	UNIT	9	1					3	30 65			400 3	400 3
Sub-Total MAINTENANCE OF VEHICLES AND EQUIPMENT											108 828 8	115 729 2	224 558 0
2 RADIO SUPPLY													
RENOVATION OF RAVES STORAGE FACILITIES /a	UNIT										39 126 2	47 520 2	86 646 4
CONSTRUCTION OF SECOU STORAGE FACILITIES /b	UNIT										107 008 8	129 074 5	236 083 3
SUPPLIES AND EQUIPMENT	UNIT	1	1	1	1	1	1	5	660 313		14 456 9	1 922 8	16 377 7
VEHICLE (4 X4)	UNIT	1	1	1		1		4	4 387 02		87 603 7		87 603 7
VEHICLE (LIGHT)	UNIT				1			1	3 870 9	19 245 0			19 245 0
WORKSHOPS	UNIT	1	2	3	4	5	5	20	637 42			60 968 1	60 968 1
IEC	UNIT	1	2	3	4	5	5	20	5 115 685			106 659 3	106 659 3
Sub-Total DRUG SUPPLY											267 418 6	286 179 0	553 597 5
3 TRAINING MANAGEMENT													
DISTRICT TRAINING	TRAINING DAY	500				500		1 000	12 18		95 297 0		95 297 0
4 [illegible] Training Management													
[illegible] [illegible]'s	UNIT							20	4 [illegible]			2 [illegible]	[illegible]
[illegible] PUBLICS	UNIT							1 000	6 092		617 9	716 2	1 [illegible]

REPUBLIC OF MALI
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TABLE 6. REGIONAL SUPPORT IN 5 REGIONS
DETAILED COST TABLE
(CFAF' 000)

PERSONNEL MGT TRAINING	TRAINING DAY			30				30	12 18		1 682 0	1 682 0
Sub total HUMAN RESOURCE MANAGEMENT										3 064 5	5 352 9	8 417 4
Sub-total RESOURCES MANAGEMENT										379 331 9	522 504 1	901 835 9
B CAPACITY BUILDING												
1 UPGRADING EXISTING OFFICES OF DRSP												
KAYES REGION	UNIT		1					1	14 511 082	31 067 7	37 541 0	68 608 7
SEGOU REGION	UNIT		1					1	14 511 082	31 067 7	37 541 0	68 608 7
KOULIKORO	UNIT		1					1	14 511 082	31 067 7	37 541 0	68 608 7
Sub total UPGRADING EXISTING OFFICES OF DRSP										93 703 0	112 623 0	205 826 0
2 CONSTRUCTION OF NEW OFFICES FOR DRSP												
MOPTI REGION	UNIT		1					1	73 382 043	157 108 0	189 843 4	346 951 4
BANAKO	UNIT		1					1	73 382 043	157 108 0	189 843 4	346 951 4
Sub total CONSTRUCTION OF NEW OFFICES FOR DRSP										314 216 0	379 686 8	693 902 8
3 EXTENSION OF EXISTING OFFICES												
KAYES REGION	UNIT		1					1	5 877 911	12 584 4	15 206 5	27 790 9
SEGOU REGION	UNIT		1					1	5 877 911	12 584 4	15 206 5	27 790 9
Sub total EXTENSION OF EXISTING OFFICES										25 168 7	30 413 0	55 581 7
4 EQUIPMENT												
TYPEWRITER	UNIT	2	2				5	5	378 523	7 844 0	1 056 7	8 900 7
MIMEOGRAPH MACHINE	UNIT	2	2				5	10	757 046	34 230 6	4 520 3	38 50 9
COPIER	UNIT	2	2				5	5	1 000 305	20 917 3	2 818 0	23 735 3
VEHICLES 4 X4	UNIT	2	2				5	5	4 387 02	103 385 6		103 385 6
VEHICLES SEDAN	UNIT	2	2				5	5	3 870 9	91 222 6		91 222 6
ADP SUPPORT HW	UNIT	-	1				5	5	483 168	11 787 8		11 787 8
MATERIALS	UNIT	2	2				5	5	1 232 771	29 051 8		29 051 8
FURNITURE	UNIT	2	2				5	5	1 102 168	11 636 7	14 080 0	25 716 7
SECRD COMPUTERS	UNIT	2	2				5	5	738 082	17 431 1		17 431 1
Sub total EQUIPMENT										327 501 4	22 485 0	349 986 5
5 TRAINING												
HEALTH ADMIN / MGT	UNIT	2	2				5	5	1 232 771	27 731 2		27 731 2
OFFICE MGT METHODS	TRAINING DAY	100	150				250	250	12 18		13 448 5	13 448 5
SEC / ADMIN	TRAINING DAY	50	50				150	150	12 18		8 060 7	8 060 7
COMPUTER TRAINING	TRAINING MONTH	4	6				10	10	154 836	6 986 1		6 986 1
Sub total TRAINING										34 687 3	21 519 2	56 216 6
Sub total CAPACITY BUILDING										790 786 5	536 727 0	1 361 513 5
Total INVESTMENT COSTS										1 341 888 8	1 297 884 0	2 638 953 8
II RECURRENT COSTS												
A PLANNING AND PROGRAMMING												
1 DISTRICT PROGRAM PREP	DAYS	200	850	850	850	850	850	3 550	2 83		33 597 1	33 597 1
Sub total PLANNING AND PROGRAMMING											33 597 1	33 597 1
B DRUG SUPPLY												
1 OPERATING EXPENSES	UNIT	1	2	3	4	5	5	20	1 215 855	92 618 9	27 426 7	120 045 6
Sub total DRUG SUPPLY										92 618 9	27 426 7	120 045 6
C SUPPORT FOR IEC												
1 VEHICLE OPERATIONS	KOMO	2	5	5	5	5		22	206 595	16 667 6	4 977 3	21 644 9
Sub total SUPPORT FOR IEC										16 667 6	4 977 3	21 644 9
D VEHICLE AND EQUIPMENT MAINTENANCE												
1 REGIONAL VEH OPERATIONS	UNIT		2	3				5	774 43	13 830 1	4 155 9	17 986 0
Sub total VEHICLE AND EQUIPMENT MAINTENANCE										13 830 1	4 155 9	17 986 0
E REGIONAL OFFICES												
1 BUILDING MAINTENANCE	UNIT		5	5	5	5	5	25	120 072	12 172 3	3 612 4	15 784 7
2 EQUIPMENT (BAC) MAINTENANCE	UNIT		5	5	5	5	5	25	25 846	2 434 5	722 5	3 156 9
3 VEHICLE OPERATING AND MAINTENANCE	PER UNIT	5	12	12	14	15	15	73	516 287	141 772 1	42 088 2	183 870 1
Sub total REGIONAL OFFICES										156 178 9	46 431 0	202 812 0
Total RECURRENT COSTS										279 495 6	116 580 0	396 085 6
Total										1 621 385 4	1 413 474 0	3 035 039 4

a/ 100 %
b/ 100 %

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

MANAGEMENT OF PHYSICAL RESOURCES/GESTION DU PATRIMOINE

I. DIAGNOSTIC DU CONTEXTE ACTUEL

1. Situation en matière de gestion du patrimoine. Les études de préparation du projet ont permis de dresser l'inventaire d'environ 20% des Centres de Santé de Cercle (CSC) et des Centres de Santé d'Arrondissement (CSA). Ces renseignements portent sur le cadre foncier, le type de construction et la surface des locaux, l'inventaire des équipements, ainsi que l'appréciation de l'état des locaux et de l'entretien du matériel. Actuellement, les données concernant la description et l'état physique du patrimoine sont encore dispersées. Le recensement administratif de 1986 fait une énumération des dispensaires et maternités jusqu'au niveau des secteurs (regroupement informel de villages dont la population varie de 5.000 à 15.000 habitants), cependant, cette documentation ne donne qu'une idée très sommaire de la dimension et de l'état des installations; celles-ci ne sont que partiellement disponibles au niveau régional et au niveau de la DNPFSS. La tâche d'organiser ou d'assurer la gestion du patrimoine n'est dévolue pour le moment à aucun service, bien que certaines activités très proches de la gestion du patrimoine soient déjà entreprises par la Cellule d'Exécution du Programme de Renforcement des Infrastructures Sanitaires (CEPRIS), ainsi que par les structures décentralisées du Gouvernement.

2. Programmation et normes des projets sanitaires. DNPFSS dispose d'une banque de données collectées au niveau des Cercles (capacités des infrastructures existantes, équipements, personnel, nature et quantités des actes médicaux et médicaments prescrits, etc..). La mise à jour de ces informations est effectuée par le médecin chef du cercle et les résultats sont publiés tous les trois ans par la DNPFSS dans le document intitulé "la Carte Sanitaire du Mali". Il est remarquable que la DNPFSS dispose déjà d'un tel outil de travail. Par contre, l'étude de ce document montre que la qualité de l'information varie selon les régions et selon la nature des données. L'amélioration de la carte sanitaire et notamment l'amélioration des informations immanent d'autres services est nécessaire pour une meilleure programmation des installations (construction, équipement, ainsi que leur remplacement et entretien). Comme l'ont démontré les études de préparation du programme proposé, les infrastructures existantes aussi bien que celles en cours de réalisation ne correspondent pas à une distribution cohérente des moyens financiers. Les normes utilisées ne sont pas en relation étroite avec l'offre ou la demande de soins ni avec les moyens de fonctionnement (en personnel, matériel et produits consommables). A cause de cette situation, un grand éventail de normes et de programmes sont appliqués sur l'ensemble du territoire pour les différents projets selon la source de financement. Il en résulte des distorsions importantes entre les surfaces des locaux, les équipements et le ratio actes médicaux/spécialiste. Il en est de même pour la programmation des équipements, leur rationalisation et les frais de fonctionnement qui en résultent.

3. La situation en matière de politique d'entretien des bâtiments. Actuellement, il n'y a aucun moyen efficace en place et aucune stratégie pour l'entretien des infrastructures sanitaires. Cet état de fait est accentué par la priorité accordée par la plupart des sources de financement aux travaux neufs plutôt qu'à l'entretien des structures existantes. Il en résulte un patrimoine grandissant associé à un retard d'entretien de l'existant qui est évalué à environ dix années et dont les conséquences s'expriment déjà par l'abandon de bâtiments anciens.

4. La situation en matière de politique d'entretien des équipements et du mobilier. Le SEPAUMAT du MSPAS, dont l'activité principale consiste à entretenir le parc de véhicules, a aussi pour mission d'entretenir également les équipements médicaux et les installations frigorifiques. Pour l'ensemble du territoire, une équipe composée d'un ingénieur bio-médical et de deux techniciens bio-médicaux est sous-employée à cause de l'insuffisance du matériel. Le nombre d'interventions importantes ne dépasse pas 5 par mois et les missions à l'extérieur de Bamako n'excédent pas six semaines par an. Dans les conditions actuelles, il est presque impossible de créer un stock approprié de pièces de rechange, car les équipements existants proviennent d'origine trop diverses -- en l'absence d'une politique des achats. Enfin, les nécessités d'entretien se heurtent au manque de ligne budgétaire. A l'intérieur du pays, le SEPAUMAT dispose d'antennes pour la mécanique-auto à Mopti et à Kayes et est en train d'en ouvrir une autre à Tombouctou. Pour toutes les interventions du SEPAUMAT, la main d'oeuvre est fournie gratuitement par le SEPAUMAT, par contre les pièces détachées doivent être acquises cas par cas par l'entité bénéficiaire, ce qui entraîne des retards considérables dûs aux lenteurs d'acquisition et de livraison du matériel.

5. La Cellule d'Exécution du Programme de Renforcement des Infrastructures Sanitaires (CEPRIS). La CEPRIS créée par Décret No 82-20 du 5 juillet 1982, avait reçue pour mission de suivre, coordonner et contrôler l'ensemble des études et des opérations relatives aux projets de renforcement des infrastructures sanitaires des régions de Tombouctou et de Koulikoro. La CEPRIS dispose de dix ingénieurs et techniciens et a démontré ces dernières années sa capacité et son efficacité à gérer l'exécution d'un volume de travaux d'environ 4.000 m2 par an sur diverses sources de financement notamment la BAD. Dans le cadre du démarrage d'un programme financé par la BAD, la CEPRIS doit voir ses attributions élargies en matière de gestion et de programmation du patrimoine, et doit être renforcée par un planificateur des infrastructures sanitaires et par un architecte.

II. OBJECTIFS.

6. Ce volet "gestion du patrimoine" a les objectifs suivants:

(a) le renforcement des capacités de gestion et de programmation des installations du patrimoine du secteur (en étroite liaison avec la DNPFSS);

(b) l'appui à la mise à jour et à l'application de normes visant à rationaliser les programmes d'investissement dans le secteur (en étroite relation avec la DNPFSS);

(c) le renforcement des capacités existantes d'entretien des installations appartenant à l'Etat, et la promotion de mécanismes d'entretien des centres de soin communautaires;

(d) le renforcement institutionnel de la CEPRIS pour lui permettre d'assurer le contrôle technique nécessaire à la bonne exécution de la composante infrastructures dans les régions du programme proposé;

(e) l'assistance du MSPAS par la CEPRIS dans la supervision du programme d'appui aux collectivités, en relation étroite avec la Cellule de Coordination du Projet et la Direction Régionale de l'Urbanisme et de la Construction (DRUC).

III. STRATEGIE.

7. Pour atteindre les objectifs énoncés ci-dessus, il est nécessaire, en complément des actions prévus sur le financement de la BAD, de prévoir le renforcement de la CEPRIS pour: (i) la mise à jour de l'inventaire du patrimoine et de son état ce qui permettra de compléter la carte sanitaire gérée par la DNPFSS; (ii) l'application des normes limitées dans un premier temps aux CSCOM, CSQ, CSC et CSCommunes; (iii) l'élaboration de normes pour les hôpitaux régionaux et nationaux; (iv) la promotion de mécanismes continus d'entretien et de prise en charge par les collectivités locales ou par les structures régionales; (v) l'acquisition et l'organisation de l'entretien des équipements spécialisés et du mobilier appartenant à l'Etat; et (v) le contrôle et la supervision du volet infrastructures du projet.

8. La mise à jour de l'inventaire du patrimoine et de son état. Il serait très ambitieux de vouloir gére l'ensemble du patrimoine à un même niveau d'intensité ou entièrement de façon centralisée. La faisabilité d'un système de gestion du patrimoine repose sur la décentralisation et l'amélioration des collectes de données au niveau des cercles et des régions. Par contre, le rôle de la CEPRIS consiste surtout, en étroite relation avec la DNPFSS à: (i) organiser l'inventaire complet des installations; (ii) participer à la définition des stratégies en matière de patrimoine, et à la préparation des outils nécessaires à leur mise en oeuvre; (iii) promouvoir au niveau régional des mécanismes permettant une décentralisation de la gestion du patrimoine; (iv) participer à la préparation des budgets nationaux et régionaux relatifs aux interventions ou avec appuis de l'Etat en matière d'entretien et d'extension des infrastructures; et (v) promouvoir et participer à la diffusion des divers programmes d'informations auprès des collectivités locales et des autorités régionales.

9. L'établissement des normes. Les normes seront publiées pour les installations groupant les CSCOM, CSQ, CSC et CSCommune. Les normes déjà établies prendront compte de l'offre minimale de soins dont les collectivités locales ont la capacité de supporter le coût des charges récurrentes:

(a) Pour les CSCOM et les CSQ, une surface nette de 124 m2 qui comprend: (i) un dispensaire/PMI de 95 m2 avec un guichet, une attente, une salle de consultation pour l'infirmier de premier

cycle, une salle de pansement/soins communiquant directement avec la salle PMI/injections/PEV, un petit dépôt pharmacie et un local de traitement de jour/réhydratation; (ii) pour les activités de la matrone et pour les accouchements, une salle de consultation, et une petite salle d'accouchement, totalisant 24 m2; et (iii) des services annexes comprenant latrines/douche traditionnels et un petit local technique/entretien totalisant 11 m2. La case de repos pour les accouchées ainsi que le logement du personnel sont hors programme;

(b) Pour les CSCom exerçant des fonctions de soins de référence et de santé publique, le programme est le même que pour les CSCOM et les CSQ, toutefois, il est complété par des activités de laboratoire et de planning familial. Le programme architectural totalisant 144 M2 aura en plus un bureau et un logement pour l'infirmier d'Etat et une salle de traitement de jour plus grande;

(c) Pour les CSC et les CSCommune, le programme comprend les soins référés par les CSA et les CSCOM, ou les CSQ ainsi que le programme des activités de gestion et d'administration du Cercle ou de la Commune. La surface totale d'un CSC comprend 850 m2 et celle d'un CSCommune 1.012 m2. Cette différence tient compte de la demande accrue dans le district de Bamako pour certains soins, notamment pour les accouchements assistés et les consultations post et prénatales, comme pour d'autres actes médicaux dont la demande est supérieure à celle des Cercles.

10. La promotion de mécanismes permanents d'entretien. A l'issue de la réalisation du programme à 100% des potentialités, le réseau des infrastructures comprendra dans les régions du projet les surfaces construites suivantes: 20.000 m2 dans 35 CSC/CSCommune, 38.000 m2 dans 161 CSA et 29.800 m2 dans 200 CSCOM/CSQ. Pour assurer un entretien efficace et économiquement rentable, il faut que les interventions ne soient plus des activités fortuites quand des dégâts importants ont mobilisés les autorités, mais plutôt une stratégie d'entretien continu. Cette stratégie doit se concrétiser par des inspections périodiques des bâtiments, une programmation des travaux sur au moins trois ans avec des budgets correspondants, la sensibilisation des responsables et des utilisateurs pour la détection des défauts ne demandant guère de technicité, et la répartition formelle de la responsabilité de l'entretien à des personnes ayant reçu une formation spécifique dans ce domaine.

(a) Pour les bâtiments appartenant aux collectivités locales (CSCOM, CSA, CSC). La sauvegarde des investissements effectués dans le cadre du projet (bâtiments et équipements) nécessitera de la part des collectivités locales un budget annuel de 18 millions de FCFA pour maintenir le capital de 1.2 milliards de FCFA, soit 165.000 FCFA/an et par centre. Comme il s'agit d'une somme importante pour la collectivité, il convient de sensibiliser les gestionnaires de ces centres au moment de l'établissement du système de recouvrement des coûts et de convenir de procédures d'inspection et de choix des méthodes d'exécution qui garantissent un rendement optimum des

fonds ainsi mobilisés. Les bâtiments qui seront réalisés ou réhabilités par les collectivités dans le cadre du programme seront déclarés la propriété de la collectivité (un texte juridique fixera les modalités de transfert de propriété). Celle-ci en assurera l'entretien. Dans le cas des CSA existants, le transfert de propriété sera effectué lors de la signature de la convention passée avec le Cercle pour l'octroi de l'appui consenti. D'un autre côté, le projet prévoit des appuis techniques en matière de gestion aux médecins chefs des cercles, et assistera les collectivités pour qu'elles insèrent l'entretien d'une manière efficace et rentable dans leurs programmes annuels;

(b) Pour les bâtiments appartenant à l'Etat (CSC et CSCommune). La sauvegarde des investissements nécessitera de la part de l'Etat un budget annuel d'entretien de 40 millions de FCFA pour maintenir le capital de 2,7 milliards de FCFA que constitueront les DRS et les CSC/CSCommune. Ne pas faire cet entretien raccourcirait la durée de vie des installations de 30 à 40 %, ce qui correspondrait à une augmentation du coût de l'amortissement technique.

11. Le renforcement de la capacité de la CEPRIS dans le domaine des acquisitions et de l'entretien des équipements spécialisés et de mobilier. Vue la situation actuelle, il est recommandé de rendre l'équipe du SEPAUMAT de Bamako mobile et opérationnelle pour assurer l'entretien des équipements médicaux des CSC et des CSCommune. Le renforcement de la CEPRIS par un ingénieur bio-médical détaché de la SEPAUMAT permettra à la CEPRIS d'établir les spécifications pour les listes d'équipements à acquérir par appels d'offres et de développer un système de gestion des équipements, en vue de prévoir les budgets et un stock minimum de pièces de rechange les plus courantes. Le SEPAUMAT de Bamako sera renforcé par l'acquisition d'outils de travail et de moyens de transport indispensables pour assurer l'entretien des équipements médicaux des CSC. En matière de mobilier, le programme laissera à l'initiative des collectivités l'acquisition du mobilier; cependant, pour conseiller les collectivités, le programme prévoit le développement de quelques prototypes les plus essentiels réalisables par des artisans locaux dont les spécifications seront mises à la disposition des collectivités (maquettes, plans, et un manuel de production). Pour le mobilier des CSC et des CSCommunes, la CEPRIS sera responsable des spécifications et du développement de modèles simples et adaptés. Un accent particulier sera porté au développement de mobilier mobile afin d'obtenir une plus grande souplesse dans l'utilisation des locaux.

12. Le renforcement de la CEPRIS pour pouvoir assurer le suivi des opérations du programme. A part le renforcement institutionnel de la CEPRIS qu'opérera le programme en matière de gestion du patrimoine, d'établissement des normes, d'entretien des installations, et d'acquisition des équipements, la CEPRIS doit également être renforcée pour faire face au surcroît de travail qu'occasionnera la réalisation du projet dans le domaine de la supervision des études et des travaux. Ce renforcement tient compte des actions déjà prévues sur le financement de la BAD.

IV. MOYENS ET MODALITES DE MISE EN OEUVRE.

13. La zone d'intervention. La zone d'intervention du programme en ce qui concerne l'inventaire du patrimoine, et l'introduction progressive des mécanismes d'entretien se limitera aux régions de Kayes, Mopti et au district de Bamako dans une première phase, puis s'étendra, dans une seconde phase, à compter de la troisième année du projet aux régions de Ségou et Koulikoro. Le renforcement institutionnel de la CEPRIS financé sur le projet se limitera aux moyens complémentaires nécessaires pour la mise à jour des normes nationales, la gestion du patrimoine et la supervision des activités en matière de construction dans les régions du projet.

14. Les moyens. Pour permettre à la CEPRIS de remplir les objectifs qui lui sont assignés, le programme tient compte de l'assistance technique qui doit être mise en place sur le financement prévu de la BAD avant la fin 1989, et qui vise à développer et introduire une stratégie d'entretien comprenant la formation des responsables, et la préparation d'un manuel d'entretien à l'intention des collectivités et autorités régionales. Le programme prévoit pour sa part de contribuer au renforcement de la CEPRIS pour lui permettre d'assumer les responsabilités additionnelles occasionnées par le projet. La CEPRIS sera restructurée suivant l'organigramme présenté sur le tableau 2. Le renforcement de la CEPRIS prévu au titre du programme comporte:

(a) six mois d'appuis ponctuels de spécialistes pour la mise en place du système informatisé de gestion du patrimoine et pour la mise à jour des normes et la mise au point des spécifications techniques des équipements et du mobilier;

(b) le personnel contractuel national pour la gestion du patrimoine, et pour la supervision du volet infrastructure du programme;

(c) 15 mois de stage de formation des deux responsables de l'entretien;

(d) l'extension des locaux de la CEPRIS (environ 165 m2) et l'acquisition de mobilier, équipement de bureau et de véhicules additionnels pour la CEPRIS; et

(e) les frais de fonctionnement additionnels directement liés à l'exécution du programme.

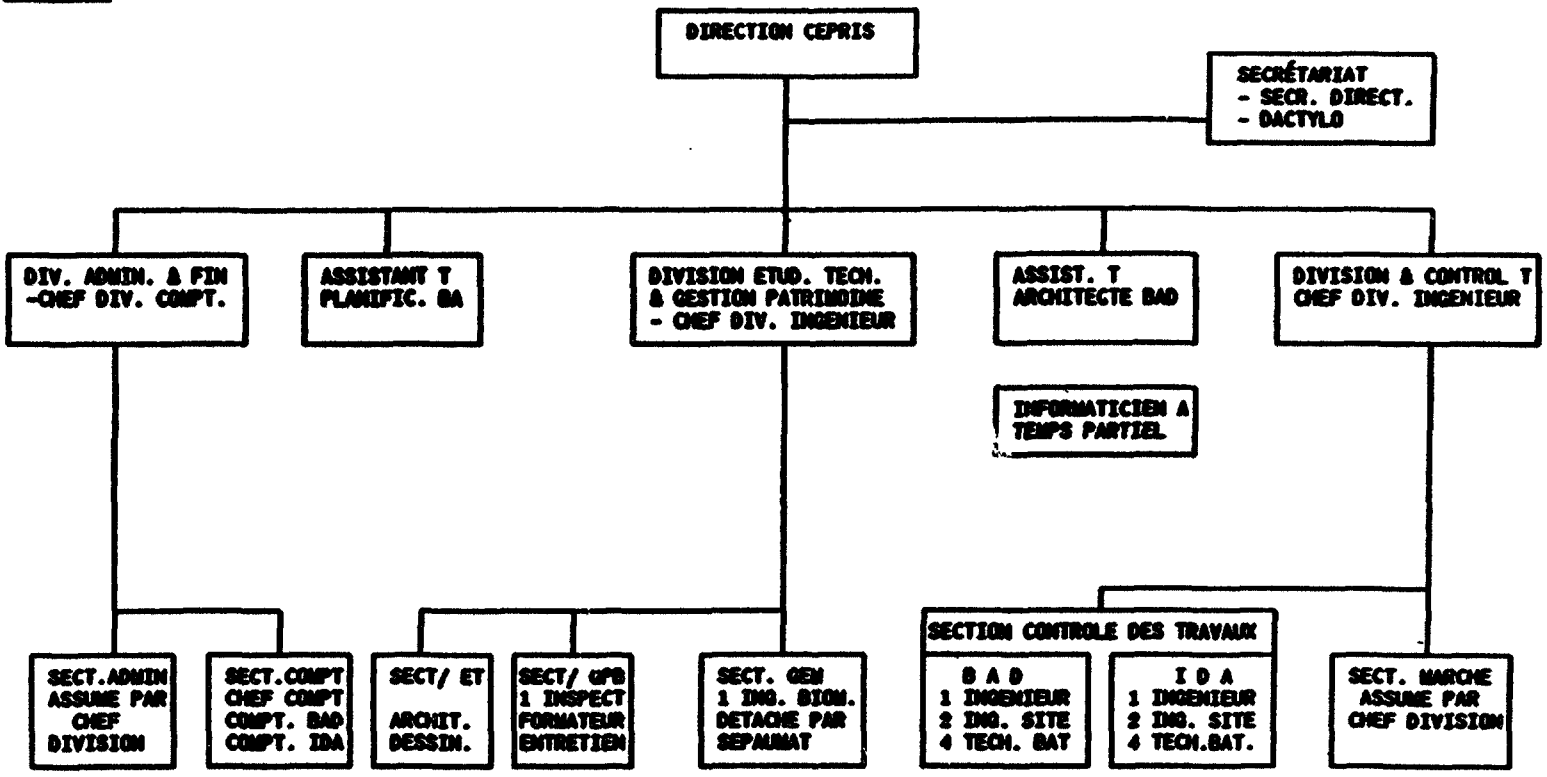
Le personnel additionnel qui serait supporté par le programme est indiqué sur le tableau 1 ci-dessous.

TABLEAU 1 — PERSONNEL ADDITIONNEL (en homme/année)

DESCRIPTION DE L'ACTIVITE	1991	1992	1993	1994	1995	1996	1997	TOTAL
Personnel contractuel CEPRIS								
- Ingénieurs terrain		2	2	2	2	2		10
- Techniciens bâtiment		1	1	1	1	1		5
- Gestionnaire du patrimoine		1	1	1	1	1		5
- Spécialiste entretien		1	1	1	1			4
Spécialiste courte durée								
- Spécialiste équipement	0.3							0.3
- Spécialiste informatique	0.6							0.6

15. Les coûts. Le détail des coûts est donné sur les tableaux 3 et 4 ci-après.

TABLEAU 2



Le programme proposé IDA prévoit un appui de consultant.

Le financement BAD en cours prévoit:

- Gestion patrimoine/informatique	2 mois
- Mobilier prototype	4 mois
- Planificateur sanitaire	36 mois
- Architecte	24 mois
- Spécialiste en équipement	8 mois
- Consultants divers	9 mois

TABLE 11. FACILITIES PLANNING/MAINTENANCE
DETAILED COST TABLE

	Unit	Quantity 1992	1993	1994	1995	1996	1997	Total	Unit Cost	Breakdown of totals incl Cont (US$) for Exch	Local (Incl Taxes)	Duties & Taxes	Total
I INVESTMENT COSTS													
A. FACILITY PLANNING AND MAINTENANCE													
1 REMODELLING OF EXISTING OFFICES (CEPRIS)													
2. EQUIPMENT FOR CEPRIS										29.901 5	36.447 6		66.349 1
VEHICLES	UNIT	4	-					4	3.944 866	72.672 0			72.672 0
OFFICE EQUIPMENT		-	-					-		10.219 5	1 384 1		11 603 6
FURNITURE		-	-					-		14 193 8	17.301 1		31 494 8
COMPUTER	UNIT	1	-					1	1.890 248	8.705 5			8 705 5
Sub-Total EQUIPMENT FOR CEPRIS										105.790 8	18 685 1		124 475 9
3. SHORT TERM SPECIALIST SERVICES													
COMPUTERIZED SYSTEM FOR INVENTORY	MAN-MONTH		2					2	3.387 84	16.973 5	13 673 4		30 646 8
PROCUREMENT SPECIALIST (EQUIPMENT)	MAN-MONTH	4	-					4	3.387 84	32.672 7	26.550 3		59 222 9
Sub-Total SHORT TERM SPECIALIST SERVICES										49.646 1	40.223 7		89.869 8
4. LOCAL LONG TERM SPEC. SERVICES /a													
FACILITY PLANNER	MAN-MONTH	12	12	12	12	12	12	72	129 072	34.416 3	10.255 0		44 671 3
MAINTENANCE SPEC	MAN-MONTH	-	12	12	12	12	12	60	129 072	28.213 6	8.669 7		37 883 3
MOBILE TECHNICIANS	MAN MONTH	24	24	24	24	24		120	215 119	93.743 3	28.057 0		121 800 5
CONSTRUCTION SPEC	MAN-MONTH	-	12	12	12	12	12	60	103 257	23.370 9	6.935 7		30 306 6
Sub-Total LOCAL LONG TERM SPEC. SERVICES /a										180.744 1	53.917 6		234 661 7
5 TRAINING													
LOCAL SEMINARS FOR MAINTENANCE	DAYS OF PARTICIPANTS		120					120	10 15		5.443 2		5 443 2
Sub-Total TRAINING											5 443 2		5 443 2
Sub-Total FACILITY PLANNING AND MAINTENANCE										366.082 5	154 717 2		520 799 7
Total INVESTMENT COSTS										366.082 5	154 717 2		520 799 7
II. RECURRENT COSTS													
A OFFICE SUPPLIES FOR CEPRIS	PER MONTH	12	12	12	12	12		60	129 072	28.123 0	8.617 1		36 540 1
B VEHICLE MAINTENANCE										110 132 1	26 571 3		136 703 4
C VEHICLE OPERATING	HR/YEAR	120.000	120.000	120.000	120.000	120.000	120.000	720.000	0 026	68.832 6	20.510 1		89.342 7
Total RECURRENT COSTS										207.087 6	55.698 6		262 586 2
Total										573.170 2	210.215 7		783 385 9

/a CONTRACTUALS

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I. FINANCIAL MANAGEMENT

TABLE 1 — HEALTH SECTOR EXPENDITURES (BILLION CFAF, NOMINAL TERMS)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
GOV'T TOTAL BUDGET a\	147.8	146.6	165.5	171.7	176.9	175.8	185.5	196.2	207.2	219.1
GOV'T RECURRENT BUDGET	62.4	62.3	64.4	64.4	68.5	69.3	72.6	74.9	77.3	79.8
GOV'T DEVELOPMENT BUDGET	57.8	53.8	60.2	60.2	68.3	73.6	87.1	94.5	102.5	111.3
HEALTH RECURRENT BUDGET BY TYPE OF EXPEND. b\										
* WAGES				3.3	3.3	3.3	3.4	3.5	3.6	3.7
* MATERIALS				1.2	1.6	2.0	2.4	2.9	3.4	3.5
TOTAL				4.5	4.9	5.3	5.8	6.4	7.0	7.2
BREAKDOWN OF THE MATERIALS HEALTH BUDGET										
* CENTRAL				1.1	1.5	1.7	2.0	2.2	2.4	2.5
* REGIONS				0.1	0.1	0.3	0.4	0.7	1.0	1.0
TOTAL				1.2	1.6	2.0	2.4	2.9	3.4	3.5
HEALTH INVESTMENT BUDGET										
* CENTRAL GOV'T				0.20	0.21	0.22	0.23	0.24	0.25	0.25
* LOCAL GOV'T				0.35	0.36	0.37	0.38	0.39	0.40	0.40
* EXTERNAL SOURCES				1.80	1.80	1.80	1.80	1.80	1.80	1.80
* ONG				0.20	0.20	0.20	0.20	0.20	0.20	0.20
* COMMUNITIES				0.12	0.20	0.25	0.30	0.35	0.40	0.40
TOTAL				2.67	2.77	2.84	2.91	2.98	3.05	3.05

a\ UP TO 1992, IMF/BANK PROJECTIONS. BEYOND 1993, ASSUMPTIONS: RECURRENT BUDGET, PLUS 3.2% PER ANNUM; DEVELOPMENT BUDGET, PLUS 8.5% PER ANNUM; OTHER, PLUS 3.2% PER ANNUM

b\ THE BASIS ON WHICH THE HEALTH BUDGET HAS BEEN ESTIMATED IS THE SAME AS IN ANNEX 2-8.

II.

1. Investment criteria. Under the project, each year beginning in FY91, the Government and IDA will review the health sector 3 year rolling investment program prior to its approval. The criteria retained for such review are the following:

(a) Any proposed new investment in the hospital sub-sector or exceeding CFAF 150 million will be subjected to a detailed financial, economic, social and technical feasibility study;

(b) The recurrent costs implications will be a major criterion in deciding the composition of the investment program; and

(c) Priority will be given, within the sector, to PHC, based on the criteria defined in this report (Annexes 3-7 and 3-8), and to rehabilitation over new construction.

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TABLE 5. HEALTH FINANCING
DETAILED COST TABLE
(CFAF '000)

		Quantity								Breakdown of totals incl Cont (US$)			
	Unit	1992	1993	1994	1995	1996	1997	Total	Unit Cost	for Exch	Local (Excl Taxes)	Duties & Taxes	Total
I. INVESTMENT COSTS													
A. HEALTH FINANCING STUDIES													
1. SPECIALIST SERVICES (OUTSIDER	MAN-MONTH	2	2	2	2	-	-	8	3,096 72	115,447.4	-		115,447 4
2. LOCAL CONSULTANT	MAN-MONTH	3	3	3	3	3	-	15	406	-	28,057 1		28,057 1
3. OFFICE ORG. METHODS FOR REGIONS (DAF)	MAN-MONTH	6	6	-	-	-	-	12	304.5	-	16,091 9		16,091 9
Sub-Total HEALTH FINANCING STUDIES										115,447 4	44,149 0		159,596 4
B. DAF - ADMINISTRATION													
1. DISTRICT PROCEDURES MANUALS		100	-	-	100	-	-	200	4,592	2,007 6	2,413 8		4,421 3
2. DISTRICT PROCEDURES MANUALS	MAN-MONTH	8	-	2	-	-	-	8	3,045	-	107,302 9		107,302 9
Sub-Total DAF - ADMINISTRATION										2,007 6	109,716 7		111,724 3
Total INVESTMENT COSTS										117,455 0	153,865 7		271,320 7
Total										117,455 0	153,865 7		271,320 7

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	Unit	Quantity 1992	1993	1994	1995	1996	1997	total	Unit Cost	Breakdown of totals incl Cont (US$) for Each	local (incl taxes)	Duties & Taxes	Total
I INVESTMENT COSTS													
A. DOCUMENTATION SURVEY													
1. DNPFSS - PLANNING AND TRAINING													
SHELVING	UNIT	10	-	-				10	91 842	1,892 5	2,306 8	-	4,199 3
SCANNER	UNIT	1	-	-	-	-		1	757 046	3,065 9	415 2	-	3,481 1
MICROCOMPUTER	UNIT	1	-	-	-	-	-	1	774 18	3,565 5	-	-	3,565 5
PHOTOCOPIER	UNIT	-	1	-	-	-		1	757 046	3,185 4	427 7		3,613 1
VEHICLE	U	1	-	-	-	-	-	1	5,259 822	24,224 0			24,224 0
DOCUMENTS	UNIT	-	11	-	-	-	-	11	246 554	12,977 6			12,977 6
QUARTERLY BULLETIN	UNIT	-	4	4	4	4		16	20 546	1,667 5			1,667 5
COMPUTER MATERIALS	UNIT	1	-	-	-	-		1	123 277	567 8			567 8
LIBRARIANS	TRAINING-MONTH	16	16	-	-	-	-	32	77 418	11,103 3			11,103 3
RESEARCH MATERIALS AND PER DIEMS	UNIT	4	3	-	-	-		7	228 375		7,025 3		7,025 3
ARCHIVES WORKSHOP	TRAINING DAYS	-	75	-	-	-	-	75	12 18		4,082 4		4,082 4
Sub-Total DNPFSS - PLANNING AND TRAINING										62,249 4	14,257 5		76,506 8
Sub-Total DOCUMENTATION SURVEY										62,249 4	14,257 5		76,506 8
B. GUIDELINES DEVELOPMENT													
1. HEALTH SERVICES													
MICROCOMPUTER	UNIT	1	-	-	-	-	-	1	774 18	3,565 5			3,565 5
PHOTOCOPIER	UNIT	1	-	-	-	-	-	1	1,009 395	4,087 8	553 6		4,641 4
VEHICLE	UNIT	1	-	-	-	-	-	1	5,259 822	24,224 0			24,224 0
NORMS PRODUCTION	UNIT	2	10	10	8	-	-	30	49 311	7,303 1			7,303 1
COMPUTER MATERIALS	UNIT	1	-	-	-	-		1	123 277	567 8			567 8
WORKSHOP ON NORMS	TRAINING DAYS	180	180	180	-			540	12 18		29,402 0		29,402 0
Sub-Total HEALTH SERVICES										39,748 2	29,955 6		69,703 8
2. IEC (DNPA / DNAS)													
CENTRE DE BAGUINEDA (REHABILITATION)	UNIT	1				-	-	1	57,677	118,849 0	144,867 6		263,716 6
CENTRE DE BAGUINEDA (FURNITURE)	UNIT	1		-	-	-	-	1	14,419 25	29,712 3	36,216 9		65,929 1
CENTRE DE BAGUINEDA (EQUIPMENT)	UNIT	1	-	-	-		-	1	26,412 5	106,964 1	14,486 8		121,450 9
VEHICLE	UNIT	1			-			1	5,342 006	24,602 5			24,602 5
COURSE REVISION FOR BAGUINEDA	UNIT	-	1	-	-		-	1	609		2,721 6		2,721 6
TRAINING IN WATER QUALITY CONTROL	TRAINING DAY	-	75	-	-	-	-	75	12 18		4,082 4		4,082 4
EPS VISUAL AIDS	UNIT	1	-				-	1	757 046	3,065 9	415 2		3,481 1
DNAS VEHICLE	UNIT	1	-	-	-		-	1	5,259 822	24,224 0	-		24,224 0
DNAS / EPS MATERIALS	UNIT	4	6	-		-	-	10	1,232 771	58,103 5			58,103 5
DNAS / IEC ORG. IN 2 REGIONS	MAN-MONTH	2	2	2				6	3,096 72	84,908 7			84,908 7
Sub-Total IEC (DNPA / DNAS)										450,430 0	202,790 5		653,220 5
3. DNPFSS - PLANNING AND TRAINING													
IEC POLICY WORKSHOP	TRAINING DAY	90			-		-	90	121 8		47,562 2		47,562 2
Sub Total DNPFSS - PLANNING AND TRAINING											47,562 2		47,562 2
Sub-Total GUIDELINES DEVELOPMENT										490,178 2	280,308 3		770,486 4
C PLANNING AND PROGRAMMING (DNSP)													
FIVE YEAR PLAN UPDATES	UNIT	1	1	2	2	2	2	10	2,465 541	127,076 9			127,076 9
PLANNING WORKSHOPS /a	TRAINING DAYS	120	120	120	120	120	120	720	12 18		41,020 2		41,020 2
MICROCOMPUTER	UNIT	1	-	-		-		1	757 046	3,065 9	415 2		3,481 1
VEHICLE	UNIT	1						1	5,259 822	24,224 0			24,224 0
SUPPORTS FOR MIS	UNIT	1						1	123 277	567 8			567 8
SEMINAR ON HEALTH INDICATORS	TRAINING DAY		150		150			300	121 8		168,269 2		168,269 2
EVALUATION OF COMPUTER UTILITY (MAI)	UNIT		1					1	458 533	1,251 3	378 0		1,629 3

EVALUATION OF COMPUTER UTILITY (PD)	UNIT		1				1	845 833		3 780 0		3 780 0
SUPPORT FOR REG. STUDIES (MAT)	UNIT		1	1	1	1	5	358 533	6 762 4	2 006 9		8 769 3
SUPPORT FOR REG. STUDIES (PD)	UNIT		1	1	1	1	5	845 833		20 068 6		20 068 6
MANAGEMENT SUPPORT	UNIT	1	1	1			3	246 554	3 541 1			3 541 1
MGT. TRAINING MODULES	UNIT	4	4	4	4		16	49 311	3 676 7			3 676 7
TRAINING WORKSHOPS /b	UNIT	125	125	125			375	12 18		20 418 1		20 418 1
MGT. TRAINING SPECIALIST	MAN MONTHS		3	3	3		9	3.096 72	132 330 2			132 330 2
TRAINING EVALUATION	MAN MONTHS				2		2	3.096 72	30 538 7			30 538 7
TESTING OF TRAINING MODULES (MATERIALS PRODUC. AND PER DIEMS)	UNIT		1	1	1		3	152 25		2 103 1		2 103 1
EVALUATION OF TRAINING MATERIALS PRODUCTION AND PER DIEMS	UNIT					1	1	304 5		1 487 0		1 487 0
EVALUATION OF TREATMENT MANUAL (MAT / PER DIEMS)	UNIT				1		1	761 25		3 609 2		3 609 2
TREATMENT MANUALS	UNIT	1				1	2	246 554	2 458 8			2 458 8
Sub-Total PLANNING AND PROGRAMMING (DNSP)									335 493 6	263 555 5		599 049 1
Total INVESTMENT COSTS									887 921 2	558 121 3		1 446 042 4
II RECURRENT COSTS												
A. INCREMENTAL OPERATING EXPENDITURES												
1 VEHICLE OPERATIONS	UNIT	1	2	2	2	1	8	240 934	6 996 9	2 094 5		9 091 4
2 EQUIPMENT MAINTENANCE	UNIT	4	5	5	5	5	5	29	129 072	14 906 6	4 140 8		18 047 4
3 REPLENISHMENT OF MATERIALS / SUPPLIES	UNIT	1	1	1	1	1	1	6	86 048	1 912 0	569 7		2 481 7
4 DIST NORMS AND PROCEDURES	UNIT	5		5		5		15	43 024	2 344 7	701 6		3 046 4
5 DIST NORMS AND PROCEDURES	UNIT	5		5		5		15	101 5		7 016 3		7 016 3
6 DNPFSS VEHICLE OPERATIONS	UNIT	1	1	1	1	1		5	240 934	4 374 7	1 309 3		5 684 0
7 DNPFSS RES. VEH. OPNS	GLOBAL AMT	1	1	1	1	1		5	1.075 597	19 529 9	5 845 2		25 375 1
Sub-Total INCREMENTAL OPERATING EXPENDITURES										49 064 8	21 677 5		70 742 3
Total RECURRENT COSTS										49 064 8	21 677 5		70 742 3
Total										936 986 0	579 798 8		1 516 784 8

/a FOR DNSP STAFF
/b PLANNING AND PROGRAMMING

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TABLE 9. HUMAN RESOURCES DEVELOPMENT
DETAILED COST TABLE
(CFAF '000)

	Unit	Quantity 1992	1993	1994	1995	1996	1997	Total	Unit Cost	Breakdown of Totals Incl Cont (US$) For Exch	local (Excl Taxes)	Duties & Taxes	Total
I INVESTMENT COSTS													
A ANALYSIS OF JOB MARKET FOR HEALTH GRADUATES (DNPFSS)	MAN-MONTH	3				-	-	3	3,096 72	40,840 8			40,840 8
B. PERSONNEL MANAGEMENT													
1 FILING CABINETS	UNIT	6	-					6	55 105	681 3	830 5		1,511 8
2. PHOTOCOPIER	UNIT	1	-	-		-	-	1	757 046	3,065 9	415 2		3,481 1
3. MICROCOMPUTER	UNIT	-		1				1	739 662	3,677 4			3 677 4
4. VENICLE	UNIT	-	-	1	-	-		1	5,259 822	26, 150 3			26, 150 3
5. FILE FOLDERS	UNIT	5,000		-		-	-	5,000	0 082	1,892 5			1,892 5
6. RECONSTIT. OF FILES	UNIT	1	-	-	-	-		1	123 277	567 8			567 8
7. PERSONNEL MANAGEMENT TRAINING	TRAINING YEAR	1	1	-	-	-	-	2	3,870 9	34,697 7			34,697 7
8. STUDY AND SET UP OF PERS. MANAGEMENT SYSTEM	MAN-MONTH	4	4	4	-	-		12	3,096 72	169,817 4			169,817 4
9. TREATMENT MANUALS	UNIT	1	-	-		1		2	2,465 541	24,587 7			24,587 7
Sub-Total PERSONNEL MANAGEMENT										265, 137 9	1,245 7		266, 383 6
Total INVESTMENT COSTS										305, 978 8	1,245 7		307, 224 5
II. RECURRENT COSTS													
A. HUMAN RESOURCE MGT.													
1. CAF VENICLE OPERATIONS	UNIT	-	-	1	1	1	1	4	.40 934	3,703 5	1,094 6		4 798 1
Sub-Total HUMAN RESOURCE MGT.										3,703 5	1,094 6		4 798 1
Total RECURRENT COSTS										3,703 5	1,094 6		4 798 1
Total										309, 682 3	2, 340 3		312 022 5

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PROJECT-RELATED TRAINING

1. The challenge. One of the critical factors in the success of the proposed project will be its ability to radically change the attitudes and practices of health personnel (a) by supporting the transition (i) from a highly hierarchical system to a decentralized one; (ii) from a curative, passive and individualistic approach to a proactive public health and community service approach; and (b) by encouraging health staff to shoulder an increased workload and heightened responsibilities as essential drugs become available.

2. Project strategy. To achieve these objectives, the project will: (i) standardize health technical and administrative procedures; (ii) provide initial and in-service training based on these procedures; (iii) establish a decentralized information system; (iv) provide incentives to ComHCs from above and from below; and (v) establish a community personnel management and control system. Experience in other countries has shown that these ingredients constitute an integrated whole and work in a synergetic fashion. Deleting one of them would sharply decrease the expected impact of the training program of the project.

3. Procedure standardization. ComHC staff will receive precise instructions for the provision of health care and information. These instructions are based on observation of the tasks most frequently performed, and mistakes most commonly made in village health care facilities (a similar exercise is being conducted for referral care). The instructions which have been developed and are being tested in the KBK area will allow staff to offer a minimum package of quality care to the communities.

4. Initial and in-service training. Modules for the initial training of staff away from vertical programs towards integrated care are being developed on the basis of the above procedures and will be refined with experience. New tasks, or tasks frequently mis-executed will be identified and taught to trainees in ComHCs already in operation. Supervision will be based on the training and visit system. A discussion of difficulties encountered in applying the instructions will help the supervisee to improve his/her practices and the supervisor to refine the instructions. Problems common to all ComHCs will be corrected during refresher courses which will be offered quarterly during the first year of operation, and subsequently twice a year. The training will be three-tiered: the Regional Health Team, strengthened by a UNICEF health specialist (internationally recruited and not costed as part of the project) will train the District health team, who in turn will train the ComHC staff.

5. Decentralized information system. As soon as selected for project support, Districts and ComHCs would have to collect base-line data from which

project performance would be monitored. For a number of financial and technical indicators (Annex 3-4), target and threshold values have been determined. This will allow the ComHC staff and the Community Health Committee to undertake corrective actions (specified in the instructions) without awaiting feedback which might be slow or insufficiently precise. This iterative exercise will provide geographic and historical comparisons of ComHC performance.

6. Incentives. The project is predicated on the provision of incentives to staff from above and from below. First, project support will be available for only 60% of the Districts. Competition should be strong, based on a number of criteria including existence of an operational ComHC. A similar mechanism will be used for the selection of communities in each District. District level staff whose performance will be superior, according to the criteria defined under the decentralized information system will be entitled to training scholarships in areas clearly linked to their job. It is also expected that the example of successful ComHCs and their impact on the communities' health will be emulated by neighboring groups of villages, and will contribute to restoring the image and status of health workers. Regular payment of a decent salary is also key to the success of the project. This issue is approached from the macro level--for Government-paid health staff, the forthcoming SAL will correct distortions and ease the country's liquidity situation; a study will be conducted to review options for enhancing staff compensation within the constraints of the IMF program. For the ComHCs staff to be paid by the communities, operational research will be launched by UNICEF in PY1 to determine the most efficient way of capturing the private savings expected from rationalization of the drug system so as to improve the quality of care.

7. Community management and control. The Health Committee elected by a group of villages as a precondition for eligibility to project support for the creation of a ComHC would receive from the District level training in simple management techniques. Following consultation with the community, they would make decisions regarding who should receive free care, what type of health problems should be addressed as priorities, what form and level of compensation should ComHC staff receive, etc. They would also oversee ComHC accounts and drug stock. Once a year, they would meet with the District health and administrative authorities to review experience with implementation of the project's strategy, especially with the provision of integrated care, cost-recovery and outreach to determine the level of financial and technical support required for the following year, and to arbitrage between competing claims on the revenues from the local development tax.

8. Table 1 summarizes the training programs to be provided under the project. Additionally, the terms of reference of the resident specialists at the central and Regional levels include training as a central objective. No cost tables are included as training has been treated as an integral part of individual components, rather than separately.

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PROJECT-RELATED TRAINING

PROJECT COMPONENT	STAFF	NB	SUBJECT	LOCAL/ FOREIGN	TIMING FROM	TO	TOTAL TIME MAN-MONTH	TRAINER	PLACE	FINANCIERS
A. HEALTH COMPONENT										
1. IMPROVING THE COVERAGE AND QUALITY OF HEALTH CARE			(A) INTEGRATED HEALTH CARE AND ADMINISTRATION (INITIAL TRAINING)	LOCAL	01/91	12/96	360	DHT	DISTRICT	USAID
- COMMUNITY HEALTH CENTERS (PHC)	COMMC STAFF (NURSES, MIDWIFES, AIDES)	360	(B) INTEGRATED HEALTH CARE (IN SERVICE TRAINING)	LOCAL	01/91	12/96	484	DHT	COMMC	USAID
- COMMUNITY HEALTH COMMITTEES	COMMC STAFF	480	SIMPLE MANAGEMENT AND ACCOUNTING TECHNIQUES	LOCAL	01/91	12/96	192	DISTRICT THEN SUB-DISTRICT STAFF	COMMC	USAID
- QUALITY OF REFERRAL CARE	PARAMEDICAL STAFF OF THE DHC	84	- MINIMUM REFERRAL CARE PACKAGE	LOCAL	01/91	12/96	504	T.A.	DHC	
- DISTRICT HEALTH SYSTEM MANAGEMENT	DISTRICT MEDICAL OFFICERS	21	(A) PUBLIC HEALTH	FOREIGN	01/92	12/96	21	SCHOOL OF PUBLIC HEALTH	TO BE DETERMIN	USAID
			(B) OBSERVATION VISITS	FOREIGN	01/91	12/95	15	-	TO BE DETERMIN.	USAID
	DISTRICT HEALTH MANAGERS AND PHARMACISTS	42	(A) HEALTH AND PHARMACEUTICAL SYSTEMS MANAGEMENT	FOREIGN	01/93	12/96	126	SCHOOL OF PUBLIC HEALTH	WEST AFRICA REGION	USAID
			(B) OBSERVATION VISITS	FOREIGN	01/92	12/96	21	-	TO BE DETERMIN.	USAID
	COMMUNITY DEVELOPMENT AGENTS	24	- IEC ON ENVIRONMENT	LOCAL	01/93	12/96	288	BAGUINEDA	MALI	IDA
	LOCAL AUTHORITIES	50	- PROJECT LAUNCH SEMINARS TO DISSEMINATE THE PROJECT'S UNDERLYING PHILOSOPHY	LOCAL	01/91	12/95	5	DHT	DISTRICT	IDA
	COMMC, DHC AND DHT REPRESENTATIVES	160	- YEARLY WORKSHOPS PREPARE JOINT ANNUAL JOINT REVIEWS WITH IDA	LOCAL	06/91	06/96	16	DHT & T.A.	DISTRICT	IDA
- REGIONAL MANAGEMENT SUPPORT (RHT)	RHT STAFF	350	(A) INITIAL WORKSHOPS TO DISSEMINATE THE PROJECT'S PHILOSOPHY AND TECHNICAL APPROACHES	LOCAL	01/91	12/92	88	DHT	REGIONAL CAPITALS	IDA
			(B) YEARLY WORKSHOPS TO MONITOR IMPLEMENTATION OF THE PROJECT, IN PREPARATION FOR THE JOINT ANNUAL REVIEWS	LOCAL	06/91	06/96	102	RHT & TA IN PY1 AND PY2, RHT MANAGEMENT THEREAFTER	REGIONAL CAPITALS	IDA
	IEC STAFF	15	- COMMUNITY DEVELOPMENT	LOCAL	01/91	12/92	15	REGIONAL INSTITUT.	TO BE DETERMIN.	UNICEF
	DEVELOPMENT COMMITTEE MEMBERS	150	- YEARLY WORKSHOPS TO DEFINE, EVALUATE AND REFINE THE IEC STRATEGY	LOCAL	01/91	12/96	56	RHT	REGIONAL CAPITALS	IDA
	ACCOUNTANTS AND BUDGET OFFICERS	15	- BUDGET PREPARATION AND MONITORING, ACCOUNTING PRACTICES AND CONTROLS (SEMINARS)	LOCAL	01/91	12/94	45	MALIAN INSTITUT. (ENA ?)	*	USAID
	PERSONNEL OFFICERS	10	- PERSONNEL MANAGEMENT, INCLUDING MANAGEMENT OF TRAINING (YEARLY)	LOCAL	01/91	12/96	10	SHORT TERM T.A.	*	USAID
	ADMINISTRATIVE OFFICERS	100	- TRAINING IN ADMINISTRATION, CLERICAL SKILLS, O&M, ACCOUNTING, COMPUTER SKILLS (SEMINARS)	LOCAL	01/91	12/92	100	MALIAN INSTITUT.	*	USAID
2. IMPROVING SECTORAL RESOURCE MANAGEMENT										
- DRUGS	STAFF OF PHARMACY DIVISION IN MOPHSA	6	(A) TRAINING IN PHARMACEUTICAL SYSTEMS DESIGN MANAGEMENT AND CONTROL REFORM	FOREIGN	01/91	12/93	72	SCHOOL OF PHARMACY	TO BE DETERMIN.	IDA

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SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

PROJECT-RELATED TRAINING

PROJECT COMPONENT	STAFF	NB	SUBJECT	LOCAL/ FOREIGN	TIMING FROM	TIMING TO	TOTAL TIME MAN-MONTH	TRAINER	PLACE	FINANCIERS
		50	(B) SEMINARS TO DISSEMINATE AND MONITOR THE DRUG REFORM IN REGIONS	LOCAL	01/91	12/96	2	PHARMACY DIVISION	REGIONAL CAPITALS	IDA
		25	(C) TRAINING OF TRAINERS FOR RATIONALIZATION OF PRESCRIPTION USE (2 TWO-WEEK SEMINARS)	LOCAL	01/91	12/92	25	SHORT TERM T.A. AND PHARMACY DIVISION	BAMAKO	IDA
		150	(D) 3-TIERED TRAINING FOR PRESCRIBERS (ONE-WEEK SEMINARS)	LOCAL	01/91	12/96	36	REGIONAL, THEN DISTRICT STAFF	REGIONAL CAPITALS, DISTRICT	IDA
- HUMAN RESOURCE DEVELOPMENT	STAFF OF ADMINISTRATIVE AND FINANCIAL UNIT	3	- TRAINING IN PERSONNEL ADMINISTRATION AND MANAGEMENT (FOUR-MONTH	FOREIGN	06/91	06/92	12	TO BE DETERMIN.	TO BE DETERMIN.	IDA
- PHYSICAL RESOURCES	STAFF OF CEPRIS	2	(A) PHYSICAL FACILITIES PLANNING, INVENTORY MANAGEMENT	FOREIGN	01/91	12/92	15	SPECIALIZED INSTIT.	TO BE DETERMIN.	IDA
		50	(B) THREE-TIERED TRAINING FOR FACILITIES PLANNING, INVENTORY AND MANAGEMENT (FOR REGIONAL AND DISTRICT STAFF, INITIAL SEMINAR PLUS TWO REFRESHERS)	LOCAL	01/91	06/96	36	CEPRIS, THEN REGIONAL STAFF	BAMAKO, THEN REGIONAL CAPITALS	IDA
B. POPULATION COMPONENT										
1. INSTITUTIONAL SUPPORT	PUBLIC OR PRIVATE AGENTS INVOLVED IN FP PROGRAMS	300	FP PROGRAMS MANAGEMENT (INITIAL AND REFRESHER SEMINARS, ONE EACH YEAR)	LOCAL	03/90	05/9.	1500	CEDPA (TWINNING ARRANGEMENT)	BAMAKO	
2. INCREASING THE AVAILABILITY FOR AND USE OF FP SERVICES NATIONWIDE										
- DISTRICT LEVEL AND BELOW	HEALTH AGENTS (NURSES AND MIDWIFES)	400	(A) FERTILITY AND FAMILY-RELATED HEALTH CARE AS PART OF THE INTEGRATED MINIMUM PACKAGE, INCLUDING SCREENING OF D.C.	LOCAL	01/91	12/93	200	DSF, WITH SHORT-TERM T.A. & AMPPF	DISTRICTS	USAID
	MIDWIFES AND UNFM	200	- SEMINARS ON TRADITIONAL DANGEROUS PRACTICES (E.G. FEMALE CIRCUMCISION)	LOCAL	01/91	12/94	50	DSF, UNFM & AMPPF	DISTRICTS	USAID POP-FUND

SUMMARY OF TRAINING	MAN-MONTHS	% OF TOTAL
FOREIGN	5.42	7%
LOCAL	75.50	93%
TOTAL	80.92	100%

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REPUBLIC OF MALI
SECOND HEALTH, POPULATION AND WATER SUPPLY PROJECT

PHARMACEUTICAL PROGRAM

This Annex describes: (i) the present situation in the drug sector; (ii) the pharmaceutical reform proposed by the Government; and (iii) the drug distribution system to be implemented under the project.

I. PRESENT SITUATION

1. The drug reform initiated in 1983, when it became clear that the free provision of drugs was an impasse, has largely failed:

(a) the drug coverage remains very low (30% of the population) and very uneven (half of drugs sales are concentrated in the capital), partly because the present health system does not reach lower than the sub-district;

(b) drugs are not available for three reasons: first, the Pharmacy Populaire du Mali (PPM), the parastatal with a quasi monopoly to import drugs, has tried to maximize its profits by selling expensive specialties, rather than essential drugs (Eds); second, the output of the local drug producer, Usine Malienne de Production Pharmaceutique (UMPP), another parastatal, for the same reason, is not in line with the ED strategy; third, PPM's distribution system is inefficient;

(c) when available, drugs are not affordable, because they are purchased under direct contract and subject to a wide profit margin, and because prescribers have no incentive and do not know how to prescribe EDs. As a result the average prescription is almost four times more expensive nationwide (CFAF 1,600 vs 400) than in the 6th and 7th Regions where drugs are purchased in generic form and under ICB;

(d) the private pharmaceutical sector remains embryonic (1988).

2. The first IDA-financed Health Development Project (Cr 1422-MLI) only partly succeeded in introducing the necessary reforms. A US$1.9 million revolving fund was created; EDs were purchased in generic form and under ICB; the acceptability of generic drugs was demonstrated; however, the revolving fund was not replenished because PPM used the proceeds from the sales of drugs to reimburse its debt; the shortage continued and because the drugs were sold at high PPM prices, drug utilization did not increase.

3. On the other hand, some positive developments have taken place recently:

(a) under the proposed project, Government proposes to bring health services closer to the people, especially in the rural areas, by creating a network of community health centers which will include a small pharmacy; community drug depots have also been introduced;

(b) both PPM and UMPP have been placed under the control of MSPAS, a "contrat-plan" specifying their roles is under preparation, which should resolve the dilemma of these two parastatals caught between commercial and social objectives;

(c) Government has announced its intention to adopt the ED strategy. With the assistance of WHO, UNICEF, and IDA, it has prepared a list of 189 ED to be purchased under ICB and in generic form; this approach was followed under a recent European Development Fund-financed purchase of EDs;

(d) Government has lifted the ban on private pharmaceutical practice, and under the IDA-financed Public Enterprise Project (Cr. 1937-MLI) the distribution network of PPM is being privatized.

II. PROPOSED REFORM

4. The objective of this component is to make EDs physically available and financially affordable all over the Malian territory within a one year period. The drug reform Master-Plan which is a centerpiece of the proposed project is based on work undertaken under the Public Enterprise Project the Structural Adjustment Credit approved by Bank's Board of Executive Directors on December 11, 1990 and a UNICEF-financed study entitled "La Pharmacie populaire du Mali dans le contexte de l'Initiative de Bamako". For each issue identified, the following paras indicate the measures proposed under the Master-Plan.

5. The so-called "Bamako Initiative" is a strategy adopted by all African Ministers of health in 1987 and supported by UNICEF and WHO. Its main objective is to ensure the physical availability and financial affordability of quality EDs throughout the national territory. The key principles underlying the policy are the procurement of an agreed list of EDs in generic form and under competitive bidding, an active ED promotion campaign with the public and prescribers, rationalization of the distribution system, and sale of EDs to patients at the lowest possible cost.

6. Types of drugs concerned. Issue: until now, although a list of EDs had been established in Mali, shortages, the incentives structure to PPM and the prescribers, and lack of information among the public, resulted in the so-called "essential specialties" dominating the market. Proposed reform: under the Master-Plan, a list of 189 EDs has been approved. These drugs will be purchased in generic form ("dénomination commune internationale"). Under the "Contrat-Plan", PPM will cease to import and will ban from its catalog and stores all the brand specialties with equivalent chemical composition (350, corresponding to the 60 most critical EDs, by November 1991, and all the remaining equivalent specialties over a two year period). Private importers will be allowed to import brand equivalents (the so-called "essential specialties"), but these will be heavily taxed (para 10). For PPM, the transition from "essential specialties" to EDs will take place gradually, as stocks of the former are depleted and replaced by the latter. Only EDs will be prescibed offered in Government run communities, and project-supported facilities.

7. The import of drugs. Status: PPM's monopoly for drug import was lifted recently in an effort to eliminate the shortages and fraudulent imports frequently observed, at a high cost for the patient. On-going reform: under the Master-Plan, the goal is to create a multiple-channel, well regulated import circuit, it being understood that an efficient PPM, which would supply the market with adequate quantities of drugs in a timely fashion at affordable prices could become a natural joint procurement agency placing multi-year orders for private as well as public operators. Concomitant to the lifting of the monopoly, regulations governing the new drug import regime were issued to ensure a smooth transition to an open system. Among other points, the regulations specify that NGOs, as well as groups of private pharmacists will be allowed to import drugs directly from the international market, provided their purchaser are qualified (a licensed pharmacist with adequate experience in drug procurement), and they agree to submit their orders to the approval of Pharmaceutical Laboratory of MSPAS for quality control and customer protection. The recently created Laboratory will be reinforced to ensure that the approval process is reasonably expeditious.

8. Procurement. Issue: until recently PPM, as a parastatal, imported drugs directly from suppliers and in packaged form, instead of bulk, resulting in higher purchasing costs. For instance, PPM's purchases of CFAF 1.2 billion in 1988 and 1.6 billion in 1989 would have costed it respectively only one fourth and one third of that amount under the principles of the EDs policy. Retail packaging entailed an additional mark-up. Proposed reform: now that PPM is placed under the authority of MSPAS, it will follow the "réglement des marchés publics" and will procure drugs on the basis of competitive bidding, as was done recently for the European Development Fund-financed order of EDs. Through institutional development, staff will be trained to plan pharmaceutical needs over a three-year period to allow multi-year orders, which further reduce prices as they allow suppliers to use their resources more rationally. Bulk form will be used whenever possible.

9. Pricing. Issue: The price structure can be described as follows: (i) PPM purchasing price: for the reasons indicated just above, the purchasing price of drugs has been very high; (ii) international transport costs: because transport is largely a fixed cost, it (including insurance, registration, various fees, handling and storage) has been higher as a proportion of purchasing costs for EDs (33%) than for non EDs (16%); (iii) import duties: until now, EDs, locally produced drugs (by UMPP) and "essential specialties" were exempted of import duties, while remaining drugs were subject to a number of taxes (CEAO, Contribution sur les Prestations de Services, CPS, Droit Fiscal sur les Importations, DFI) totalling about 22% of invoice value; (iv) PPM's margin: until recently, this margin was a price multiplier on the CAF Bamako price which was substantially higher for specialties (2.06) than for EDs (1.4), giving prescribers an incentive to promote the former. This has been replaced by a single multiplier (1.95); although this is an improvement, the disincentive to reduce the CAF price persists; additionally, the way these margins are applied is subject to considerable variations; and (v) distribution costs: while distribution costs are practically identical whatever the volume of sales, they vary substantially with the distance to be covered. However, the sales price was theoretically uniform throughout the country.

10. Proposed reform: under the reform, first of all, and following a detailed management review (PY1), PPM will, among other managerial improvements, be equipped with a cost accounting system which will allow, in particular, to identify and address the causes of its 20% unexplained losses during storage and to bring greater transparency in its operations. Second, to monitor PPM procurement by competitive bidding and in generic form, it has been agreed that at all times during project implementation the CAF Bamako price of the basket of EDs will not exceed that of UNIPAC (the UNICEF Procurement and Assembly Center). Third, under a new decree only the 189 EDs will be subject to the minimal rate of import taxes and duties; a highly differentiated taxation system (taxing most heavily the brands equivalent to EDs) will be put in place under the SAL, as a disincentive to the import, prescription and use of the so-called "essential specialties". Fourth, as of January 1, 1991, price fixing was abolished in Mali under the SAL. As far as PPM is concerned, a revised margin based on a study of changes in the cost structure expected to result from PPM's restructuring (para 11), will be agreed with IDA and implemented by November 30, 1991. Drugs will be sold to consumers at price including PPM's margin, variable transport and handling costs to the Regions, plus a small margin determined by the ComHC Health Committees. PPM's internal pricing mechanism will be detailed in an Annex to the Contrat-Plan with Government to be signed as a credit effectiveness condition. The feasibility of PPM's retaining one retail point per region ("pharmacie-temoin") where lower-priced drugs would be offered as an alternative to consumers is being reviewed.

11. PPM's operations. Issue: in addition to the problems discussed above, PPM has (i) been operating non profitable services which do not form part of its stated "mission", such as running a Diagnosis Center and a Dental Prothesis Center; (ii) had excess staff, especially in its administrative directorate and among its sales personnel; and (iii) had slow and unreliable deliveries and substantial physical losses (20%) during storage/distribution. Finally, PPM staff has been receiving substantial in-kind compensation in the form of free drugs (average of 180,000 CFA/employee/annum. Proposed reform: under the proposed Contrat-Plan, to be signed between Government and PPM is a credit effectiveness condition PPM will, among other things, (a) discontinue its non-profitable activities, resulting in a saving estimated at about CFAF 125 million; (b) dismiss redundant staff, as part of a plan involving adequate compensation (the early departure program established in the context of the SAL). These two measures will substantially reduce its total operating costs, estimated at CFAF 1,990 million, and would translate into a further 5-10% reduction in the cost of drugs. On the other hand, transport costs will need to be increased from CFAF 180 to 280 million to bring the transport function up to acceptable standards. A stock management system will be established to trace and correct losses. Options to secure staff cooperation in the new system will be studied during PY1 for implementation as of the first annual review.

12. UMPP. Issue: Due to inefficiencies, the drugs produced by the Usine malienne de produits pharmaceutiques (UMPP) cost, on average, about twice as much as if internationally procured. As a result, maintaining procurement from UMPP under the ED policy would entail additional costs equivalent to about 1/3 to 1/2 compared to international prices. A financial/management study of UMPP has been completed under the Public Enterprise Project. It

needs to be complemented by a study on UMPP's line of production on the EDs context. Proposed reform: a complementary study of UMPP, about to be launched, will be discussed with IDA to reach an agreement on how to restructure UMPP's line of production (credit effectiveness condition). Among other measures UMPP will, over a period to be agreed, introduce a number of adjustment measures, including the possible closure of certain lines of products, reduce its costs so as to charge prices equivalent to UNIPAC's price plus a margin not exceeding 15%.

13. Distribution. Issue: Until recently, PPM network reached down to the sub-district level. In the past two years, Government has encouraged the private sector to increase its role in distribution, and PPM is implementing a program aimed at divesting its more profitable retail points. Two questions need to be addressed: (i) how to serve the underprivileged Regions where the private sector is unlikely to invest, and (ii) how to bring drugs to the community level. Proposed reform: PPM is gradually evolving into a wholesaler, with warehouses down to the district-level only (over time, it is expected that the warehouses will be limited to one per Region); in Bamako and in the four Regions covered by the health component, the health centers down to the community level (ComHC) will have their own pharmacy, which will follow the EDs policy. Outside the project, the private sector will continue to play an increasing role in distribution, although not lower than the district level, below which community-run depots or small salesmen are expected to be the main source of supply. In the poorer Regions, NGOs also play a key role. The Contrat-Plan will specify PPM's social "mission", its obligations and those of the Government vis-a-vis deficit operations of a social nature. The chief medical officer of the District health team will be in charge of organizing, in coordination with village health committees, distribution down to the village level. UNICEF will conduct operational research to help identify the most cost-effective ways of reaching the periphery. Every effort will be made to privatize the transport of drugs and thus further cut PPM's costs.

14. Drug availability. Issue: the only way to ensure that a gradual opening of the market does not result in dramatic price rises for patients is to supply the drug market abundantly, and only then, to announce the launching of the Bamako initiative. Proposed reform: the MSPAS has prepared bidding documents to purchase enough EDs to own a one-year supply (including 20% stock) by the beginning of the project. Bids have been launched; as a result, within a year, no less than 55 of the 60 drugs most used at the periphery would be available at all times at the District level. UNICEF field staff would complement the Pharmacy/Laboratory in making spot checks to control compliance.

15. Prescribing practices. Issue: the prescribers usually do not know the EDs equivalent of brand drugs they have been used to prescribe. Similiarly, patients know neither about the existence, nor about the advantages of EDs. Proposed reform: the project will support a program to train prescribers and to inform the public about EDs. Each pharmacy will be requested by law to post the comparative generic and brand prices, to respond favorably to clients request for ED fulfilling of prescriptions, and to indicate the location of the nearest PPM "pharmacie-temoin".

16. Implementation schedule. Most of the above reforms are already being implemented; the remainder, which require further study or institutional development, will be in place by the first annual review (November 1991).

17. Responsibility. Implementation of the reform will be the responsibility of MSPAS, with donors assistance. Various units in PPM and the Pharmacy/Laboratory of the Ministry will be reinforced to that effect.

18. Expected outcome. The opening of the drug market will be a test for PPM which will either make rapidly the adjustments required to sustain competition form the private sector, and become a joint procurement agency, placing multi-year orders or collapse altogether. Preparatory studies have amply shown that with enough political will, the former course of action is feasible. This would be highly desirable in the country of the Bamako Initiative.

19. Proposed means. The project will finance: (i) equipment and supplies, training and specialist services for the Pharmacy/Laboratory, which will be responsible for quality control; (ii) a training program and a media campaign for the prescribers and the public (outside the project, under bilateral French aid, the various health schools will introduce EDs in their curriculum); (iii) a monitoring system, including a pharmaceutical management specialist who will be based in MSPAS to assist with implementation of the reform (terms of reference in the project file); after one year on a full-time basis the residency could, depending on progress in implementing the reform, be replaced by shorter, regular visits; the specialist would be assisted by a team of pharmaceutical specialists recruited under a twinning arrangement with a specialized institution; (iv) operating costs. The additional expenditures entailed by the reform for PPM will be financed out of the latter's own resources.

TABLE 1

III. PROPOSED DRUG SUPPLY SYSTEM IN THE PROJECT AREA

LEVEL	STOCK	PRICING	MANAGEMENT	CONTROL	REPLENISHMENT
COMC	ONE YEAR SUPPLY OF EDs (30 CENTS/PERSON)	SET BY HEALTH COMMITTEE	HEALTH COMMITTEE (WILL RECEIVE TRAINING)	NURSE AND TREASURER	- FUNDS DEPOSITED IN BANK - REPLENISHMENT FROM PPM DISTRICT DEPOTS OR PRIVATE SUPPLIERS
DISTRICT	DISTRICT DEPOTS = ONE YEAR INITIAL STOCK (30 CENTS/PERSON PLUS BUFFER STOCK 10 CENTS/PERSON AFTER 6 MONTHS)	BASED ON AGREED PRICE FORMULA	MANAGEMENT COUNCIL (TRAINING)	NURSE AND TREASURER	- FUNDS DEPOSITED IN BANK - REPLENISHMENT FROM PPM CENTRAL DEPOTS
REGION	THE REGIONAL DIRECTORATES WILL FOCUS ON PLANNING, PROGRAMMING, ASSISTING THE DISTRICT IN MANAGING THE SYSTEM, TRAINING AND INFORMING THE PUBLIC, AND UNDER THE RESPONSIBILITY OF THE REGIONAL PHARMACIST. THERE WILL BE NO REGIONAL DEPOT, ALTHOUGH THE DISTRICT DEPOT IN THE REGIONAL CAPITAL WILL, IN SOME CASES, SERVE AS WHOLESALER POINT.				
NATIONAL	TO PURCHASE PRIOR TO DISBURSEMENT, A ONE YEAR STOCK OF GENERIC EDs, UNDER ICB (USING EXISTING REVOLVING FUND OF US$ MILLION)	CIF BAMAKO PRICE, SAME AS UNIPAC OR INTERNATIONAL DISPENSARY ASSOCIATION	MSPAS	DONORS' MONITORING GROUP, LED BY UNICEF	- FUNDS DEPOSITED IN BANK - YEARLY ICB PURCHASE BASED ON PROJECTIONS OF CONSUMPTION

TABLE 2

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND WATER SUPPLY PROJECT

PROPOSED DRUG SYSTEM

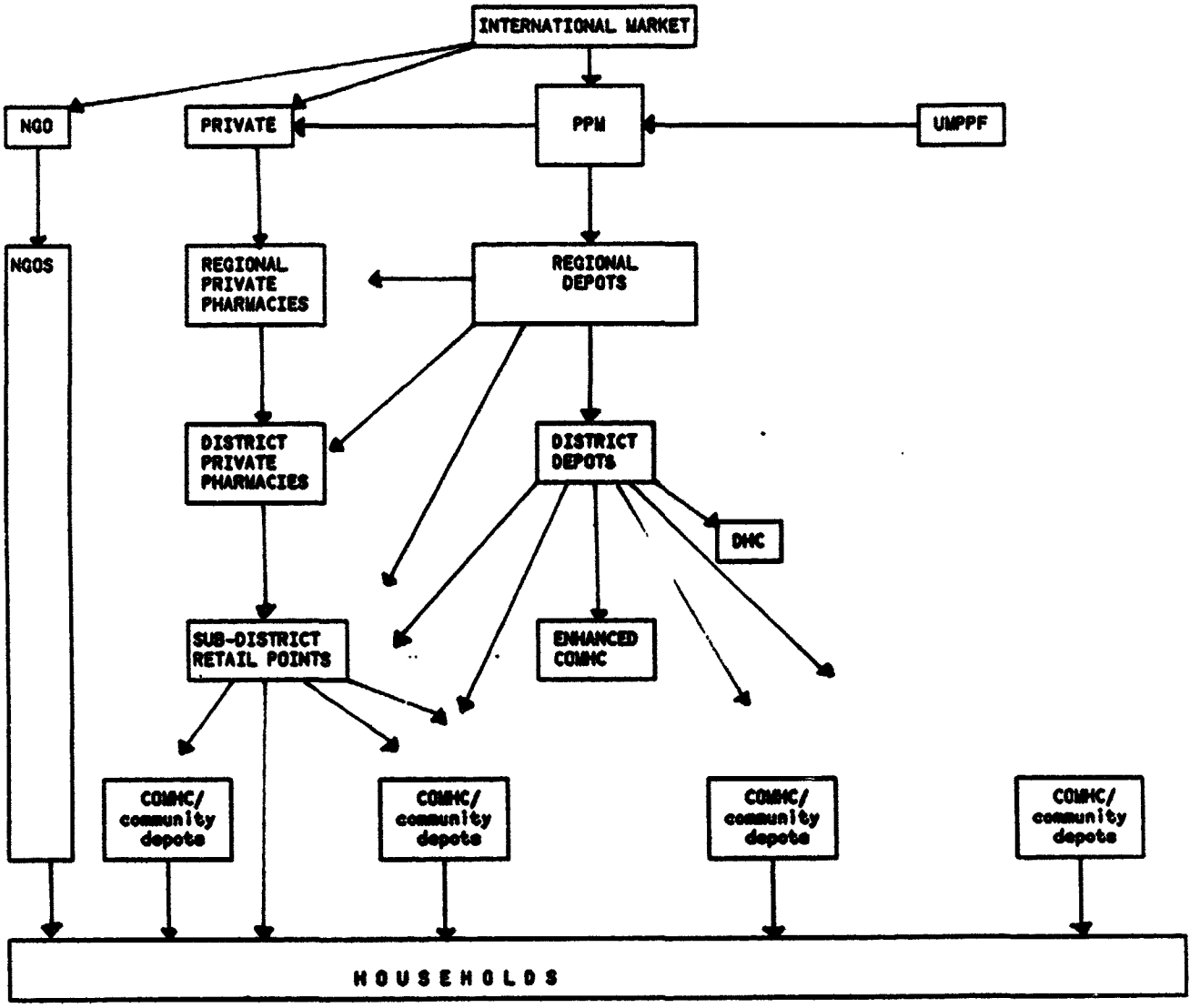

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TABLE 8. AVAILABILITY OF ESSENTIAL DRUGS

DETAILED COST TABLE

(CFAF' 000)

	Unit	Quantity 1992	1993	1994	1995	1996	1997	Total	Unit Cost	Breakdown of Totals Incl Cont (US$) for Each	Local (Excl Duties & Taxes)	Duties & Taxes	Total
I INVESTMENT COSTS													
A NATIONAL POLICY DEVELOPMENT													
1 TECHNICAL UNIT IN PHARM. AND LAB DIV (MOPHSA)													
FURNITURE AND EQUIPMENT	UNIT	1						1	6,056 085	12,479 1	15 211 1		27 690 2
VEHICLE (4 X4)	UNIT	1			1			2	5,419 26	52,952 1			52 952 1
VEHICLE (LIGHT)	UNIT	1						1	3,870 9	17,827 4			17 827 4
SEMINAR	UNIT	1	1	1	1	1	1	6	956 13		41 957 8		41 957 8
OVERSEAS TRAINING	MAN-YEAR	2	2	2				6	2,420 603	66,370 3			66 370 3
SPECIALIST SERVICES (SHORT TERM)	MAN MONTH	2	2	2				6	3,096 72	84,908 7			84 908 7
RESEARCH	UNIT	6	6	6	6			24	127 484		13,884 6		13 884 6
DOCUMENTATION	UNIT	1	1	1	1	1	1	6	576 77	7,862 0	9,370 6		17 232 7
MATERIALS (COMPUTER SUPPLIES)	UNIT	1						1	4,325 775	8,913 7	10,865 1		19,778 7
Sub-Total TECHNICAL UNIT IN PHARM. AND LAB DIV (MOPHSA)										251,313 3	91,289 1		342,602 4
2 APPROP USAGE OF MEDICINES													
FELLOWSHIPS	UNIT	18	18					36	47 807		7,579 3		7,579 3
MEETINGS	UNIT	10	10					20	82 865		7,298 6		7,298 6
PUBLICATION	UNIT									77,546 6			77,546 6
SUPPLIES	UNIT	1	4	1	1	1		5	5,161 2	128,487 9			128,487 9
SPECIALIST SERVICES	MAN-MONTH	2	2	2				6	3,096 72	84,908 7			84,908 7
OVERSEAS TRAINING	UNIT	1	1	1				3	2,064 48	28,302 9			28,302 9
Sub-Total APPROP. USAGE OF MEDICINES										319,246 1	14,877 8		334 123 9
3 STRENGTHENED MONITORING													
SUPPLIES AND EQUIPMENT	UNIT	2						2	660 313	5,348 2	724 3		6,072 5
VEHICLES (LIGHT)	UNIT	1	1					2	3,870 9	36,350 0			36,350 0
OVERSEAS TRAINING	UNIT	2	2	2				6	2,064 48	56,605 8			56,605 8
WORKSHOP	UNIT	1	1	1	1	1	1	6	318 71		8,944 7		8,944 7
PHARMACEUTICAL MANAGEMENT SPECIALISTS	MAN-MONTH	10	10	10	10	10		50	3,096 72	735,885 2			735,885 2
Sub-Total STRENGTHENED MONITORING										834,189 2	9,669 0		843,858 2
Sub-Total NATIONAL POLICY DEVELOPMENT										1,404,748 6	115,836 0		1,520,584 6
B STOCK INVENTORY ACCOUNTING SPECIALIST	MAN MONTH		6					6	3,096 72	84,867 3			84,867 3
Total INVESTMENT COSTS										1,489,615 9	115,836 0		1,605,451 9
II RECURRENT COSTS													
A NATIONAL POLICY DEVELOPMENT													
1 TECHNICAL UNIT IN PHARM. AND LAB DIV (MOPHSA)													
OPERATING EXPENSES	UNIT	1	1	1	1	1	1	6	2,741 9	60,037 3	17,889 4		77,926 7
Sub-Total TECHNICAL UNIT IN PHARM AND LAB DIV (MOPHSA)										60,037 3	17,889 4		77,926 7
2 APPROP USAGE OF MEDICINES													
PER DIEMS	UNIT	18	18					36	127 484		20,211 4		20,211 4
OPERATING EXPENSES	UNIT	1	1	1	1	1	1	6	1,350 95	30,018 6	8,944 7		38 963 3
Sub-Total APPROP USAGE OF MEDICINES										30,018 6	29,156 1		59,174 7
3 STRENGTHENED MONITORING													
OPERATING EXPENSES	UNIT	1	1	1	1	1	1	6	1,621 14	36,022 4	10,733 6		
Sub-Total STRENGTHENED MONITORING										36,022			

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

POPULATION AND FAMILY PLANNING

I. GENERAL

1. There are two major sources of information on population and family planning in Mali. One is the "Enquête démographique et de santé au Mali" (EDS), prepared in 1987 by the Centre d'études et de recherches sur la Population pour le Développement" (CERPOD) of the Sahel Institute, with US funding and technical assistance. The other is IDA's Population Sector Memorandum, which was discussed with the Government in 1988. Additionally, the results of the 1987 Census are still being analyzed.

2. EDS was the first major attempt to analyze the levels and determinants of fertility in Mali, actual family planning (FP) knowledge and practices, and mother/child health indicators. The findings are detailed in Table 1. The key points are that fertility is high and stable in Mali, due to a combination of early age of marriage, pro-natalist tradition, persistent high infant mortality rate, lack of information about modern contraceptive methods, conservative attitudes of men, and the taboo nature of FP among spouses. Table 2, excerpted from IDA's Population Sector Memorandum, illustrates the impact of various fertility assumptions on population and on key socioeconomic indicators. At present fertility rates, Mali's population will double in 25-30 years, making its development challenges even more formidable.

3. The Malian case is somewhat paradoxical. On the one hand, the Government has been reluctant to recognize that population growth is a serious problem and to tackle the issue aggressively, for fear it might be socially unacceptable; on the other hand, it has encouraged a public debate on the issue, has made genuine efforts to integrate demographic variables into the planning process, and has supported the integration of FP into MCH as a means to protect the health of mothers and children through wider birth spacing. As a result of the groundwork done in recent years with the assistance of a number of donors, especially UNFPA/ILO and USAID, a draft population policy is now available and basic data and tools for designing, implementing and monitoring FP services have been put in place.

II. POPULATION

4. Draft population policy. Based on the principle that "Mali's prime resource is its people," the Government has traditionally followed a "laissez-faire" population policy. For the past seven years an inter-ministerial "Groupe d'études et de coordination des activités en matière de population" (GECAPOP), assisted by a Secretariat (the Population Unit of the Planning Directorate in the Ministry of Plan) has studied, as part of an UNFPA/ILO project, the interaction between demographic variables and various aspects of socioeconomic development. The resulting draft of the population policy (discussed at a national seminar in July 1990) sets as its objectives:

(a) accelerate the development process while adjusting fertility to the economy's capacity to sustain said process; (b) increase food security; (c) reduce mortality and morbidity, especially among children; (d) promote integrated MCH/FP; (e) expand schooling and employment opportunities; (f) protect the environment; and (g) help women to become full partners in the development process (WID). Among the means envisaged to achieve these objectives, it is proposed to increase the contraceptive prevalence rate (CPR) from 5% (all methods) to 40% (in urban areas) and 10% (in rural areas) by 2000 and to 70% and 40% for those same areas by 2020.

5. The Government (a) has undertaken a broad consensus-building exercise prior to seeking Ministerial Council approval of the policy; and (b) to operationalize it, proposes to formulate and implement a population Action Plan consisting of programs in health; MCH/FP and IEC; rural development and protection of the environment; and human resource development, including employment, an internal/external migration strategy, and improvements in the status of women. An institutional framework to that end has been proposed (para 25).

6. The census. Preliminary results of the 1987 census show an intercensal population growth rate of 1.7% since the 1976 census. This is substantially lower than recent censuses in neighboring countries and could be explained by a very high out-migration rate (1.0% p.a.), which would put the growth rate at 2.7%, in line with the 1976 estimate. For the purposes of planning and policy formulation it is essential to obtain the best possible estimate of population growth and its constituent elements as soon as possible. This requires checking the data for internal inconsistencies and complementing the information available on out-migration. The census bureau has received financial assistance from UNFPA, UNICEF, UNDP and Canada to cover costs up to the data-entry phase; it now needs additional assistance for analysis and dissemination of the census results.

III. FAMILY PLANNING

7. Service delivery and access. As indicated in the staff appraisal report (para 2.10), FP services, started in 1972, are now available in the capital and in all the main towns down to the District level. They are also offered in the few sub-districts health centers that have trained obstetrical nurse on their staff. Below that level, the rural population simply does not have access to FP information or services.

8. Table 3 shows contraceptive use, broken down by method. Among the some 21,000 FP acceptors (1990), the predominant contraceptive method is the pill (80%), while at the other end of the spectrum demand for sterilization, and therefore for hospital-based services, is minimal. Over half of users are served at the AMPPF in Bamako, one fourth in government-run services and MCH centers also in the capital, and the remaining fourth in centers in the Regions. Users are generally young, educated, urban, and often reported as singles; however, given the unbalanced distribution of FP services, it is not clear whether this profile is supply driven or demand driven.

9. Until now, training in FP has been confined to physicians, midwives and obstetrical nurses (mostly males), i.e. the staff of District health centers. There are two important issues linked to expansion of service delivery beyond that level: first, the majority of chief nurses ("infirmier chef de poste") at the sub-district level are men and could have some difficulty examining women to screen them for contraceptive use; second, authorization to prescribe and distribute hormonal contraceptives has, until now, been restricted to physicians, midwives and registered nurses, thus disallowing assistant midwives "matrones" and nurse's aides ("infirmiers brevêtés") from delivering prescription methods. These two factors threaten to cut short at the sub-district level the desired expansion of services, especially in rural areas.

10. Recently, in the context of a USAID project, distribution of non-prescription methods by community health workers was authorized. While a positive development, especially in the effort to control AIDS, increased condom use cannot be expected to have a significant impact on birth spacing and planning objectives in peripheral areas, as they are not likely to be widely and regularly used by steady couples.

11. The logistics of contraceptive distribution. There are two parallel logistical systems for distributing contraceptives: one is run by MSPAS's DFH, the other by AMPPF. UNFPA only uses the former, IPPF,the latter, and USAID both. Both systems are inadequate and need to be expanded. In terms of storage, DFH has one warehouse in Bamako and one in each MSPAS Regional Directorate (total 7); AMPPF has one warehouse in Bamako and one in each of its five Regional antennae. There are no storage facilities at the District level and below. Only recently, an efficient computerized reporting mechanism was established to monitor the flow of goods; as a result, stock-outs, once a common occurrence, have become less frequent. In terms of transport, the demands of the system on DFH and AMPPF fleets are limited but will increase substantially with the proposed expansion of MCH/FP services. As FP services expand, it will also become more difficult and less cost-effective to maintain a separate delivery system for contraceptives. These should actually be included in the official list of essential drugs, and the current separate distribution system should, over time, although not in the lifetime of this project, be phased out as an effective ED distribution system is established.

12. Under a number of ongoing or new projects (Integrated Family Health Project, Enterprise Project, and Social Marketing Project), USAID already has experimented, or will, with a variety of contraceptive distribution channels: (a) the midwives in 15 MCH/FP centers, (b) the employer-based health unit of two major parastatals, COMATEX and SONATAM, (c) community-based distribution through men in 12 villages, and (d) a number of private and commercial retail outlets which offer a broad range of products and flexible hours. The question of appropriate level and method of pricing contraceptives needs to be analyzed thoroughly: on the one hand, affordability is essential to stimulate and maintain a high level of demand, especially if commercial channels are expected to contribute significantly to improving access to FP products; on the other hand, the level of subsidy should be such as to keep recurrent costs within sustainable limits and encourage rational use.

13. Information/education/communication. The fact that 32% of women would like to delay their next pregnancy and that 17% want no more children, as well as the growing although still modest number of illegal abortions suggest there may be a large potential demand for FP services. This demand could be drawn out through strong promotional and information efforts. The principal impediments to acceptance--belief that the Muslim religion forbids the use of contraceptives, fear that the effects of modern contraceptive methods may be irreversible or that contraceptive use would affect the sexual behavior of one's wife or daughter, or simple lack of information on the existence and availability of modern methods of contraception--could be overcome through well-designed and targeted information campaigns. These efforts are especially important in rural areas, where such beliefs are widespread.

14. In Mali as in other countries, FP IEC activities are (a) either integrated with clinic services, particularly those targeted to women coming to health centers for maternal and child care services; (b) or brought to the general public through various channels--public meetings, seminars, mass media, etc. Clinic-based IEC is done mostly by health personnel, though they may be assisted by other specially trained agents (e.g., social welfare personnel) and by AMPPF staff in conducting discussion sessions ("causeries") among women clients.

15. Non-clinic based IEC is organized mainly by AMPPF, often working with Social Affairs, UNFM, UNJM, the Ministry of Education or other relay agents ("agents relais"). AMPPF is working hard to maintain efforts to promote FP; however, its staff and resources are limited (49 staff in total consisting of a small core staff in Bamako plus antennae in five of the seven Regions, each with two agents). As a result, its efforts to organize a network of relay agents and to carry out IEC activities are often sporadic. The importance of these activities cannot be overstated, and AMPPF should be equipped with the technical, managerial and physical resources to fulfill its mandate, as part of an FP strategy fully integrated in the national population policy.

16. The fact that the Government has clearly identified the specific target groups for its IEC campaign (opinion leaders, women of reproductive age, men, and youths) and already tested a number of approaches and messages will prove helpful. Additionally, the design of this campaign should build on lessons learned from experience with FP IEC elsewhere, e.g., the need for prior research on the precise message to be delivered and most appropriate medium, the desirability of giving the message a human, personal and whenever possible, entertaining twist, the importance of using as many channels as possible (be they modern or traditional, community or individual, private or public) and of carefully monitoring and evaluating the impact of the effort.

17. The institutional setting. Since 1988 the distribution of roles has been clearly delineated between DHF and AMPPF. DFH is responsible for clinic-based services, including contraceptive distribution. AMPPF is responsible for IEC; it will continue to offer services at its Bamako clinic, but will channel its contraceptive supplies through DHF.

18. This arrangement raises four issues: first, the direct provision of FP services, in line with the general thrust of MSPAS, is no longer adapted to

the new environment, characterized by decentralization, the increasing importance of communities, NGOs, the private sector and external donors, and a shift in the Ministry's role towards its policy, managerial and support functions. Second, DFH is not equipped to properly fulfill all these functions (e.g., distribution). Third, to ensure that the IEC and service delivery aspects of the FP program move in the same direction and at the same pace, better coordination is needed between AMPPF and DFH especially in peripheral areas where demand generation activities (IEC) are crucial to the success of the program. Finally, steps should be taken to ensure consistency in the messages delivered by workers in health centers, by AMPPF and its field agents, or by any other partner, public, NGO or private, operating in this sensitive area. Good coordination and a full partnership are therefore essential.

19. National FP/IEC strategy. A FP/iec strategy has just been formally approved by MSPAS. It includes short, medium and long-term CPR targets. Its implementation should benefit from the testing of MCH/FP norms and procedures in Bamako's Commune II, from lessons learned from the various approaches tested with service delivery, and from the recent improvement of the database at DFH. The strategy defines quantified, monitorable objectives, to which the Government is openly committed, proposes a framework for coordinated and complementary interventions, specifies the means (policies, institution building, investment, efficiency norms and performance indicators) to achieve them, monitor and evaluate progress, and take corrective action as needed. This is all the more important as the proposed project, involving substantial resources and a number of donors, is being put in place.

20. External assistance. Table 4 summarizes donor interventions in the subsector. To maximize their cost-effectiveness, a clear definition of priorities, a system to monitor the flow and use of resources for MCH/FP activities (level of funding, nature of activities supported, geographic distribution, implementation performance, expected outputs, unit costs, etc.), and systematic coordination are needed.

IV. PROJECT STRATEGY

21. Objectives. Given the issues identified above, this project component will support implementation of the Government's population policy and MCH/FP strategy. Specifically, it proposes to:

(a) Provide institutional support to (i) help the Government finalize, disseminate and operationalize its population policy; (ii) finalize the census; and (iii) strengthen national capacities to plan, manage and evaluate national FP programs (including IEC); and

(b) (i) Stimulate, through IEC, the demand for FP where it is weak; (ii) increase the availability of FP services where there is unmet demand; and (iii) improve the quality of FP services.

22. Unlike the health component, which would be limited to four Regions and Bamako, this component would have nationwide coverage, although its impact is

expected to be more deeply felt in the more urbanized areas and in those covered by the health component. Its objectives are to increase the CPR from 1.2% to 10% in Bamako and the four regions of concentration and to about 8.5% nationwide by 1997; for IEC, the objective is to ensure that 75% of urban women and at least half of rural women know about contraception, its availability and benefits.

23. Tools. To achieve the above objectives, the project would use two tools: a core of fully appraised investments, and a fund for population activities (POPFUND), a mechanism designed to flexibly finance population-related activities which either are still at an experimental stage but likely to warrant expansion, or are of a very innovative nature, have only been identified in light of the recently issued draft population policy, or will emerge out of its early phases of implementation.

24. Philosophy. A few principles underlie the design of this component: (a) it is based on Government's policy of integrating FP into MCH whenever possible; (b) major emphasis is given up-front to institutional development, be it the creation of appropriate management mechanisms or the training of staff in their use; (c) it stresses the necessary partnership between public, private and NGO operators in MCH/FP, as well as the need for increased donor coordination; (d) because the few CPR and demographic targets set by the Government may be overly optimistic, given the sociological and logistical constraints, it aims only to create an initial momentum, and in case of faster than expected progress, could easily be complemented by a Project Preparation Facility (leading to a full-fledged population project financed by an IDA credit) or by additional contributions from other donors.

25. Legal context. To enhance the impact of the activities to be financed under the project, existing legal barriers or practices restricting access to FP have been lifted. Operational guidelines have been circulated, authorizing all trained health personnel down to the ComHcs to prescribe and distribute contraceptives (including hormonal products), while community agents will be allowed to re-supply women previously screened by trained health personnel. Complementary operational guidelines have been circulated to all health personnel and communicated to AMPPF, specifying that there is no legal basis for denying access to FP services to unmarried women or to married women without marital consent. These messages will be reinforced through training and the media.

V. INSTITUTIONAL SUPPORT

26. Finalizing, disseminating and operationalizing the population policy. Responsibility for this sub-component will lie with the Planning Directorate in the Ministry of Plan. Three steps are involved. With respect to finalization of the policy, the ILO-executed UNFPA project has done a good job in helping with the preparation phase, and the Planning Directorate, which comprises the Population Unit, wishes this assistance to continue until an Action Plan is ready for submission to a Donors' Round Table (end-1991). Therefore, project support will be limited to six months of short term sectoral specialist services to complement the UNFPA project if need be. For dissemination of the policy (1990-92), the Population Unit will repeat its July 1990 performance through project-financed seminars targeted at

political, administrative and religious opinion leaders. The seminars will be given in each of the country's seven Regions, beginning with the more urbanized areas. Operationalization of the policy requires a new institutional framework (a national, seven Regional and 46 District level population coordination bureaus, cf organigram in the project file); the project will provide O&M assistance (six months of short-term consultancies) and equipment for the central level of the coordinating framework (Bureau National de Coordination des Activites de Population, BUNACOP) or any entity serving as Technical Secretariat to the national commission for population activities, with broad public/private/NGO representation. This process will begin early in PY1 as soon as the policy has been formally adopted in a Presidential statement. Additionally, experimentation of the action programs proposed under the Action Plan could be financed under the POPFUND (para 45).

27. Regarding the Census, the project will provide to the Planning Bureau (Ministry of Planning) through CERPOD (a Sahel-wide Center for population and development Research based in Bamako and backed up by the Population Council) punctual technical assistance as described in para 6 (six months).

28. Strengthening national FP management capacities. Responsibility for this component will lie with DNPFSS (recently merged into DAF), which is in charge of planning training activities in MSPAS. The Government's policy of integrating FP into MCH services countrywide and the Population policy option of mobilizing all potential partners to increase the CPR will generate a strong need to train middle level managers of public, private and NGO-run FP programs. To meet that objective with the required flexibility, this sub-component will be contracted to a specialized institution under an umbrella-contract providing for two-tier in-country training, short-term specialist services, and a study tour. Over the six years of project implementation, some 250 middle-level FP project managers (roughly one third each from the public, private and NGO sectors) will receive five weeks of training (three in project management properly speaking and two in monitoring and evaluation a year later).

29. The training will be provided by an institution, preferably with Malian experience. During PY1 the existing needs assessment and curriculum elements will be refined and training facilitators will be trained in Bamako (principles of adult learning, delivery and feedback, etc.), with a view to becoming trainers themselves by the end of the project. The areas to be covered by the training have been identified, ranging from organizational assessment to the development of work plans, including communication, systems management, quality of care in FP, etc., for the first round of seminars, and stressing the development and use of monitoring tools for the second rounds. The training will take place in rented facilities in Bamako. Selection of trainees will be made by DNFSS on the basis of qualification and eligibility of the concerned FP program, and assurances from the employer that the same person will remain in charge of the program for at least five years. The approach will be highly participatory, and follow-up will be provided in the form of specialized assistance to interested FP programs. Short term specialists in FP planning, management and evaluation will help, for instance, to reinforce DFH's Evaluation Unit and to create in UNFM a project management capability, as well as solve additional, unexpected problems.

Finally, a total of 25 higher-level FP managers will go a tour abroad (Tunisia) to gain exposure to and exchange views on successful FP programs in other francophone countries.

30. To complement this training, DFH, DNAS, DNAFLA (WID Division) and AMPPF will receive a joint total of one year of O&M short-term assistance and office equipment and supplies. The precise distribution of the services and nature of the equipment will be determined following a detailed diagnosis of their individual and collective functional problems and a complete inventory of the resources available to them from a variety of sources (PY1). Coordination, information, M&E management tools will be reinforced as a top priority (the distribution of responsibilities is in Table 6).

VI. INFORMATION/EDUCATION/COMMUNICATION (IEC)

31. Stimulating demand for FP through IEC. Within the broader framework of the population policy, the FP/IEC strategy submitted to IDA specifies (a) the target groups: opinion leaders, women of reproductive age (15-49) especially young mothers, women who tend to be more conservative, young people, and Mali's development partners (the latter group hardly needs to be convinced of the benefits of FP); (b) the channels to be used: participatory structures, the media, political organizations, opinion leaders, artists, and formal education system and the informal functional literacy network; (c) the intermediaries ("relais"): rural "animateurs," community development agents, functional literacy agents, cooperative staff; (d) the pedagogical supports: video, audio, cinema and photo materials, plays, role games, etc.; and (e) the formats: discussion panels, workshops, puppet or theater shows, mobile audio libraries.

32. In line with this approach, this sub-component will (a) refine the IEC/FP message, bearing in mind the Government's policy of integrating FP into MCH and of stressing child spacing for health reasons; and (b) following the development and focused testing of improved messages and materials adapted to the various target groups, support their dissemination through using both the core investment program for the most urgent activities (reinforcement of AMPPF and of DNAFLA, media campaign, and strengthening of family health education in the formal education system) and the POPFUND for others (para 47).

33. The IEC/FP message. During the January-June 1991 period, sub-groups from the task force that prepared the MCH/IEC/FP strategy will continue to work on detailed implementation plans and will initiate start-up activities. In this IEC design sub-group, the key actors will be DNAS, as the Government entity responsible for IEC strategy, and AMPPF as the lead agency for IEC delivery (and therefore the one with the most practical experience). The sub-group will be assisted by an IEC specialist for an initial period of six months, followed by short-term visits (additional six months over the project life). First, the sub-group will conduct an evaluation of the impact of the many IEC/FP experiments already ongoing--through female UNFM rural agents, the DNAFLA literacy centers network, men and midwives, artists and media-stars, 15 Government clinics experimenting with integrated MCH/FP, and the health agents of large industrial firms. This evaluation will be complemented by a

beneficiary assessment of individual knowledge, perceptions and behaviors related to fertility matters. The beneficiary assessment, a technique already used to design and monitor FP programs in other countries, will cover a spectrum of socioeconomic groups and regions. It will be conducted by a Malian team from MSPAS, assisted by an independent consultant, possibly from the "Institut malien de recherche appliquée sur le développement" (IMRAD) who successfully assisted in a similar exercise in the education sector.

34. Using the combined results of the evaluation and the beneficiary assessment, the sub-group will sharpen the message and adapt it for each target group. PY2 will be devoted to focused tests of the revised message run with UNFM and the medical and midwife professions to reach women, UNTM for men at their workplace, UNJM for young people, private pharmacies, AMPPF's mobile units, extension workers for farmers, etc. Once satisfactorily tested, these approaches could be expanded under POPFUND financing. The geographic coverage, however, will be carefully phased with the development of health services, i.e., Kayes, Mopti, Bamako (and Sikasso outside the project) beginning in PY2, Segou and Koulikoro in PY3. Within each Region, the effort will start in the urban areas (the capital, then District and finally sub-district level) because of the resulting multiplier effect. However, flexibility will be essential. Once a year during the life of the project, the sub-group will organize, each time in a different Regional capital, a national one-week seminar for all the operators involved in IEC/FP. The purpose of the seminar will be to share experiences and learn from them, and use the feedback to correct the program as needed.

35. The refined message will be translated by DNAFLA into the six languages of Mali (Bambara, Songhoi, Tamashec, Fulfulbe, Dogon and Soninke). About 2,000 posters, 2,000 brochures, 14 audio films, and audio cassettes (the latter two will be the same as under the media campaign) will be produced, some internationally, some locally. DNAFLA's Materials Production Unit will be reequipped and receive three months of technical assistance to that end.

36. The media campaign. Responsibility for this sub-component will lie with the Division for Health Education. Once the core IEC message has been formulated (PY1), the above sub-group will, with assistance from local media consultants (one from the radio, one from the television, and one from the press, three months each over the total project period) will develop a media campaign to familiarize the public with the health and economic benefits of family planning. While integration of FP into MCH and of MCH into primary health care will be constantly stressed, the focus of this campaign will clearly be FP and family health (at least 60%). Radio time is already available to DFH (one hour per week), the Ministry of Education (one hour per week), and for rural/agricultural messages (several hours per week). About 2 new radio programs per month will be issued as of PY2 (120 over a five year period); they will be adapted for different audiences. Taking into account the experience with the audio-visual programs developed under a Johns Hopkins assisted operation, six TV clips p.a. (30 over the life of the project) will be prepared. These will also be made available in video film format. Listener and viewer feedback will be used for evaluation and monitoring purposes. The level of press coverage will be determined by the working group.

37. Family health education. Responsibility for this sub-component will rest with the Division for Health Education and the Ministry of Education's National Pedagogical Institute (IPN). Given the high level of teen-age pregnancies, the existing family education program needs to be improved for clarity, practicality and simplicity. Using the basic IEC message, and with assistance from UNESCO (six months in total), the team will, in coordination with UNFPA, evaluate and revise the existing program, with different modules for Grades 5 and 6 (the final school years for many children, especially girls), for Cycle 2 of basic education (Grades 7-9) and for secondary education (Grades 10-12). The basic principles will be to integrate the training into the existing disciplines ("eveil", science, home economics and ethics) rather than add to the curriculum. The modules will be tested in about 10 classes each (in different Regions) during PY2 and refined. Once improved, in PY3 they will be distributed as a kit to all schools in the country (about 2000) and introduced in teacher training colleges (IPEGs, ENSECs, ENSUP). The project will finance five summer camps to train in family health IEC about 1000 teachers (600 primary teachers, 400 science teachers) sufficiently experienced to play a catalyst role among their colleagues. The program will be backed up by visits from the mobile units of AMPPF (para 36) and by educational radio (one program per month). Additional in-service training for the whole teacher corps could be financed out of the POPFUND.

38. AMPPF has traditionally been the lead agency for IEC delivery and training, and caters to over half of the demand for FP services in its Bamako reference center. To spearhead the IEC effort, AMPPF's five existing Regional antennae--Mopti and Kayes in PY2, Segou, Sikasso and Koulikoro in PY3--will be reinforced with contractual local staff (2 per center), equipment, materials and mobile video-units. To ensure countrywide IEC coverage, two new antennae will also be created in Gao and Tombouctou (PY3). If the quantified indicators to be developed for the District health system (Annex 3-4) showed signs that demand for FP services exceeded that which can be provided by Government-run clinics, these antennae could, under the POPFUND, be upgraded into reference centers patterned after the one in Bamako. This situation is not expected to arise in Gao and Tombouctou, however, where the new antennae might have to deal more with problems related to sterility than hyper-fertility.

39. All additional IEC activities, which are unlikely to start until PY2, will be financed under the POPFUND, provided they meet the eligibility criteria (Section VIII).

VII. EXPANSION OF FP SERVICES

40. The draft population policy sets ambitious CPR objectives (para 4). To initiate the required transition, the project's strategy stresses (a) IEC, as just seen, (b) integration of MCH/FP into the primary health care package to be offered in the ComHCs in the Regions of concentration of the health component, (c) introduction of FP into MCH countrywide, and (d) improvements in the quality of FP services. Pour memoire, under the health component, 66 "urban" ComHcs will be created (20 in Bamako, 21 in District capitals and 25 in sub-district centers) and 56 rural centers. All will offer a menu of short- and long-term FP options: condoms and spermicides, injectables and

pills (following screening at a first referral facility), will be available at the ComHcs; IUDs and (eventually) voluntary sterilization in the District health centers. The 240 technical staff of the ComHCs will be trained in integrated health care by their District health teams, themselves trained by the Regional teams, initially assisted by expatriates.

41. Additionally, under this sub-component and under the responsibility of DFH, the project will, in all Regions of Mali bring FP services down from the District level (46 health centers) at present to the sub-district level (264 centers). To that effect, about 400 technical staff (assistant nurses and midwifes) will be trained in integrated MCH/FP techniques. This will be carefully coordinated with an ongoing UNFPA-supported operation expected to cover about 10 Districts by end-1993. Training modules have been successfully developed and tested with USAID support, and some 15 trainers (from DFH, DNPFSS, the midwifery school, the medical and pharmacy school, and the Regional health directorates) have been trained. The training will combine one residential and one on-site training sessions. The former (about 12 days, to be held in the Regional Health Directorates) on management techniques, and the latter (12 days) on integrated care (immunizations, nutrition, FP, diarrheic diseases, pre- and neo-natal surveillance, child delivery, growth monitoring, well children, etc.,). The FP part of the training covers IEC, identification of specific fertility-related problems, including sterility, prescription of contraceptives, insertion of IUDs, monitoring of the side effects of different types of contraceptives, and management of a regular supply of contraceptive products. It is reinforced by the distribution of a booklet on MCH/FP norms and procedures (for staff), another on family health (for patients), and a standardization of equipment. The training will be offered to some 400 midwives and nurses countrywide, allowing them to prescribe hormonal contraceptives and insert IUDs. The concomitant provision of equipment will be funded under the POPFUND.

42. Further expansion of FP services will also be financed under the POPFUND. It will rely largely on the private sector (associations of physicians or midwifes) and NGOs to meet existing unmet demand in urban areas and on CBD and various informal channels to satisfy the newly generated demand in rural areas.

43. Contraceptive provision. This sub-component will ensure the timely provision of quality, affordable contraceptive products needed to attain the project's CPR targets, in line with the development of services. Historically, most of the contraceptive products consumed in Mali have been provided on a grant basis by UNFPA and USAID (Table 6). Given the time lag required for the proposed IEC campaign to begin to bear fruit and for the quality of services to be sufficiently strengthened to ensure that new acceptors become regular users, project allocations have been based on a realistic scenario (CPR of about 8.5% by 1996) entailing yearly allocations of US$ 2.1 by 1996. This scenario assumes qualitative improvement in Government-run services and a sharply increased role for the private sector.

44. Contraceptive product needs have been projected using the Bongart's TARGET model. This model, frequently used in preparing Bank population projects, generates as outputs the number of new acceptors and continuing

users required, by method, source and delivery system, to reach the target CPR rate. Inputs used were derived from the DHS for Mali, Bank population projections, and the Government's draft policy. Tables 7 and 8 show the projected number of users by method, and the estimated expenditures respectively under the base scenario and the lower case (project) scenario. The country's total contraceptive needs have been quantified at about US$ 7.6 million for the life of the project. Of this total, about US$ 5.0 million will be financed under the project by EEC, the Republic of Germany and USAID as grant and by the IDA credit. The remaining contraceptives will be provided by UNFPA and WHO outside the project, following a yearly coordination exercise led by DFH and AMPPF, in which a special effort will be made to focus purchases on a limited number of the most popular brands. USAID will finance oral pills, IUDs, condoms, spermicides and vaginal foaming tablets. The other donors will finance these and other products as well (including injectables such as DEPROVERA, and NORPLANT). WHO will provide condoms only, as part of its AIDS program. In case of an unexpectedly rapid and sustained increase in contraceptive product consumption beyond the levels projected here, the POPFUND could provide emergency funding and a PPF, leading to a free-standing population project could be put in place.

45. Logistics. Under this component (a) the existing Central and Regional warehouses of both networks will be upgraded; (b) the new AMPPF, Gao and Tombouctou antennae will be equipped with a small storage capacity and these will be core activities; and (c) a capacity will be created gradually at the District and sub-district levels countrywide, along the same geographic sequencing as for the health component; this will be funded under the health component where applicable and under the POPFUND for the rest of the country. To facilitate transport planning, both networks will rely on contracts with local trucking companies. Additionally, a study for further improving the existing planning and monitoring system as consumption increases will be conducted prior to the beginning of the project, for implementation during PY1. Table 9 shows the proposed distribution mechanism.

VIII. POPFUND

46. Rationale. The purpose of the donors' fund for population activities (POPFUND) is to assist the people of Mali to find truly Malian solutions for implementing their national population policy countrywide. It was designed as a response to the specific Malian situation, which has three characteristics: (a) the newness of the policy and its still evolving nature; (b) the basic tenet that the magnitude of the tasks at hand require a major, well-coordinated effort from public and parapublic, NGO and private operators at the national and local levels; and (c) the need for prompt action, given the sociological obstacles to be overcome and the normal time lag in population programs. Thus, the POPFUND will be a flexible mechanism providing eligible implementing agents with grant financing for priority, well-prepared population-related sub-projects. Table 10 shows the breakdown between core and POPFUND investments.

47. Description. The POPFUND will be an autonomous body, funded by donors and managed by an independent Malian team, assisted by a Steering Committee comprising public, private, NGO and donor representatives. Its Statutes and

by-Laws, to be approved as a condition of disbursement for this component, will specify its operating rules:

(a) types of sub-projects to be financed; the POPFUND will support population-related activities which are either of an experimental or innovative nature, or build on successful experimentation. Based on an analysis of ongoing or required activities, the eligible sub-projects will fall into five categories:

(i) Experimentation with, or detailed preparation of, population activities such as defining a migration policy or a land-planning policy (up to 10% of the Fund);

(ii) IEC activities using formal channels (UNFM,UNJM, UNTM, the school system, community development, functional literacy, health agents, extension services, the media, etc.) as well as informal or innovative ones (women's groups, cooperatives, employer-provided health services, puppet shows, plays, etc.) (up to 25% of the Fund);

(iii) Expansion of FP services to strengthen and complement the existing (mostly public and AMPPF) network, in line with Government's MCH/FP policy (up to 30% of the Fund);

(iv) Activities aimed at improving the socioeconomic status of women through the promotion of income-generating activities and the provision of time-saving devices (up to 25% of the Fund);

(v) Studies, survey and operational research, e.g., to gain insights into the socio-cultural, economic and other determinants of fertility, to study specific sterility problems, and to experiment with the medical and social acceptability of new FP methods such as NORPLANT (up to 10% of the Fund).

At least one sub-project in each category is expected to be fully prepared and appraised prior to initial POPFUND disbursements. An indicative list of about 20 already identified sub-projects is in Table 11. The portfolio will not necessarily be limited to this list; conversely, the proposals mentioned there may be eventually rejected by the POPFUND. The projects will typically be in a range of US$50,000-500,000 to avoid unmanageable dispersion.

(b) Eligible implementing agencies will include:

(i) Central and local government and parapublic agencies (Ministries of Health and of Education, parastatals, Regional development organizations, etc.) up to one third of the Fund's resources on a full grant basis; and

(ii) NGOs, private practitioners or professional associations, physicians, pharmacists and midwives, private firms and

educational institutions, and legally constituted organizations (such as "Centre DJoliba") meeting the criteria defined here, up to two thirds of the Fund's resources; these implementing agencies will receive matching grants amounting to 75% of the estimated cost of their sub-project;

(c) Operational guidelines. The legal framework (Statutes, by-Laws) for the POPFUND will specify, inter alia, the following basic principles:

(i) All sub-projects to be submitted for POPFUND financing will be in line with the Government's Population Policy and its FP/MCH strategy;

(ii) Indicative ceilings reflecting the geographic phasing of IEC and FP services expansion will be set;

(iii) All IEC/FP/WID and study/operational research sub-projects will have a clear focus on MCH/FP; sub-projects in all categories will be for a period not exceeding three years; funding renewal will be based on performance;

(iv) Each sub-project proposal will initially be screened by the POPFUND's Technical Secretariat on the basis of a standardized project brief, and approved by its Steering Committee on the basis of an appraisal report following an agreed format; the appraisal report will include, in particular, a detailed analysis of recurrent costs and quantified, monitorable objectives against which performance can be measured;

(v) A number of items forming a negative list will not be eligible for funding; they will include civil servant salaries or premia, new construction, and a 10%-of-cost ceiling for vehicles and travel;

(vi) Competition based on cost-effectiveness will be encouraged for similar proposals.

(d) Expenditure categories:

(i) Local (INRSP, IMRAD, etc.) and international consultants (UNICEF, IPPF, World Vision, Save the Children, Christian Children Fund, etc.) and twinning arrangements between local and international NGOs, based on a roster to be prepared by the Technical Secretariat;

(ii) Equipment, vehicles and supplies, including contraceptives and IEC materials;

(iii) Rehabilitation and upgrading civil works (no new construction);

(iv) Media time and space;

(vi) Training; and

(v) Critical operating costs;

Exceptions to these rules could be made to accommodate specific cases (e.g., face-to-face IEC), as long as these exceptions are provided for and fully justified.

48. Management arrangements. The POPFUND will have a Malian director (a manager with a proven record), assisted by a Technical Secretariat consisting of: an internationally recruited financial manager/administrator; one physician with a strong FP background, one IEC and one WID specialist to screen and appraise sub-projects, and one accountant--all Malians with qualifications and experience satisfactory to IDA. As needed, they will be assisted by Malian or international short-term specialists (e.g., to help finalize preparation of sub-projects). Sub-projects will be approved by a Steering Committee consisting of representatives selected from the public sector (MSPAS, UNFM, UNJM); and the NGO/private sector (AMPPF, NGO coordinating committee, medical association, midwives association, pharmacists association). The Steering Committee will meet on a quarterly basis to approve pre-screened sub-projects.

49. Controls. Sub-projects for which sub-loans in excess of US$100,000 are sought will be subject to a priori review by IDA; others will be subject to a posteriori control. POPFUND accounts will be audited twice a year by a firm acceptable by IDA. Physical supervision of the sub-projects, which are expected to be scattered all over the country, will be conducted by UNICEF semiannually. Additionally, IDA missions will conduct random inspections. Each year, as part of the Annual Joint review, Government, the donors and the implementing agencies will review experience with POPFUND operations and agree on improvements as needed.

50. Contractual arrangements. For each sub-project selected, a contract specifying the obligations of the POPFUND and the implementing agency will be signed by their respective representatives. A standard contract for each type of sub-project will be prepared prior to initial disbursements of the POPFUND. Funds will be released in tranches based on pre-agreed monitorable achievements. Accounting and procurement procedures will be acceptable to IDA. The POPFUND Director will submit a semi-annual report to the donors through the Project Director.

51. Operation. Disbursements under the POPFUND will be conditional upon the creation of the BUNACOP (or any agency fulfilling this population coordination function and featuring broad membership) and upon implementation, by the Government of management arrangements, including recruitment of staff with qualifications and experience fully satisfactory to IDA (and the other concerned donors). The POPFUND'S objectives and operating principles will be broadly advertised through seminars and a booklet. It will receive special attention at the time of the project launch seminar.

52. Table 12 summarizes the sharing of responsibilities for implementing this sub-component. Table 13 provides the implementation plan for the whole

population component, and Table 14 indicates its detailed cost. Note: Tables 4 (Donors support), 5 (BUNACOP organigram), 6 (tentative distribution of responsibilities for FP), 7 (Base case projection), and 10 (Distribution between the core program and the POPFUND) are available in the project file.

POPULATION AND FAMILY PLANNING

TABLE 1 Main Findings of the Demographic and Health Survey, 1987

SIZE OF THE SAMPLE	
- 15-49 YEAR OLD WOMEN	3,200
- 20-55 YEAR OLD WOMEN	970
- 3-36 MONTH OLD CHILDREN	1,538
CHARACTERISTICS	
- % OF WOMEN:	
- IN URBAN AREAS	26.2
WITH MORE THAN PRIMARY EDUCATION a\	1.1
- LITERATE	13.5
FERTILITY DETERMINANTS	
- % OF WOMEN IN UNION	92.1
- % OF WOMEN EVER MARRIED	95.5
- MEDIAN AGE AT 1ST MARRIAGE OF 20-49 YEAR OLD WOMEN	15.7
- MEDIAN DURATION OF BREAST FEEDING (MONTHS) b\	18.1
- MEDIAN DURATION OF POSTPARTUM ABSTINENCE (MONTHS)	2.4
- MEDIAN DURATION OF POSTPARTUM AMENORRHEA (MONTHS) b\	13.0
- % OF MEN IN UNION	78.8
- % OF MEN EVER MARRIED	79.9
FERTILITY	
- TOTAL FERTILITY RATE c\	6.7
- AVERAGE NUMBER OF CHILDREN ALREADY BORN TO 40-49 YEARS OLD WOMEN	7.1
- % OF WOMEN IN UNION AND PREGNANT	13.0
DESIRED CHILDREN	
- % OF WOMEN PRESENTLY IN UNION	
WHO DO NOT WANT ANY MORE CHILDREN	16.5
WHO WISH TO DELAY THEIR NEXT PREGNANCY BY AT LEAST 2 YEARS	32.4
- IDEAL AVERAGE NUMBER OF CHILDREN DESIRED BY 15-49 YEAR OLD WOMEN	6.9
- % OF UNWANTED PREGNANCIES d\	3.5
- % OF UNTIMELY PREGNANCIES e\	10.7
KNOWLEDGE AND USE OF FAMILY PLANNING	
- % OF WOMEN PRESENTLY IN UNION	
WHO KNOW OF AT LEAST ONE FP METHOD	43.2
- AMONG THESE, % WHO APPROVE OF FP	70.7
WHO HAVE ALREADY USED A FP METHOD	19.0
WHO PRESENTLY USE A FP METHOD	4.7
* PILL	0.9
* IUD	0.1
* INJECTION	0.1
* CONDOM	0.0
* VAGINAL METHOD	0.1
* FEMALE STERILIZATION	0.1
* PROLONGED FEMALE SEXUAL ABSTINENCE	1.5
* PERIODIC ABSTINENCE	1.3
* COITUS INTERRUPTUS	0.1
- % OF MEN IN UNION:	
WHO ALREADY KNOW AT LEAST ONE FP METHOD	65.4
WHO HAVE ALREADY USED A FP METHOD	15.9
WHO PRESENTLY USE A FP METHOD	3.7

CONT'D Main Findings of the Demographic and Health Survey, 1987

MORTALITY AND HEALTH	
INFANT MORTALITY RATE f\	108
INFANT/CHILD (BELOW 5 YEAR OLD) MORTALITY RATE f\	249
% OF RECENT MOTHERS: g\	
- HAVING RECEIVED MEDICAL ATTENTION DURING THEIR PREGNANCY	31.4
- IMMUNIZED AT LEAST ONCE AGAINST TETANUS DURING THEIR PREGNANCY	18.2
- HAVING RECEIVED ASSISTANCE FROM A PHYSICIAN, A MIDWIFE OR A NURSE FOR THEIR DELIVERY	31.9
% OF CHILDREN 0-2 MONTH OLD UNDER BREAST FEEDING AT THE TIME OF THE SURVEY	98.4
% OF CHILDREN 4-5 MONTH OLD UNDER BREAST FEEDING AT THE TIME OF THE SURVEY	92.7
% OF CHILDREN 10-11 MONTH OLD UNDER BREAST FEEDING AT THE TIME OF THE SURVEY	80.4
% OF CHILDREN UNDER FIVE YEAR OLD WITH A HEALTH BOOK	11.6
% OF CHILDREN 12-23 MONTH OLD:	
- WITH A HEALTH BOOK	12.0
- IMMUNIZED AT LEAST ONCE	39.2
- IMMUNIZED AGAINST:	
* BCG	11.4
* DTCOQ	3.4
* POLIO	2.7
* MEASLES	8.8
* ALL SIX MAJOR INFANT DISEASES	1.8
% OF CHILDREN UNDER 5 YEAR OLD HAVING HAD DIARRHEA EPISODES h\	34.4
% OF CHILDREN UNDER 5 YEAR OLD HAVING RECEIVED TREATMENT INCLUDING ORAL REHYDRATION	68.4 2.2
% OF CHILDREN UNDER 5 HAVING HAD FEVER i\	33.1
% OF CHILDREN UNDER 5 YEAR OLD HAVING RECEIVED TREATMENT WHILE HAVING FEVER	75.5
% OF 3-36 MONTH OLD CHILDREN SUFFERING FROM ACUTE, MODERATE OR SEVERE MALNUTRITION, BASED ON SIZE FOR AGE	24.4
% OF 3-36 MONTH OLD CHILDREN SUFFERING FROM ACUTE, MODERATE OR SEVERE MALNUTRITION, BASED ON WEIGHT FOR AGE	11.0

a\ Six years of schooling or more.

b\ Median length, based on the number of births during the 36 months period prior to the survey.

c\ Based on the number of births among 15-44 year old women during the four year period prior to the survey.

d\ Percentage of unwanted births during the 12 months period prior to the survey.

e\ Percentage of births occurred during the 12 months period prior to the survey, which mothers would have preferred to delay.

f\ During the 5 years period preceding the survey (1982-86).

g\ Based on the number of births during the five year period preceding the survey.

h\ Based on the number of children below five years of age reported by their mothers as having had diarrhea during the two weeks prior to the survey.

i\ Based on the number of children below five years of age reported by their mothers as having had fever during the four-week period preceding the survey.

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

DEMOGRAPHIC PROJECTIONS

TABLE 2

FERTILITY ASSUMPTIONS	1985	2000 (MILLION)	2015	PROJECTED NUMBERS RELATIVE TO 1985 NUMBERS = 100	
1. PROJECTED POPULATION				2000	2015
CONSTANT FERTILITY	7.5	11.4	19.1	152.0	254.0
GRADUAL FERTILITY DECLINE AFTER 1995	7.5	11.2	16.4	150.0	218.0
RAPID DECLINE AFTER 1995	7.5	10.8	13.3	144.0	178.0
	PERCENT 1980-85	1995-2000	2010-15	DOUBLING TIME AT 2010-15 GROWTH RATE	
2. PROJECT GROWTH RATES					
CONSTANT FERTILITY	2.3	3.0	3.6	19 YEARS	
GRADUAL FERTILITY DECLINE AFTER 1995	2.3	2.8	2.3	30 YEARS	
RAPID DECLINE AFTER 1995	2.3	2.0	2.3	52 YEARS	
	% OF CHILDREN UNDER FIVE				
3. PROJECTED AGE STRUCTURE	1985	2000	2015		
CONSTANT FERTILITY	46.0	47.0	48.0		
GRADUAL FERTILITY DECLINE AFTER 1995	46.0	46.0	41.0		
RAPID DECLINE AFTER 1995	46.0	44.0	30.0		
	DEPENDENCY RATIO *			* (NUMBER OF CHILDREN UNDER 15 AND ELDERLY AGED 65 AND OVER PER 100 WORKING AGE POPULATION AGED 15-64 YEARS)	
	98.0	101.0	105.0		
	98.0	98.0	78.0		
	98.0	91.0	52.0		
4. PROJECTED POPULATION OF WORKING AGE (15-64 YEARS)	1985	2000 (MILLION)	2015	RATIO OF PROJECTED NUMBERS RELATIVE TO 1985 NUMBERS = 100	
				2000	2015
CONSTANT FERTILITY	3.8	5.7	9.3	150.0	245.0
GRADUAL FERTILITY DECLINE AFTER 1995	3.8	5.7	9.2	150.0	242.0
RAPID DECLINE AFTER 1995	3.8	5.7	8.8	150.0	232.0
				RATIO OF PROJECT NUMBER RELATIVE TO 1985 NUMBER = 100	
5. PROJECT NUMBER OF PRIMARY SCHOOL AGE CHILDREN (6-11 YEARS)	1985	2000 (MILLION)	2015	2000	2015
CONSTANT FERTILITY	1.3	1.9	3.4	153.0	266.0
GRADUAL FERTILITY DECLINE AFTER 1995	1.3	1.9	2.6	153.0	205.0
RAPID DECLINE AFTER 1995	1.3	1.9	1.5	153.0	122.0
6. PROJECTED NUMBER OF MCH CLIENTS	1985	2000	2015	AVERAGE ANNUAL PROJECTED GROWTH RATE (PERCENT)	
	CHILDREN UNDER 5 (MILLION)			1985-2000	2000-2015
CONSTANT FERTILITY	1.4	2.2	3.7	3.0	3.6
GRADUAL FERTILITY DECLINE AFTER 1995	1.4	2.0	2.3	2.5	0.9
RAPID DECLINE AFTER 1995	1.4	1.6	1.4	1.0	-1.2
	ANNUAL DELIVERIES (THOUSAND)				
CONSTANT FERTILITY	359.0	544.0	898.0	2.8	3.3
GRADUAL FERTILITY DECLINE AFTER 1995	359.0	485.0	514.0	2.0	0.4
RAPID DECLINE AFTER 1995	359.0	359.0	312.0	0.0	-0.9
	TOTAL MCH CLIENTS (MILLION)				
CONSTANT FERTILITY	1.8	2.7	4.6	2.9	3.5
GRADUAL FERTILITY DECLINE AFTER 1995	1.8	2.5	2.9	2.4	0.8
RAPID DECLINE AFTER 1995	1.8	2.0	1.7	0.8	-1.2

SOURCE: WORLD BANK'S POPULATION SECTOR MEMORANDUM, 1986.

TABLE 3

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

MODERN CONTRACEPTIVE USE, BROKEN DOWN BY METHOD, ALL SOURCES

METHODS	1 9 8 7	
	USERS	UNITS
PILLS	12 000	202 000 (CYCLES)
IUD	1 400	1 000 (PROCEDURES)
FEMALE STERILIZATION	1 400	400 (PROCEDURES)
MALE STERILIZATION	0	0
INJECTABLES	1 400	6 700 (INJECTIONS)
CONDOMS	1 700	168 000 (UNITS)
FOAMING TABLETS	1 400	185 000 (UNITS)

SOURCE: USAID.
(COVERS USAID, UNFPA, IPPF AND WHO DELIVERIES)

DISTRIBUTION OF INSTITUTIONAL RESPONSIBILITIES

	MINPLAN	DFH	DNAS	AMPPF	ONG	PRIVATE SECTOR	UNFM	UNJM	UNTM	MEN (DNAFLA/IPN)	DIVISION HEALTH EDUCATION
STRATEGY DEFINITION	X	X	X								
IEC MESSAGE			X	X		X				X	X
IEC DELIVERY				X	X	X	X	X	X	X	X
FP SERVICE DELIVERY		X		X	X	X					
M & E	X	X								X	X
LOGISTICS		X		X		X					

SOURCE: MISSION

TABLES 4, 5 , 6, 7(A), 7(B) AND 10 ARE IN THE PROJECT FILE)

TABLE 8 (A)

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

PROJECTED NUMBER OF CONTRACEPTIVE USERS (MODERN METHODS, INCLUDING STERILIZATION)
1990-2000
LOWER CASE SCENARIO

PROJECTED NUMBER OF USERS BY METHOD (1000) a\

YEAR	PROJECTED PREVALENCE ALL METHODS (% OF MWRA)	FEMALE STERILIZI-ZATION	MALE STERILIZI-ZATION	IUD	INJECTA-BLES	PILL	CONDOM	SPERMICIDES	ALL METHODS
1990	1.20	0.20	0.00	1.30	4.50	14.50	0.40	0.60	21.50
1991	2.32	0.50	0.00	2.70	9.20	28.20	1.00	1.40	43.00
1992	3.48	0.90	0.00	4.30	14.40	42.30	1.70	2.20	65.80
1993	4.67	1.40	0.10	6.20	20.30	56.80	2.50	3.20	90.50
1994	5.90	1.90	0.20	8.40	26.70	71.80	3.60	4.30	116.90
1995	7.15	2.70	0.20	10.90	33.90	87.10	4.80	5.60	145.20
1996	8.44	3.50	0.40	13.70	41.90	103.10	6.30	7.00	175.90
1997	9.75	4.50	0.50	16.90	50.70	119.50	8.10	8.70	208.90
1998	11.08	5.70	0.70	20.50	60.40	136.20	10.10	10.60	244.20
1999	12.44	7.00	0.80	24.50	71.00	153.30	12.40	12.70	281.70
2000	13.83	8.60	1.10	29.00	82.60	170.50	15.00	15.00	321.80

a\ METHOD MIX DERIVED FROM DEMOGRAPHIC AND HEALTH SURVEY 1987. (INSTITUTE FOR RESOURCE DEVELOPMENT/WESTINGHOUSE). THE PROTECTION IS BASED ON WORLD BANK STANDARD FERTILITY DECLINE SCENARIO.

TABLE 8 (B)

ESTIMATING EXPECTED EXPENDITURES IN CONTRACEPTIVE SUPPLIES AND STERILIZATION REQUIRED TO ACHIEVE CPR OBJECTIVE UNDER THE LOWER CASE SCENARIO

COST PER COUPLE YEARS OF PROTECTION BY METHOD (US$1000) a\

YEAR	FEMALE STERILIZI-ZATION AT (US$80/CYP)	MALE STERILIZI-ZATION AT (US$80/CYP)	IUD AT US$8.4 PER CYP	INJECTA-BLES AT US$10 PER CYP	PILL AT US$10 PER CYP	SPERMICIDES AT US$15 PER CYP	CONDOM AT US$15 PER CYP	ALL MODERN METHODS	AVERAGE ANNUAL CO (5-YEAR AVERAGES
1990	16.00	0.00	10.92	45.00	145.00	9.00	6.00	231.92	761.77
1991	40.00	0.00	22.68	92.00	282.00	21.00	15.00	472.68	1053.30
1992	72.00	0.00	36.12	144.00	423.00	33.00	25.50	733.62	1391.68
1993	112.00	8.00	52.08	203.00	568.00	48.00	37.50	1028.58	1763.55
1994	152.00	16.00	70.56	267.00	718.00	64.50	54.00	1342.06	2171.17
1995	216.00	16.00	91.56	339.00	871.00	84.00	72.00	1689.56	2592.62
1996	280.00	32.00	115.08	507.00	1031.00	105.00	94.50	2164.58	3054.83
1997	360.00	40.00	141.96	604.00	1195.00	130.50	121.50	2592.96	3277.39
1998	456.00	56.00	172.20	710.00	1362.00	159.00	151.50	3006.70	3505.53
1999	560.00	64.00	205.80	710.00	1533.00	190.50	186.00	3449.30	3724.95
2000	688.00	88.00	243.60	826.00	1705.00	225.00	225.00	4000.60	4000.48

a\ COST FIGURES ARE DERIVED FROM THE AVERAGE OF A NUMBER OF AFRICAN COUNTRIES.

TABLE 9

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

PROPOSED CONTRACEPTIVE DISTRIBUTION SYSTEM

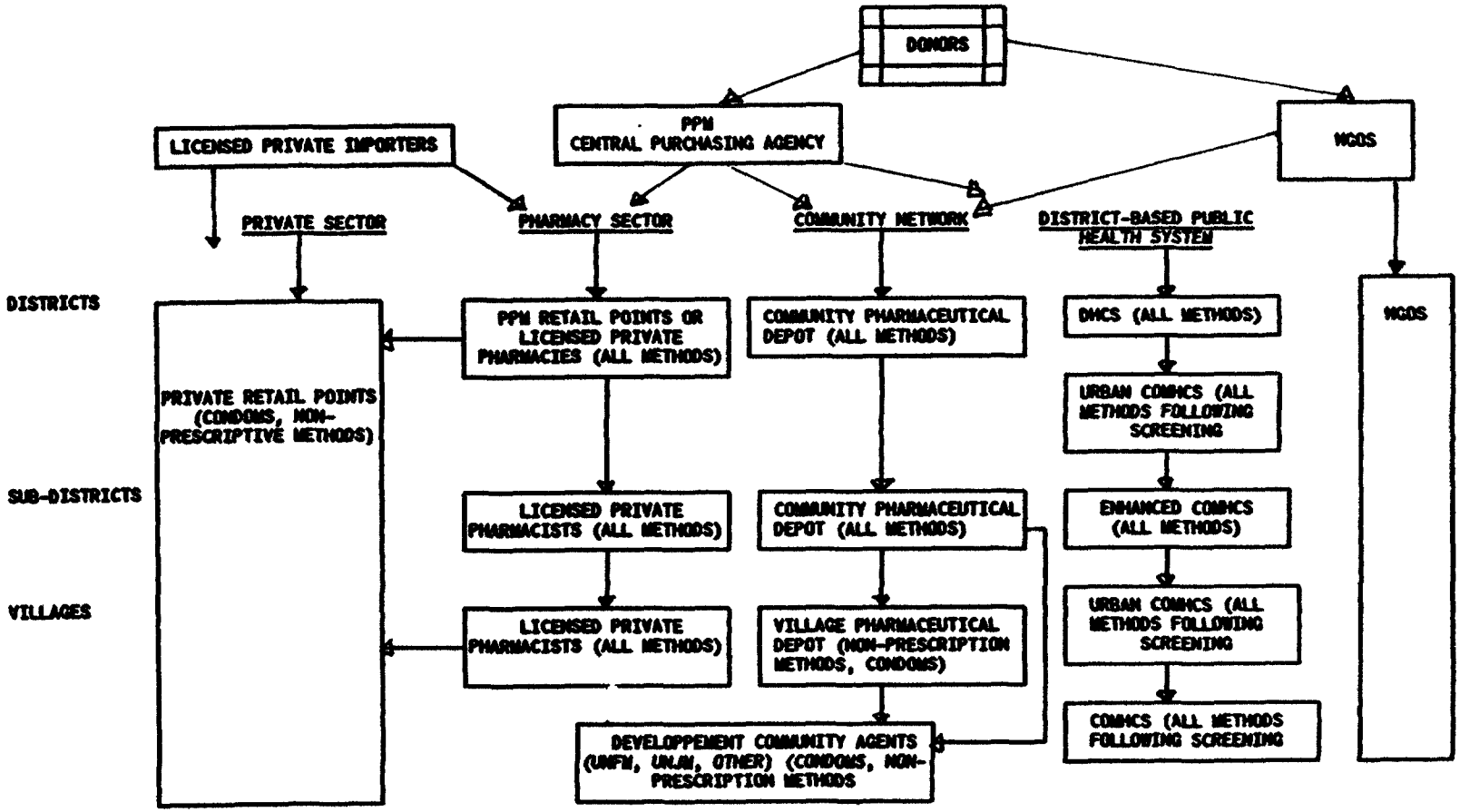

TABLE 11

REPUBLIC OF MALI
SECOND POPULATION, HEALTH AND RURAL WATER SUPPLY PROJECT

SUB-PROJECTS IDENTIFIED FOR FINANCING UNDER THE POPFUND

NAME OF SUB-PROJECT	IMPLEMENTING AGENCY	BASIC OBJECTIVES	GEOGRAPHIC PHASING	POPULATION REACHED	INSTITUTION BEING SUPPORTED	TENTATIVE ESTIMATED COST
I. POPULATION						
EXPERIMENTAL ACTION PROGRAMS IN HEALTH/MCH/FP/IEC,HRD, RURAL DEVELOPMENT AND THE ENVIRONMENT, EMPLOYMENT, MIGRATION AND WID	RELEVANT TECHNICAL MINISTRY OR AGENCY	TEST APPROACHES TO BE SUBSEQUENTLY SUBMITTED FOR EXPANSION AT 1991 POPULATION ROUND TABLE	TO BE DETERMINED PY1, PY2	POTENTIALLY NATIONWIDE	REGIONAL DIRECTORATES OF TECHNICAL MINISTRIES	UP TO US$0.5 MILLION IN TOTAL, NO MORE THAN $50,000 PER SUB-PROJECT
II. I.E.C						
1. SUPPORT TO FUNCTIONAL LITERACY FOR WOMEN	UNFM	IMPROVE STANDARDS OF LIVING AND PROVIDE MCH/FP/IEC	DISTRICTS AND SUB-DISTRICTS, ALONG PHASING OF HEALTH COMPONENT PY3-PY6	900 WOMEN (30X30 LITERACY CENTERS)	UNFM LITERACY CENTERS	UP TO $109,000
2. FAMILY EDUCATION FOR GIRLS	UNFM	REDUCE THE NUMBER OF SCHOOL DROP-OUTS AND PROMOTE FAMILY EDUCATION IN A VOCATIONAL TRAINING INSTITUTION	BAMAKO PY2-PY6	FEMALE DROP-OUTS (150)	BAMAKO TRAINING CENTER	UP TO $25,000
3. HEALTH/FP/IEC FOR YOUNG PEOPLE	UNJM	PROMOTE RESPONSIBLE PARENTHOOD, FIGHT ILLEGAL ABORTION, FAMILY LIFE EDUCATION, HEALTH INFORMATION	BAMAKO, REGIONAL CAPITALS PY2-PY6	ABOUT 10,000 YOUTHS	YOUTH CENTERS	UP TO $100,000
4. EMPLOYER-PROVIDED IEC FOR INDUSTRIAL WORKERS	AMPPF	EXPAND THE ENTERPRISE PROJECT, EXPLAIN THE BENEFITS OF FP TO STAFFERS	BAMAKO, REGIONAL CAPITALS, PY2-PY6	UP TO $50,000	HEALTH PROGRAM OF FIRMS	UP TO $0.5 MILLION
5. FARMERS	COMMUNITY DEVELOPMENT GROUPS	RURAL EXTENSION NETWORK (CMDT OFFICE DU NIGER) INCLUDE THE BENEFITS OF FP IN AGRICULTURAL EXTENSION MESSAGE	SIKASSO AND SEGOU REGIONS	UP TO	RELEVANT ODR	UP TO $250,000
6. SUPPORT DNAFLA LITERACY CENTERS NETWORK	DNAFLA	INFORM THE PUBLIC ABOUT FP	DNAFLA'S EXISTING 500 EXISTING CENTERS	UP TO 250,000	DNAFLA	UP TO US$0.5 MILLION

TABLE 11 CONT'D.

SUB-PROJECTS IDENTIFIED FOR FINANCING UNDER POPFUND

NAME OF SUB-PROJECT	IMPLEMENTING AGENCY	BASIC OBJECTIVES	GEOGRAPHIC PHASING	POPULATION REACHED	INSTITUTION BEING SUPPORTED	TENTATIVE ESTIMATED COST
7. GRIOTS, THEATER PLAYS	DNAS, AMPPF	DISSEMINATE FP/IEC MESSAGE IN RURAL AREAS	SPREADING-OUT OF REGIONAL CAPITALS TO RURAL AREAS,	TO BE DETERMINED	PRIVATE SECTOR	UP TO US$1000, PER SUB-PROJECT
8. FACE-TO-FACE IEC	DNAS, UNFM, UNJM, NGO, DJOLIBA CATHOLIC CENTER	DISSEMINATE FP/IEC MESSAGE IN RURAL AREAS	SPREADING-OUT OF REGIONAL CAPITALS TO RURAL AREAS,	TO BE DETERMINED	IMPLEMENTING ORGANIZATIONS	UP TO US$75,000 (TOTAL)
III. FP EXPANSION						
1. DEVELOPMENT OF SOCIAL MARKETING	DHF	EXPAND THE SOMARC PROJECT BEYOND BAMAKO TO MAKE A VARIETY OF CONTRACEPTIVES AVAILABLE THROUGH A MULTI-CHANNEL SYSTEM	MOVE GRADUALLY FROM REGIONAL CAPITALS TO DISTRICTS AND SUB-DISTRICTS. PY2-PY6	TO BE DETERMINED	PRIVATE SECTOR	UP TO US$450,000
2. EXPANSION OF COMMUNITY-BASED DISTRIBUTION	DNAS/AMPPF	BUILD ON SUCCESSFUL CBD APPROACHES (MIDWIVES, MEN) OR EXPERIMENT WITH NEW ONES	EXPAND GRADUALLY, STARTING FROM EXISTING PROJECT SITES. PY2-PY6	TO BE DETERMINED	UNFM, UNJM, UNTM, NGOS	UP TO US$100,000
3. OPENING OF NEW FP CENTERS	DHF	PROVIDE MATCHING FUNDS (75% OF COST) TO ESTABLISH SERVICES IN LIAISON WITH MCH CLINIC NETWORK	BAMAKO AS OF PY2, THEN GRADUAL EXTENSION TOWARD THE PERIPHERY	UP TO 10000 WOMEN PER CENTER	PRIVATE PHYSICIANS, MIDWIVES	UP TO US$450,000
IV. PROMOTING THE STATUS OF WOMEN						
1. FORMULATING A WID STRATEGY	UNFM AND PRIVATE WOMEN ASSOCIATIONS	DEFINE AN ACTIONABLE PLAN TO IMPROVE THE SOCIOECONOMIC STATUS OF WOMEN AND THEIR ACCESS TO SOCIAL SERVICES	WORK WILL REQUIRE BROAD CONSULTATION WITH THE REGIONS. PY2-PY3	ALL MALIAN WOMEN	WOMEN'S MIXED TASK FORCE (PUBLIC AND PRIVATE)	UP TO US$50,000
2. SUPPORT TO WOMEN'S GROUPS AND COOPERATIVES	UNFM, NGOS	MANAGEMENT TRAINING TO GENERATE ADDITIONAL INCOME (TECHNICAL SKILLS, BUSINESS MANAGEMENT, ACCOUNTING, MARKETING AND PRODUCTION TECHNIQUES, USE OF CREDIT)	INDIVIDUAL SUB-PROJECTS LOCATED ANYWHERE ON THE MALIAN TERRITORY. PY2-PY6	TO BE DETERMINED	WOMEN'S GROUP AND COOPERATIVES	UP TO US$450,000
3. SMALL NGO PROJECTS	CCONG	MATCHING FUNDS (75%) TO PROVIDE CREDIT, SMALL WORKS INPUTS AND TIME-SAVING DEVICES TO WOMEN IN RURAL AREAS	PRIORITY TO BE GRANTED TO ESTABLISHED NGOS. PY2-PY6	TO BE DETERMINED	CONCERNED NGOS	UP TO US$750,000

TABLE 11 CONT'D.

SUB-PROJECTS IDENTIFIED FOR FINANCING UNDER THE POPFUND

NAME OF SUB-PROJECT	IMPLEMENTING AGENCY	BASIC OBJECTIVES	GEOGRAPHIC PHASING	POPULATION REACHED	INSTITUTION BEING SUPPORTED	TENTATIVE ESTIMATED COST
V. STUDIES, SURVEYS AND OPERATIONAL RESEARCH						
1. STUDY ON THE DETERMINANTS OF FERTILITY	DNSP	IMPROVE KNOWLEDGE OF SOCIOECONOMIC CULTURAL, RELIGIOUS, AND ENVIRONMENTAL AND OTHER DETERMINANTS IN DIFFERENT PART OF MALI TO GUIDE INTERVENTIONS	BAMAKO AND REGIONAL CAPITALS. PY1	N/A	LOCAL CONSULTANTS	UP TO US$20,000
2. STUDY OF STERILITY PROBLEMS IN THE 6TH AND 7TH REGION	DNSP	IMPROVE UNDERSTANDING OF STERILITY PROBLEMS IN THESE 2 REGIONS TO GUIDE INTERVENTIONS	6TH AND 7TH REGIONS DRS. PY2	N/A	LOCAL CONSULTANTS	UP TO US$6,000
3. INTRODUCTION OF VOLUNTARY STERILIZATION SERVICES IN HOSPITALS OR CLINICS	DNSP	PROVIDE TRAINING AND EQUIPMENT TO HOSPITALS AND DHCS TO PERFORM VOLUNTARY STERILIZATION	ONLY AFTER MCH/FP IMPROVEMENTS HAVE BEEN INTRODUCED. PY2-PY6	TO BE DETERMINED	GOVT AND PRIVATE HEALTH STAFF	UP TO US$100,000
4. ESTABLISHING A SURVEILLANCE SYSTEM	DNSP	MONITOR THE IMPACT AND SIDE EFFECTS OF VARIOUS CONTRACEPTIVE METHODS	NATIONAL OR REGIONAL CAPITALS. PY2-PY6	TO BE DETERMINED	SELECTED HOSPITAL STAFF	UP TO US$250,000
5. TESTING THE INTRODUCTION OF NEW FP METHODS SUCH AS NORPLANT	DNSP	ENSURE PUBLIC SAFETY WHILE BROADENING THE MENU OF FP OPTIONS TO SUIT INDIVIDUAL PREFERENCES AND CONSTRAINTS	NATIONAL CAPITALS ONLY. PY2/PY6	TO BE DETERMINED	SELECTED HOSPITAL STAFF	UP TO US$100,000
6. STUDY OF IMPACT AND NATURE OF IEC AND ALTERNATIVE CHANNELS	DNAS	ASCERTAIN THE EFFECTIVENESS OF ON-GOING IEC PROGRAM, INSTITUTIONAL APPROACHES AND MESSAGES	NATIONAL	N/A	AMPPF	UP TO US$50,000
7. STUDY OF CONTRACEPTIVE PRACTICE AND DISCONTINUATION RATES	DNSP	IMPROVE KNOWLEDGE AND DETERMINANTS OF CONTRACEPTIVE USE, METHOD SWITCH AND DISCONTINUITY TO DEVELOP BETTER QUANTITATIVE IMPACT INDICATORS	NATIONAL	N/A	LOCAL	UP TO US$50,000

TABLE 12

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PROCESSING OF SUB-PROJECTS UNDER THE POPFUND

STEPS	RESPONSIBILITIES
1. SUBMISSION OF SUB-PROJECT BRIEF (PB)	- ANY PUBLIC/PRIVATE/NGO OPERATOR MEETING THE CRITERIA AND SPONSORED BY THE NATIONAL COMMISSION ON POPULATION ACTIVITIES
2. SCREENING OF PBs	- POPFUND'S TECHNICAL SECRETARIAT
3. PREPARATION OF SUB-PROJECT APPRAISAL REPORT	- IMPLEMENTING AGENCY, IF NEED BE WITH ASSISTANCE FROM A CONSULTANT PROVIDED FREE OF CHARGE BY POPFUND FOR SELECTED SUB-PROJECTS
4. APPROVAL OF SUB-PROJECTS	- STEERING COMMITTEE (MEETS FOUR TIMES A YEAR)
5. SIGNING OF CONTRACT	- BETWEEN POPFUND DIRECTOR AND AUTHORIZED REPRESENTATIVE OF IMPLEMENTING AGENCY
6. RELEASE OF FUNDS	- BY POPFUND'S FINANCIAL UNIT, IN PRE-AGREED TRANCHES, BASED UPON MONITORABLE PERFORMANCE INDICATORS
7. IMPLEMENTATION	- IMPLEMENTING AGENCY
8. PHYSICAL SUPERVISION OF SUB-PROJECTS	- UNICEF, TWICE A YEAR, PLUS IDA ON RANDOM BASIS. SUPERVISION REPORTS TO BE SENT TO POPFUND DIRECTOR POPFUND DIRECTOR
9. AUDIT	- TWICE A YEAR, OF POPFUND AND OF ALL SUB-PROJECTS ACCOUNTS BY AN AUDIT FIRM ACCEPTABLE TO IDA
10. FEEDBACK	- YEARLY MEETING OF POPFUND, GOVERNMENT, PRIVATE SECTOR NGOs AND DONORS TO REVIEW EXPERIENCE
11. REPORTING	- TWICE A YEAR, FROM POPFUND DIRECTOR TO IDA THROUGH PDS DIRECTOR

TABLE 12

POPULATION COMPONENT
IMPLEMENTATION SCHEDULE

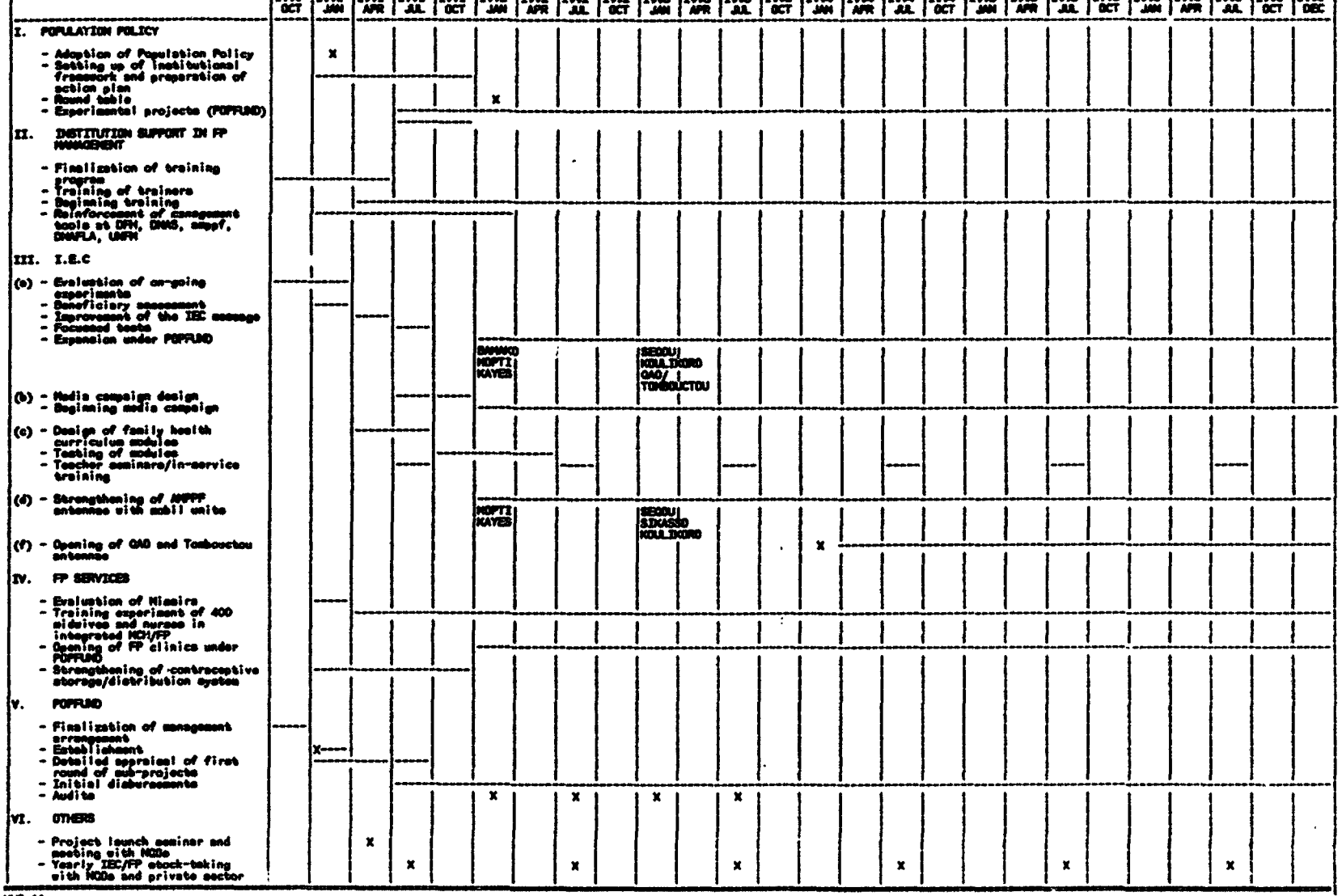

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TABLE 10. POPULATION AND FAMILY PLANNING INSTITUTIONAL STRENGTHENING

DETAILED COST TABLE

(CFAF' 000)

		Quantity								Breakdown of Totals Incl Cont (US$)			
	Unit	1992	1993	1994	1995	1996	1997	Total	Unit Cost	For Exch	Local (Excl Taxes)	Duties & Taxes	Total
I INVESTMENT COSTS													
A. DISSEMINATING / OPERATIONALIZING THE POPULATION POLICY													
1. SEMINARS FOR OPINION LEADERS /a	SEMINAR	7	7	-	-	-	-	14	3,187 1		196,499 7		196,499 7
2. PREPARATION OF ACTION PLAN	MAN-MONTH	6	6	-	-	-	-	12	3,096 72	166,549 0	-		166,549 0
3. SETTING UP THE INSTITUTIONAL FRAMEWORK /b	MAN-MONTH	6	6	-	-	-	-	12	3,096 72	166,549 0			166,549 0
4. EQUIPMENT / SUPPLIES													
NATIONAL LEVEL		-		-	-	-	-	-		32,089 2	4,346 0		36,435 3
REGIONAL LEVEL	PER REGION	7		-	-	-	-	7	5,282 5	149,749 P	20,281 5		170,031 2
Sub-Total EQUIPMENT / SUPPLIES										181,839 0	24,627 5		206,466 5
Sub-Total DISSEMINATING / OPERATIONALIZING THE POPULATION POLICY										514,937 0	221,127 1		736,064 1
B. CAPACITIES TO PLAN , IMPLEMENT , MANAGE AND EVALUATE													
1. TRAINING /c	SESSIONS	1	1	1	1	1	-	5	15,935 5	-	367,080 7	-	367,080 7
2. SHORT TERM SPECIALIST /d	man-month	6	6	6	3	3	-	24	3,096 72	348,128 6	-		348,128 6
Sub-Total CAPACITIES TO PLAN , IMPLEMENT , MANAGE AND EVALUATE										348,128 6	367,080 7		715,209 3
C. CENSUS													
1. DEMOGRAPHER SPECIALISTS (SHORT TERM)		6	-	-	-	-	-	6	3,096 72	81,681 7	-		81,681 7
2. DISSEMINATION OF CENSUS RESULTS	UNIT	1	-	-		-	-	1	15,935 5	-	69,141 3	-	69,141 3
Sub-Total CENSUS										81,681 7	69,141 3		150,823 0
D. UPGRADING EXISTING DNAS													
1. NATIONAL LEVEL	DOTATION	1	-	-	-	-	-	1	7,923 75	32,089 2	4,346 0		36,435 3
2. REGIONAL LEVEL /e	DOTATION	7			-	-		7	5,282 5	149,749 8	20,281 5		170,031 2
Sub-Total UPGRADING EXISTING DNAS										181,839 0	24,627 5		206,466 5
Total INVESTMENT COSTS										1,126,586 3	681,976 7		1,808,563 0
Total										1,126,586 3	681,976 7		1,808,563 0

/a 50 PARTICIPANTS PAR REGION
/b O AND M SPECIALIST
/c 50 MANAGERS PER YEAR
/d moh/fp o&m specialist
/e 7 REGIONS

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TABLE 13. INCREASING THE DEMAND FOR AND AVAILABILITY OF FP SERVICES NATIONWIDE
DETAILED COST TABLE
(CFAF '000)

	Unit	Quantity 1992	1993	1994	1995	1996	1997	Total	Unit Cost	Breakdown of totals incl Cont (US$) for Exch	local (Excl Taxes)	Duties & Taxes	Total
I INVESTMENT COSTS													
A DEVELOPING AND TESTING THE IEC / MCH / FP MESSAGE													
1 IEC SPECIALIST	MAN-MONTH	12	-	-			-	12	3.096 72	163.363 4	-	-	163.363 4
2 FP SPECIALIST	MAN-MONTH	12	-	-			-	12	3.096.72	163.363 4	-	-	163.363 4
3 BENEFICIARY ASSESSMENT	PER YEAR	2	-	1		1		4	6,374 2	-	115.781 6	-	115.781 6
4. SUPPORT TO INSTITUTIONS TO TEST THE MESSAGE													
UNFA	PER YEAR	1	1	-	-	-	-	2	15.935.5	-	140.356 9	-	140.356 9
UBAM	PER YEAR	1	1	-	-	-	-	2	15.935 5	-	140.356.9	-	140.356 9
UNTM	PER YEAR	1	1	-	-	-	-	2	15.935 5	-	140.356 9	-	140.356 9
DNAFA	PER YEAR	1	1	-	-	-	-	2	15.935 5	-	140.356 9	-	140.356 9
Sub-Total SUPPORT TO INSTITUTIONS TO TEST THE MESSAGE										-	561.427 6	-	561.427 6
5. STRENGTHENING DNAFLA PRODUCTION	DOTATION	1	-	-	-	-	-	1	26.412.5	106.964 1	14.486 8	-	121.450 9
6. FONCTIONAL LITERACY SPECIALIST	MAN-MONTH	2	2	2	-	-	-	6	3.096.72	84.906 7	-	-	84.906 7
7. IEC MATERIAL DNAFLA /a	UNIT	-	2.000	2.000	2.000	2.000	2.000	10.000	0 329	16.229 8	-	-	16.229 8
Sub-Total DEVELOPING AND TESTING THE IEC / MCH / FP MESSAGE										534.829 4	691.695 9	-	1.226.525 3
B. SEX EDUCATION IN FORMAL SYSTEM													
1. SEX EDUCATION SPECIALIST	MAN-MONTH	6	2	2	2	-	-	12	3.096 72	169.901 8			169.901 8
2 TRAINING OF TEACHERS /b	PARTICIPANTS	-	-	250	250	250	250	1.000	20 3	-	97.731 7		97.731 7
3. KITS /c													
PRIMARY		1.500	-	-	-		-	1.500	64 515	425.425 5	-		425.425 5
CYCLE II		300	-	-	-	-	-	300	129.03	170.170 2	-		170.170 2
SECONDARY		25		-	-	-		25	129 03	14.180 8			14.180 8
Sub-Total KITS /c										609.776 5			609.776 5
Sub-Total SEX EDUCATION IN FORMAL SYSTEM										779.678 4	97.731 7		877 410 1
C. STRENGTHENING AMPPF /d													
1. REMODELING OF EXISTING OFFICES		-					-	-		24.055 8	28.939 8		52.995 6
2. ADDITIONAL EQUIPMENT	DOTATION	5		-		-	-	5	2.523 487	51.097 5	6.920 4		58.017 9
3 ADDITIONAL LOCAL STAFF /e	MAN-MONTH	36	36	48	48	48	48	264	121 8		151.207 4		151.207 4
4 IEC MATERIAL		-					-	-		312.369 3			312.369 3
Sub-Total STRENGTHENING AMPPF /d										387.522 6	187.067 7		574.590 3
D. OPENING NEW ANTENNAE IN GAO AND TOMBOUCTOU													
1. CIVIL WORKS	PER ANTENNA		2			-	-	2	11.021 083	47.191.4	57.024 3		104.215 7
2 EQUIPMENT	UNIT		2	-	-		-	2	6.729.298	56.629.7	7.603 2		64.232 9
3 LOCAL STAFF /f	MAN-MONTH	-	48	48	48	48	48	240	121.8	-	138.714 4		138.714 4
Sub-Total OPENING NEW ANTENNAE IN GAO AND TOMBOUCTOU										103.821 1	203.342 0		307.163 0
E CREATION OF 7 MOBILE UNITS													
1 VEHICLES / EQUIPMENT	UNIT	-	7	-			-	7	7.570 482	222.979 3	29.937 8	-	252.917 1
2. LOCAL STAFF /g	UNIT	-	7	7	7	7	7	35	1.522 5	-	252.864 8	-	252.864 8
Sub-Total CREATION OF 7 MOBILE UNITS										222.979 3	282.802 6	-	505.781 9
F TRAINING OF 400 NURSES / MIDWIFES /h	PER YEAR										358.402 9		358.402 9
G. CONTRACEPTIVES PROVISIONS AND DISTRIBUTION													
1 IDA CONTRIBUTION	PER YEAR	1	1	1	2	-	-	5	25.806	637 240 6			637.240 6
2 EEC CONTRIBUTION	PER YEAR		1	2	3	3	4	13	25.806	1.770.555 1			1.770.555 1
3 USAID CONTRIBUTION	PER YEAR		1	2	3	3	4	13	25.806	1.770.555 1			1.770.555 1
4 GERMANY CONTRIBUTION	PER YEAR			1	1	3	4	9	25.806	1.252.163 5			1 252 163 5
Sub-Total CONTRACEPTIVES PROVISIONS AND DISTRIBUTION										5.430.514 4			5.430 514 4

H. REINF. OF STORAGE CAPACITY /i	UNIT		3	2	2			7	6,428 965	99,611 8	119,448 3		219,060 1
I. CONTRACEPTIVE STOCK MANAGEMENT SYSTEM	MAN-MONTH	3	-	-	-			3	3,096 72	40,840 8			40,840 8
J. MEDIA CAMPAIGN /j		-	-		-	-		-			142,895 8		142,895 8
K. FUND FOR POPULATION / MCH / FP ACTIVITIES													
1. IDA CONTRIBUTION	PER YEAR	-	-		1	1	-	2	60,560 85	235,620 0	290,996 1		526,616 1
2. GERMANY CONTRIBUTION	PER YEAR	-	1	1	1	1	1	5	57,677	561,000 0	692,847 8		1,253,847 8
3. EEC CONTRIBUTION	PER YEAR	-	1	1	1	1	1	5	57,677	561,000 0	692,847 8		1,253,847 8
4. USAID CONTRIBUTION	PER YEAR	1	1	1	1	-	-	4	95,167 05	740,520 0	914,559 1		1,655,079 1
5. GVT CONTRIBUTION /k	PER YEAR	-	1	1	1	1	1	5	20,300	-	441,304 3		441,304 3
Sub-Total FUND FOR POPULATION / MCH / FP ACTIVITIES										2,098,140 0	3,032,555 2		5,130,695 2
Total INVESTMENT COSTS										9,697,937 8	5,115,942 1		14,813,879 8
II. RECURRENT COSTS													
A. ADMINISTRATIVE ASSISTANTS FOR DSF	MAN MONTH	24	24	24	24	24	24	144	154 886	82,599 1	24,612 1		107,211 2
Total RECURRENT COSTS										82,599 1	24,612 1		107,211 2
Total										9,780,536 8	5,140,554 2		14,921,091 0

/a 1000 BROCHURES AND 10000 PLACARDS
/b 600 PRIMARY, 300 CYCLE 2 AND 200 SECONDARY
/c FOR 1500 FOR PRIMARY SCHOOLS, 300 CYCLE II. AND 25 FOR SECONDARY
/d 5 EXISTING ANTENNAE
/e 2 PER CENTER
/f 2 PER CENTER
/g 2 PER UNIT
/h IN INTEGRATED MCH/FP
/i AT CENTRAL AND 7 REGIONAL WAREHOUSES
/j INCLUDING 3 CONSULTANTS FOR 3 MONTHS EACH
/k FOR OPERATIONS

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RURAL WATER SUPPLY PROGRAM

1. Project component objectives. The main objectives of the rural water supply component are to (a) provide potable drinking water to improve the sanitary and health environment of the rural population; (b) ensure villagers' participation in investment and particularly in the operation and maintenance of their water installations; (c) establish a network of village pump repairmen and a distribution network of spare parts to guarantee the sustainability of the water installations; (d) implement an iodination program to combat iodine deficiency, which causes goiter; and (e) strengthen the capabilities of DNHE (Direction Nationale de l'Hydraulique et de l'Energie) for project identification, preparation, implementation and supervision.

2. Project component contents. This component consists of (a) the construction of approximately 385 modern water points in the Kenieba and Bafoulabe Districts; (b) the rehabilitation of 500 existing water points in the Regions of Kayes, Mopti, Segou and Koulikoro; (c) the supply and installation of iodine modules in approximately 1515 existing and new water points in these four Regions; and (d) studies to identify rehabilitation and new water supply needs in the four Regions.

3. Executing agency. The Direction Nationale de l'Hydraulique et de l'Energie (DNHE) of the Ministry of Industry, Water and Energy will be the executing agency for the rural water supply component. DNHE will second staff to a project unit for this component, which will be assisted by a consulting firm for the technical and financial supervision of implementation.

A. Construction of Water Points (Kenieba/Bafoulabe)

4. Community development activities. The project unit will be responsible for community development activities. Six community development agents will help the villagers create village water committees for the technical and financial responsibility for the water points. They will also help the villagers maintain the pump area in good condition and will advise on the hygienic aspects of carrying, storing and consuming water and on the iodination program.

5. Water resources. Water resources will be available from underground aquifers in between fissures and fractures existing in sandstone, schists and dolerites.

6. Borehole siting. The sites of boreholes will be identified by a team of geophysicists from the project unit in close collaboration with the villagers. The water point will be in the village's central area and site location will, within technical constraints, take into account the preference of the villagers.

7. Construction of boreholes. A total of 385 modern water points will be constructed under private contract in the Districts of Kenieba and Bafoulabe, 300 in Kenieba and 85 in Bafoulabe. The expected borehole drilling success rate is about 60%, requiring about 640 exploratory boreholes. The water points will have

an enclosed concrete platform to protect the surrounding area. The boreholes will be drilled using two drilling rigs during three complete annual drilling campaigns and a fourth partial one.

8. Supply and installation of hand pumps. The successful boreholes will be equipped with hand pumps supplied by the project unit but financed by the villagers. A private contractor will be recruited for installation of the pumps; the contractor will also be responsible for the training of 30 village pump repairmen and 385 village pump caretakers and for the establishment of a distribution network of spare parts, consisting of about 20 spare parts sales depots. These depots will be replenished from the central depot in Kita District, created under the First Rural Water Supply Project (IDA Credit 1431-MLI/SF7). The villagers will assume responsibility for their water point immediately after installation of the hand pump, and there will be no guarantee period except for obvious factory and/or transportation defects.

9. Financial participation of the villagers. The village cash contribution will amount to CFAF 135,000 (US$500), equivalent to the purchase price of the pump and to be collected by the project unit at the signing of a contract between the villagers and the Government, represented by the project unit. This contribution will be collected at least one month before arrival of the borehole siting team. A small stock of current spare parts, costing approximately CFAF 8,000 (US$30), will be purchased by the villagers at the time of installation of the pump. This sum will be collected either at the same time as the initial cash contribution or when the pump is installed. The villagers will bear all costs of labor and spare parts for maintenance of their pump.

10. Project supervision. The project unit will be responsible for supervision of this component and will consist of a unit leader, two hydrogeologists, a geophysicist, a geophysics technician, a rural water technician, a sanitary engineering technician, and a community development specialist. The project unit will be assisted by an engineering consulting firm with technical, logistical and financial responsibility for successful implementation.

B. Rehabilitation works (Kayes, Segou, Mopti and Koulikoro Regions)

11. Rehabilitation of existing water points in these Regions will also be executed under the rural water supply component. It is estimated that there are some 8,000 existing water points, of which 2,000 require rehabilitation (25%). A study will be carried out by a consultant to identify and evaluate the necessary rehabilitation and to propose solutions for villagers' financial participation and assumption of full responsibility for their water points, including the training of pump repairmen and the distribution and sales of spare parts to ensure their sustainability. Following this study, priority rehabilitation works will be undertaken. Under the project, some 500 existing water points will be rehabilitated.

C. Supply and installation of iodine modules (Kayes, Mopti, Segou and Koulikoro)

12. It is known that goiter due to iodine deficiency is prevalent in the Kita, Kenieba and Bafoulabe Districts of Kayes Region; therefore, priority to iodination of drinking water will be given to these areas. About 630 existing water points constructed in Kita and Bafoulabe under the First IDA-financed Rural

Water Supply Project (Cr. 1431-MLI and SF 7) between 1985 and 1989, 385 water points to be constructed in Kenieba and Bafoulabe (para 7 above) and 500 existing water points to be rehabilitated (para 11 above) in the four Regions will be fitted with iodine modules, bringing the total to approximately 1,515 water points. The pump installation contractor (see para 8 above) will train village pump repairmen in the installation of the modules to the base of the hand pumps. The project unit for the rural water supply component will be responsible for supervision of that activity. The Project file contains a detailed description of the technology to be used.

D. Creation of New Water Points (Kayes, Mopti, Segou and Koulikoro Regions)

13. The study for the rehabilitation works (para 11 above) will also cover the identification and preparation of new water points to improve the sanitary conditions of the rural population of these Regions. It is estimated that to increase the current service level (from about 34% to 40%) until the year 1995, some 2,800 new water points would have to be constructed, i.e., 400 to 500 water points annually. The costs of construction of these water points is estimated at CFAF 17 billion (April 1989).

E. Implementation Schedule

14. According to the implementation schedule, it is estimated that the construction works in Kenieba and Bafoulabe would start in early 1991 and the rehabilitation works one year later.

F. Agreements Reached

15. Implementation of the rural water supply component. An agreement (satisfactory to IDA) between MSPAS and MIHE, defining their mutual responsibilities in the implementation of this component, has been signed.

16. Community development activities. An agreement (satisfactory to IDA) among all parties concerned with undertaking community development activities in the Districts of Kenieba and Bafoulabe to involve villagers in this component (para 4 above) has been signed.

17. Establishment of the water supply project unit. Before signing of the consultant supervision contract, DNHE will submit to IDA a list of personnel (para 10 above) to be seconded to the water supply project unit, and will ensure, to the satisfaction of IDA, that they are adequate in numbers, qualifications and experience.

18. Contract with village communities. A model contract between village communities and DNHE, defining community responsibility and participation (including financial) in the rural water supply component, been reviewed by IDA and found to be satisfactory. This contract will have to be signed and the cash contribution paid at least one month before the arrival of the borehole siting team (para 9 above).

G. Detailed Cost Estimates

19. The estimated costs of the rural water supply component are shown in Table 1.

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TABLE 14. EXPANSION OF RURAL WATER SUPPLY
DETAILED COST TABLE
(CFAF '000)

	Unit	Quantity 1992	1993	1994	1995	1996	1997	Total	Unit Cost	Breakdown of totals Incl Cont (US$) For Exch	Local (Excl Taxes)	Duties & Taxes	Total
I. INVESTMENT COSTS													
A. CONSTRUCTION (KAYES REGION)													
1. BOREHOLE DRILLING		-	-	-	-	-	-	-		6,282,243 3	839,548 4	-	7,121,791 8
2 HANDPUMP SUPPLY AND INSTALLATION													
PUMPS		154	77	77	77	-	-	385		185,645 7	24,871 9	-	210,517 6
PIPES , TOOLS , SPARE PARTS		154	77	77	77	-	-	385		431,983 4	57,074 9	-	489,058 3
PUMP INSTALLATION		57.8	115.5	115.5	96.3	-	-	385		257,815.2	34,409 3	-	292,224.5
Sub-Total HANDPUMP SUPPLY AND INSTALLATION										875,444 3	117,156 1	-	992,600 4
3. CONSULTANT SUPERVISION AND OTHER SERVICES		-	-	-	-	-	-	-		1,218,132 4	974,933 0	-	2,193,065 4
Sub-Total CONSTRUCTION (KAYES REGION)										8,375,820 0	1,931,637 6	-	10,307,457 6
B. REHABILITATION OF EXISTING WATER POINTS (FOUR REGIONS)													
1 PUMPS , TOOLS AND SPARE PARTS		-	-	-	-	-	-	-		826,223 0	109,996 7	-	936,219 7
2. PUMP INSTALLATION		-	-	-	-	-	-	-		370,824 7	49,256 8	-	420,081 5
3. CONSULTANT SUPERVISION		-	-	-	-	-	-	-		58,994 8	47,017 8	-	106,012 7
Sub-Total REHABILITATION OF EXISTING WATER POINTS (FOUR REGIONS)										1,256,042 6	206,271 3	-	1,462,313 8
C. IODINE													
1. INSTALLATION OF IODINE MODULES	UNIT	760	890	1,120	1,120	1,320	1,320	6,530	12 903	432,906 5	-	-	432,906 5
2 SUPPLY OF IODINE MODULES	UNIT	760	890	1,120	1,120	1,320	1,320	6,530	32 258	1,082,266 1	-	-	1,082,266 1
3. SUPERVISION AND EVALUATION	UNIT	760	890	1,120	1,120	1,320	1,320	6,530	5 646	99,174 9	78,596 3	-	177,771 2
Sub-Total IODINE										1,614,347.5	78,596 3	-	1,692,943 8
D MEN WATER POINTS (FOUR REGIONS)													
1. CONSULTANT STUDIES		-	-	-	-	-	-	-		176,803 6	143,038 9	-	319,842 5
Sub-Total MEN WATER POINTS (FOUR REGIONS)										176,803 6	143,038 9	-	319,842 5
Total INVESTMENT COSTS										11,423,013.8	2,359,544.0	-	13,782,557 7
Total										11,423,013.8	2,359,544 0	-	13,782,557 7

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PROJECT COORDINATION AND MANAGEMENT

1. Background. Under the first Health Development Project (Cr.1422-MLI) a Project Unit (PU) was created. This structure has functioned in parallel with MSPAS, thereby alienating itself from many authorities with whom it was supposed to collaborate. While in some areas such as project preparation, the PU has performed well, its performance with respect to overall management of project activities, in particular those related to the construction program, constituted a handicap during implementation. The Government recognized the need for improvement in this area; however, steps thus far taken are not yet adequate to ensure the desired improvement in overall Project management.

2. Problems which remain in project implementation include: (a) a lack of systematic project coordination; (b) a weak data-base and information system; and (c) weak budgeting and accounting procedures. Coordination and planning activities should not be carried out by the PU in parallel with those responsible for these activities.

3. With respect to the construction program, problems arose when the NGO selected to implement the program started work at three sites simultaneously, thereby over-extending its supervisory and financial capacity. From the supervision side, problems included: (a) sparse, fragmented and unreliable data on supervision; (b) unexperienced supervision structure; (c) lack of capacity to organize such programs; and (d) a poorly designed contract with the NGO.

4. Objectives. Under the proposed project a new Project Coordination Unit (PCU) will be established. Its main tasks will comprise coordination and overall management, particularly in the areas of: (a) project coordination; (b) financial management and accounting; (c) general procurement procedures and contract supervision; and (d) preparation of an annual work plan in liaison with those responsible for implementing project activities.

5. Expected outcomes. These include: (a) wide coverage of project coordination and data processing; (b) improvement in financial management resources; (c) acceleration of disbursements through improved procurement procedures; (d) assistance to Regional and national entities responsible for project implementation; and (e) supervision of project expenditures.

6. Approach/strategy. To fully integrate the project activities into MSPAS's organizational framework, the relevant Directorates of MSPAS, MIHE and the Regional and District Health Teams will be responsible for implementation of each project component. DNHE will be the implementing agency of the rural water supply component, for which a water project unit will be created. This unit will liaise with the PCU, particularly on matters concerning disbursement, procurement, action plan, and regular reporting. However, to place project coordination at a sufficiently high level in the Ministry's hierarchy to ensure

adequate inter-departmental and inter- ministerial coordination, overall project coordination -- including the water supply component --will be assumed by a (Ministerial) Committee. The PCU will focus on coordination, support and monitoring functions. It will also act as the Permanent Secretariat of the (Ministerial) Committee. To this end, the PCU will be headed by a full-time national Director, assisted by (a) a Deputy Director in charge of project monitoring; (b) a procurement specialist; (c) an accountant; (d) five regional accountants to be posted in the RHTs; (e) support staff; and (f) short-term specialists, as needed, for up to 60 man-months. The performance of the PCU will be reviewed every six months by the audit firm.

7. With respect to project coordination, procurement and financial management, the Project Director will oversee all project activities, including liaison with the various units of other ministries concerned with the project, and will serve as the direct contact point between the Government and IDA. Specifically, the PCU will:

(a) Assist each Directorate and entity concerned in the preparation of work plans and budgets for the components or sub-components under their responsibility;

(b) Ensure, with external assistance as needed, that all necessary documentation is ready for the joint annual reviews;

(c) Coordinate all aspects of project implementation with the RHTs and the Government entities;

(d) Plan and handle with the institutions concerned all procurement matters and ensure that works, goods and services procured under the project are delivered in conformance with IDA's Guidelines to their destination and are utilized appropriately;

(e) Organize the selection process of personnel, specialists and training required and financed by the project, and ensure that those services are delivered in conformity with the contract obligations in terms of quality and quantity;

(f) Ensure adequate budgeting and flow of funds from the Government, IDA, other donors, NGOs, the Local Development Committees, and communities;

(g) Prepare and maintain all project accounts, following appropriate accounting methods and procedures;

(h) Prepare all necessary documents and certifications for withdrawal of funds and their submission to IDA and other agencies;

(i) Arrange for prompt annual audits of all project accounts (and semi-annual audits for the Special Account and SOEs);

(j) Keep records, including financial, on the project and submit to IDA semi-annual progress reports on project implementation, as well as a completion report not later than six months after completion of the project; and

(k) Support and organize the preparation of future projects.

8. With respect to the implementation of civil works, all construction activities will be carried out under the supervision of CEPRIS who will be adequately reinforced under the project by local specialists (four technicians, two engineers, a maintenance specialist and a facility planner) and will be responsible for: (a) maintaining and managing existing facilities and organizing its financing through increased local authority and community participation; (b) ensuring that local communities receive sufficient technical assistance to construct and maintain adequate facilities; (c) maintaining a computerized inventory of existing facilities; and (d) developing and updating construction/equipment norms and standards.

9. Means. Each operational responsibility will be carried out as indicated in Table 1 below. In addition to its permanent staff, all of whom will be adequately qualified and experienced, the PCU will seek assistance in specific areas from short-term consultants, as shown in Table 2.

TABLE 1

SUMMARY OF OPERATIONAL RESPONSIBILITY BY PROJECT COMPONENT

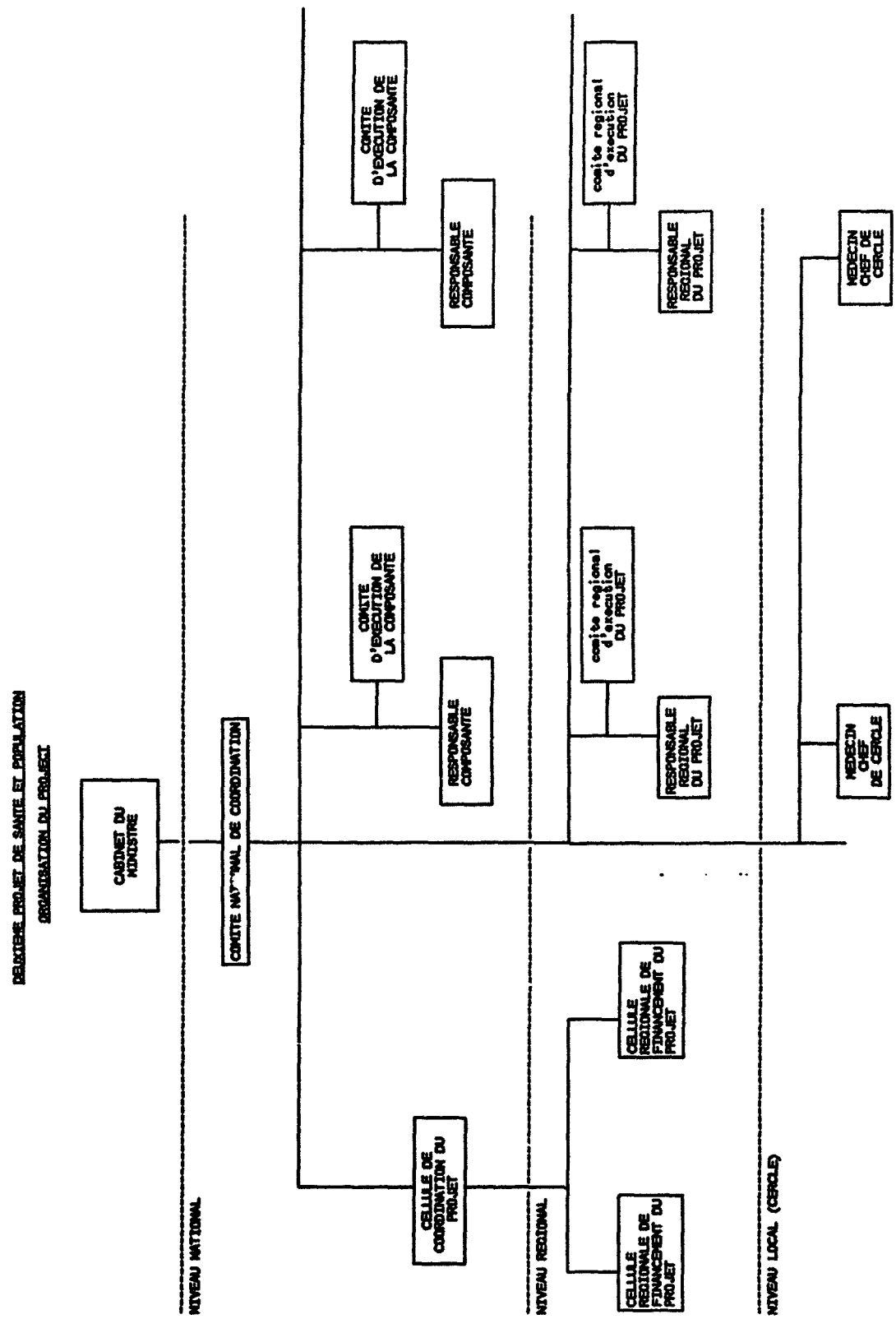
A. HEALTH	NORMS	ORGANIZE INITIATE	IMPLEMENT	SUPERVISE	DISBURSE PROCURE
1. COVERAGE AND QUALITY OF HEALTH SERVICES					
SUPPORT TO 120 COMMUNITY HEALTH CENTERS	-	DHT	COMHC	DHT	PCU + LDC
QUALITY IMPROVEMENT OF HEALTH SERVICES	-	RHT	DHT	RHT	PCU
ESTABLISHING 21 DISTRICT TEAMS	DNPFSS	RHT	DHT	RHT	PCU
REGIONAL SUPPORT IN FIVE REGIONS	-	DNSP	RHT	DNSP	PCU
2. INCREASING THE EFFICIENCY OF RESOURCE USE					
STRENGTHENING SECTORAL PLANNING	DNPFSS	DNPFSS	DNPFSS	MSPAS	PCU
FACILITY PLANNING/MAINTENANCE	DAF	CEPRIS	CEPRIS	DAF	PCU
AVAILABILITY OF ESSENTIAL DRUGS	DNSP	DNSP	RHT/PPM	DNSP	PCU
HUMAN RESOURCES DEVELOPMENT	DAF	DAF	DAF	MSPAS	PCU
HEALTH FINANCING	DAF	DAF	DAF	MSPAS	PCU
B. POPULATION AND FAMILY PLANNING					
INSTITUTIONAL STRENGTHENING	DNPFSS	DSF	DHF	MSPAS	PCU
IEC/FAMILY PLANNING SERVICES	DNAS	DSF	MSPAS	MSPAS	PCU
POPULATION FUND	DSF	AMPPF	NGOS	MSPAS	PCU
C. RURAL SUPPLY OF POTABLE WATER					
CONSTRUCTION OF 385 WATER POINTS	MIWE	DNHE	DNHE	DNHE	PCU
REHABILITATION OF 500 WATERS POINTS	MIWE	"	"	"	PCU
SUPPLY/INSTALLATION OF IODINE MODULES	MIWE	"	"	"	PCU
STUDIES FOR FUTURE REHAB. EXTENSION	MIWE	"	"	"	PCU
D. PROJECT MANAGEMENT UNIT					

TABLE 2

SHORT-TERM CONSULTANTS TO ASSIST THE PCU

SHORT-TERM SPECIALISTS	STATUS	DURATION (MAN-MONTH)
(A) PROCUREMENT SPECIALIST	F	7
(B) CONSULTING ENGINEER	F/L	8
(C) AUDITOR	F/L	6
(D) FINANCIAL/LEGAL SPECIALIST	F	6
(E) MID-TERM REVIEW	F/L	8
(F) EXTERNAL EVALUATION	F/L	5
(G) FUTURE PROJECT PREPARATION	F/L	22
(H) KAP SURVEY	F	8

9. Timetable and costs. The implementation calendar, quantities and costs are shown in Table 4 below.


DEUXIEME PROJET DE SANTE ET POPULATION
ORGANISATION DU PROJET
CABINET DU MINISTRE
COMITE NATIONAL DE COORDINATION
CELLULE DE COORDINATION DU PROJET
COMITE D'EXECUTION DE LA COMPOSANTE
RESPONSABLE COMPOSANTE
COMITE D'EXECUTION DE LA COMPOSANTE
RESPONSABLE COMPOSANTE
CELLULE REGIONALE DE FINANCEMENT DU PROJET
CELLULE REGIONALE DE FINANCEMENT DU PROJET
comite regional d'execution DU PROJET
RESPONSABLE REGIONAL DU PROJET
comite regional d'execution DU PROJET
RESPONSABLE REGIONAL DU PROJET
MEDECIN CHEF DE CERCLE
MEDECIN CHEF DE CERCLE
NIVEAU NATIONAL
NIVEAU REGIONAL
NIVEAU LOCAL (CERCLE)

REPUBLIC OF MALI
SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT
TABLE 15. PROJECT COORDINATION UNIT
DETAILED COST TABLE
(CFAF ' 000)

Breakdown of Totals Incl Cont
US$$

	Unit	Quantity 1992	1993	1994	1995	1996	1997	Total	Unit Cost	For Each	Local (Excl Duties & Taxes)	Duties & Taxes	Total
I INVESTMENT COSTS													
A RENODELING OF EXISTING FACILITIES	M2	160						160	36 737	12 112 0	14 763 6		26 875 6
B ADDITION / REPLACEMENT OF EXISTING EQUIPMENT													
1 VEHICLES	UNIT	2		1				3	4,688 529	66 439 1			66 439 1
2 IBM COMPATIBLE PC AT	UNIT	1						2	1,032 24	9,886 0			9,886 0
3 FURNITURE	PER STAFF	7						7	736 739	10,598 0	12,918 1		23,516 1
4 OFFICE EQUIPMENT	PER STAFF	7						7	168 233	4,769 1	605 9		5 815 0
5 COMPUTER EQUIPMENT	UNIT	1						1	1,514 052	6,131 7	830 5		6,962 2
C PROGRAMME STAFF													
Sub Total ADDITION / REPLACEMENT OF EXISTING EQUIPMENT										92,823 9	14,394 5		112 218 4
D PROGRAMME STAFF													
1 PRODUCT DIRECTOR	MAN-YEAR	1	1	1	1	1	1	6	2 839 576	63 056 5	18 000 9		81 057 4
2 DEPUTY DIRECTOR	MAN YEAR	1	1	1	1	1	1	6	2,839 576	63,056 5	18,000 9		81 057 4
3 ACCOUNTANT (CHIEF)	MAN YEAR	1	1	1	1	1	1	6	1,461 6		41,020 2		41 020 2
4 ACCOUNTANTS / IN 5 REGIONS) /b	MAN YEAR	5	5	5	5	5	5	30	1 461 6		205,101 2		205 101 2
5 FULL TIME PROCUREMENT SP /c	MAN-YEAR	1	1	1	1	1	1	6	1,461 6		41,020 2		41 020 2
6 SECRETARY /d	MAN YEAR	2	2	2	2	2	2	12	974 4		54,893 6		54 893 6
7 CHAUFFEUR	MAN YEAR	1	1	1	1	1	1	6	687 2		13,673 4		13 673 4
Sub Total PROGRAMME STAFF										126,183 0	392,110 6		518,303 6
D SHORT TERM SPECIALIST SERVICES													
1 PROCUREMENT SPECIALIST	MAN MONTH	3	2	2				7	3,086 12	88,522 3			88,522 3
2 CONSULTING ENGINEER	MAN MONTH	1	1	1				3	3,086 12	42,454 3			42,454 3
3 AUDITING	MAN MONTH	1	1	1	1	1	1	6	3,086 12	90,055 9			90 055 9
4 PERSONNEL AUDIT	MAN MONTH	1	1	1	1	1	1	6	3,086 12	90,055 9			90,055 9
5 PROJECT PUBLICATION	MAN MONTH										21,336 8		21,336 8
E LOCAL CONSULTANTS	MAN MONTH	3	6	6				11	466	168,625 3			168 625 3
INTERNATIONAL CONSULTANTS	MAN MONTH		3	6	4			11	3,086 72	168,625 3			168 625 3
Sub Total PROJECT PUBLICATION										168,625 3	21,336 8		189 862 0
F TRAINING PROGRAMME													
6 MID TERM EVALUATION	MAN-MONTH			3				3	3,086 72	44,088 6			44,088 6
7 EX POST EVALUATION /e	MAN MONTH	1	1	1	1	1		5	3,086 72	72,548 5			72,548 5
8 BAP SURVEY	MAN MONTH	2	2	2	2			8	3 086 72	115,447 4			115 447 4
Sub-Total SHORT TERM SPECIALIST SERVICES										722,838 2	21,336 8		744,075 0
G TRAINING AND TRAVEL													
1 PRODUCT RELATED TRAINING													
REGIONAL SEMINARS	PER DAY	5	5	5	5	5		25	89 148	7,811 9	-		7,811 9
OBSERVATION VISITS /f	PER DAY	7	7	7	7			35	30 967	5,151 2	-		5 151 2
TRAVEL	PER DAY	2	2	2	2	2		10	825 792	38,247 2	-		38,247 2
Sub-Total PRODUCT RELATED TRAINING										50,210 4	-		52,210 4
Sub Total TRAINING AND TRAVEL										92,210 4	-		52,210 4
F PRODUCT LAUNCH SEMINAR													
1 SHORT TERM SPECIALISTS	MAN DAY	30						30	103 224	13,613 6			13,613 6
2 MATERIALS	PER PARTICIPANT	60						60	6 575	1,736 2			1,736 2
3 FACILITY AND CATERING	PER DAY	10						10	131 8	5,284 7			5,284 7
Sub Total PRODUCT LAUNCH SEMINAR										19,347 8	5,284 7		20 632 5
Total INVESTMENT COSTS										1,026,525 3	448,790 1		1,475 315 4
II RECURRENT COSTS													
A VEHICLE OPERATIONS										58,672 4	14 126 3		72 798 7
B EQUIPMENT MAINTENANCE										3,522 5	649 9		4 172 4
C COMPUTER MAINTENANCE										4 062 8	977 0		5 039 7
D INFORMATION/MEDIA ACTIVITIES	PER YEAR	1	1	1	1	1	1	6	738 143	5 736 0	1 709 2		7 445 2
E OFFICE SUPPLIES	PER YEAR	1	1	1	1	1	1	6	668 182	15 296 1	4 557 8		19 853 9
F FACILITIES AND TELECOM	PER YEAR	1	1	1	1	1	1	6	1 032 573	22,944 2	6 836 7		29 780 9
G TRANSPORTATION	PER DAY	60	60	60	60	60	60	360	6 08	16,255 1			10 255 1
Total RECURRENT COSTS										39 311 9	110 234 0		109 545 9
Total										688 102 0	1 136 759 3		1 824 861 3

/a CONTRACTUAL
/b CONTRACTUALS
/c CONTRACTUAL
/d CONTRACTUAL
/e APPRAISAL OF AMOUNT REVIEW
/f INCLUDING VISITS TO 108 MEADOWARDS

Dec ember 21 1990 15 47

REPUBLIC OF MALI
SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT
YEARLY ANNUAL REVIEW

AGREED MEASURES	INSTRUMENT	RESPONSIBILITY	YEAR
A. INCREASING THE COVERAGE AND QUALITY OF HEALTH CARE			
1. VERIFY THAT THE DISTRICTS SELECTED FOR PROJECT SUPPORT MEET THE ELIGIBILITY CRITERIA	DHPD	RHT	EACH YEAR
2. VERIFY THAT THE COMMUNITIES SELECTED WITHIN THOSE DISTRICTS ALSO MEET THE ELIGIBILITY CRITERIA	CONTRACT BETWEEN DHT AND COMMUNITY	DHT	"
3. REVIEW SUCCESS OR FAILURE, AS MEASURED BY THE NUMBER OF APPLICATIONS FOR PROJECT SUPPORT, FROM THE DISTRICT AND FROM COMMUNITIES AND ANALYZE UNDERLYING REASONS	ANNUAL REPORT	RHTS AND PCU	"
4. REVIEW COST-RECOVERY PERFORMANCES, INCLUDING EXPERIENCE WITH VARIOUS FEE FORMULAE AND WITH PREMIA PAYMENT BY THE COMMUNITIES	DHPDS, AND OPERATIONS RESEARCH CONDUCTED WITH UNICEF ASSISTANCE	RHTS AND UNICEF	"
5. EXAMINE THE FUNCTIONALITY OF THE MIS SYSTEM	COMPUTER SYSTEM	PCU AND CERPOD	PY 1 & 2 ESPECIALLY
6. EXAMINE PERFORMANCE AGAINST QUANTIFIED INDICATORS (ON A STATIC BASIS BY REVIEWING THE BASELINE SURVEY AND IN A DYNAMIC SENSE, BY MONITORING DEVELOPMENTS AGAINST TARGET AND THRESHOLD VALUES)	INDICATORS AS STATED IN ANNEX 8-4	DHT AND RHTS	EACH YEAR
7. EXAMINE FUNCTIONALITY OF TREATMENT PROTOCOLS AND T & V TRAINING SYSTEM	TREATMENT PROTOCOLS, TRAINING MODULES AND SUPERVISION REPORTS	DNFSS	ESPECIALLY PY1-PY3
8. REVIEW THE EXPERIENCE WITH COMMUNITY DEVELOPMENT TRAINING AND ITS IMPACT ON SOCIAL MOBILIZATION			
9. DISCUSS UNICEF REPORTS AND ISSUES	UNICEF REPORT	PCU AND UNICEF	EACH YEAR
10. VERIFY THAT THE NEW REGIONAL ACCOUNTING SYSTEM IS IN PLACE AND IS PROPERLY OPERATING	COMPUTERIZED ACCOUNTING SYSTEM	RHTS AND PCU	PY1-PY2
B. IMPROVING SECTORAL RESOURCE USE			
1. MONITOR THE DEVELOPMENT AND TESTING OF OPERATIONAL PROCEDURES AND GUIDELINES	OPERATIONAL PROCEDURES AND GUIDELINES	DNSSF/DAF	PY1-PY3
2. REVIEW THE STAFFING AND EFFECTIVENESS OF DNFSS FOLLOWING THE "CADRE ORGANIQUE" AS WELL AS COORDINATION OF THE LARGE EXPATRIATE BILATERAL TEAM	DIRECT SUPERVISION	DNSSF, DNSP	PY1
3. DISCUSS WITH DAF PERSONNEL FINANCIAL STUDIES, AND ENSURE THAT COMPUTERIZED PERSONNEL AND BUDGET MANAGEMENT SYSTEM IS IN PLACE BY THE END OF PY2, AND THAT DAF STAFF IS TRAINED IN USING IT	STUDIES (BY 9/30/91)	DAF	ESPECIALLY PY1 & PY2
4. MONITOR STAFF REDEPLOYMENT, TAKING INTO ACCOUNT EARLY DEPARTURE PROGRAM AND PRIVATIZATION PITCH	MANPOWER DEVELOPMENT	DAF AND RHTS	EACH YEAR
5. PARTICIPATE IN REVIEW OF STUDY ON HOSPITAL EFFICIENCY	STUDY (BY 11/91)	DNSP WITH FAC ASSISTANCE	PY1-PY2
6. ENSURE THAT THE BUDGET NOMENCLATURE IS REVISED, THAT THE RECURRENT BUDGET TARGETS ARE MET AND THAT THE INVESTMENT BUDGET CRITERIA ARE RESPECTED	STUDY (BY 6/30/91)	DAF	EACH YEAR

AGREED MEASURES	INSTRUMENT	RESPONSIBILITY	YEAR
7. MONITOR IMPLEMENTATION OF THE DRUG REFORM MASTER PLAN:	MASTER-PLAN	CABINET, PPM, PCU	EACH YEAR
- ENSURE THAT THE CRITERIA ON DRUG PROCUREMENT (UNIPAC PRICE), PPM'S MARGIN AND AVAILABILITY (55 OF THE 60 MOST ESSENTIAL DRUGS AVAILABLE AT THE CERCLE ARE MET	UNIPAC CATALOGUE, STUDY ON MARGIN (6/30/91)		
- DISCUSSION OF STUDY ON UMPP AND AGREEMENT ON MEASURES TO BE TAKEN	STUDY (BY 3/31/91)	CABINET, PPM, PCU	EACH YEAR
- IMPLEMENTATION OF CONTRAT-PLAN IN PARTICULAR: STAFF REDUCTIONS, DELETION OF NON-PROFITABLE ACTIVITIES, STRENGTHENING STOCK MANAGEMENT, REVISING THE COMPENSATION SYSTEM, ESTABLISHING A COST ACCOUNTING AND AN INVENTORY SYSTEM	CONTRAT-PLAN	CABINET, PPM, PCU	EACH YEAR
- PRESCRIBERS TRAINING PROGRAM	"	"	"
8. VERIFY COMPLIANCE WITH PROCUREMENT ARRANGEMENTS AGREED WITH MSPAS	NOTE FROM AF&PH	CEPRIS	
C. POPULATION AND FAMILY PLANNING			
1. MONITOR ESTABLISHMENT OF POPULATION COORDINATION STRUCTURE AND PREPARATION OF ACTION PLAN	DIRECT SUPERVISION	MINPLAN WITH (POPULATION UNIT ASSISTANCE FROM ILO	PY1-PY2
2. REVIEW PROGRESS ON CENSUS	DIRECT SUPERVISION	CENSUS BUREAU-CERPOD	PY1-PY2
3. REVIEW CONTENT AND IMPLEMENTATION OF FP MANAGERS TRAINING PROGRAM	DIRECT SUPERVISION	DNSSF, PCU	EACH YEAR
4. MONITOR COORDINATION OF FP MATTERS	FP/IEC STRATEGY	DFH, PCU	EACH YEAR
5. ENSURE THAT FOLLOWING TOOLS ARE PROMPTLY PUT IN PLACE OR STRENGTHENED:	STAFF APPRAISAL REPORT	DNSP, PCU	EACH YEAR
- SYSTEM TO MONITOR FLOW AND USE OF EXTERNAL RESOURCES			
- INVENTORY OF STOCK AND LOGISTICAL SYSTEM			
- YEARLY COORDINATION MEETING WITH DONORS ON CONTRACEPTIVE NEEDS	-		
- YEARLY MEETING WITH PRIVATE OPERATORS AND NGO TO TAKE STOCK OF EXPERIENCES			
6. REVIEW PARTICIPATION OF NGOS AND PRIVATE SECTOR (LEVEL, QUALITY, POSSIBLE ISSUES)	DIRECT SUPERVISION	DNSP, PCU	EACH YEAR
. REVIEW STATUS OF:	TAFF APPRAISAL REPORT AND DIRECT SUPERVISION	NAS, AMPPF, DSF, DNAFLA, AMPPF	ESPECIALLY PY1-PY3
- IEC MESSAGE			
- MEDIA CAMPAIGN			
- DNAFLA PROGRAM			
- MEN'S FAMILY HEALTH EDUCATION PROGRAM			
8. REVIEW CHANGES IN PRACTICES REGARDING CONTRACEPTIVE DEMAND AND PRESCRIPTION	BENEFICIARY ASSESSMENT AND KAP		
9. REVIEW OPERATIONS OF POPFUND, INCLUDING DEPARTURE FROM INITIAL CEILINGS AND TARGETS	POPFUND STATUTES, IN-LAWS, ETC.	DNSP, PCU	EACH YEAR
D. RURAL WATER SUPPLY			
1. VERIFY THAT CONTRACTS BETWEEN VILLAGERS AND DNHE ARE SIGNED, AND EACH CONTRIBUTION PAID ONE MONTH BEFORE ARRIVAL OF BOREHOLE SITING TEAM	RANDOM CHECKS	DNHE	EACH YEAR
2. DISCUSS PHASE I OF IODINATION PROGRAM (200 POINTS) AND JUSTIFICATION FOR EXPANSION	EVALUATION REPORT	DNHE/FAC	END PHASE PY2
E. PROJECT COORDINATION			
1. ENSURE THAT ANNUAL REVIEWS ARE WELL PREPARED	PREPARATION REPORT (BY 9/30/ OF EACH YEAR)	PCU WITH ASSISTANCE FROM UNICEF AND CONSULTING FIRM	EACH YEAR
2. ENSURE THAT REGULAR COORDINATION MEETINGS ARE ORGANIZED	PROGRESS REPORTS	PCU	THROUGHOUT PROJECT
3. ENSURE TIMELINESS, QUALITY AND EXPLOITATION OF AUDITS	AUDIT REPORTS	PCU AND AUDIT FIRMS FIRMS ACCEPT TO IDA	EACH YEAR
4. ENSURE SUSTAINED IMPLEMENTATION OF MGMT.STUDY	A. ANDERSEN REPORT	CABINET, PCU	PY1-PY3

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

PROJECT COSTS BY COMPONENT, COST CATEGORY AND FINANCING SOURCE

1. Basis of cost estimates. Operation costs are based on prices at appraisal (April 1989) revised to reflect economic conditions a the time of negotiations (December 1990). Cost estimates for construction/rehabilitation are based on a survey of existing facilities and unit prices reconstructed for each construction component. Other cost estimates for goods are based on recent tenders in Mali or in the region for similar types of goods completed recently, with adjustment, where necessary, for regional cost differences. The average cost per month of internationally recruited services (US$12,000, including salaries, overhead and subsistence), locally recruited specialists (US$2,250), and the costs of scholarships abroad (US$2,000) are those applied for UNDP financed projects.

2. Foreign exchange component. The estimated foreign exchange component of the project is US$41.7 million (68% of total project cost) and is the result of the following estimated foreign exchange percentages for the individual expenditure categories:

Civil Works (general contracts)	50%
Community Participation	40%
Furniture	50%
Non-Medical Supplies and Equipment	100%
Medical Supplies and Equipment	100%
International Specialists/Volunteers	100%
Local Specialists	0%
Training Abroad	100%
Local Training	0%
Operating Costs	80%

3. Customs, duties and taxes. Cost estimates do not include duties or taxes. During negotiations the Government confirmed that the project will be exempt from taxes and duties.

4. Contingency allowances. The cost estimates include physical contingencies of (a) 10% for hardware components, such as civil works, furniture and equipment; and (b) 5% for specialist services, training, and operating costs. Allowances for annual price escalations are as follows:

Projected Annual Price Escalation Rates

	1991	1992	1993	1994	1995	1996	1997
Foreign Costs	3.9%	3.9%	3.9%	3.9%	3.9%	3.7%	3.7%
Local Costs	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%

5. Financing plan. The IDA credit was based on the assumption that cofinancing would be available from the Government, local communities, and external donors. Table 1 below summarizes the cofinancing arrangements.

TABLE 1

	EDF	FAC	REPUBLIC OF GERMANY	IDA	USAID
A. HEALTH					
1. COVERAGE AND QUALITY OF HEALTH SERVICES					
SUPPORT TO 120 COMMUNITY HEALTH CENTERS	-	-	X	-	TRAIN
QUALITY IMPROVEMENT OF HEALTH SERVICES	X	-	-	OPC	IEC
ESTABLISHING 21 DISTRICT TEAMS	CW	-	-	X	TRAIN
REGIONAL SUPPORT IN FIVE REGIONS	-	-	-	X	TRAIN
2. INCREASING THE EFFICIENCY OF RESOURCE USE					
STRENGTHENING SECTORAL PLANNING	-	-	-	XX	-
FACILITY PLANNING/MAINTENANCE	-	-	-	XX	-
AVAILABILITY OF ESSENTIAL DRUGS	TA/TRAIN	-	-	X	-
HUMAN RESOURCES DEVELOPMENT	-	-	-	XX	-
HEALTH FINANCING	-	-	-	XX	-
B. POPULATION AND FAMILY PLANNING					
1. INSTITUTIONAL STRENGTHENING	-	-	-	XX	-
2. IEC/FAMILY PLANNING SERVICES	CONTRACEP	CONTRACEP	CONTRACEP	CONTRACEP	X
3. POPULATION FUND	X	-	X	X	X
C. RURAL SUPPLY OF POTABLE WATER					
1. CONSTRUCTION OF 385 WATER POINTS	-	-	-	XX	-
2. REHABILITATION OF 500 WATERS POINTS	-	-	-	XX	-
3. SUPPLY/INSTALLATION OF IODINE MODULES	-	XX	-	-	-
4. STUDIES FOR FUTURE REHAB. EXTENSION	-	-	-	XX	-
D. PROJECT MANAGEMENT UNIT	-	-	-	XX	-

XX = FULL FINANCING
X = PARTIAL FINANCING
TA = TECHNICAL ASSISTANCE
TRAIN = TRAINING

CONTRACEP = CONTRACEPTIVES
CW = CIVIL WORKS
IEC = INFORMATION/EDUCATION/COMMUNICATION
MEDEQ = MEDICAL EQUIPMENT
OPC = OPERATING COSTS

6. Detailed project costs. The tables showing project costs by expenditure, category and by component are included in the report. Assumptions made in arriving at the cost estimates, as well as the detailed project costs by component, cost category and source of financing are given in the following tables:

Table 2 By Expenditure Category
Table 3 Financing Plan by Category
TAble 4 Financing Plan by Component
Table 5 By Expenditure Category and by Years
Table 6 By Component and by Years

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REPUBLIC OF MALI
SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT
BREAKDOWN OF SUMMARY ACCOUNTS
(US$'000)

TABLE 2

	Base Costs				Physical Contingencies				Price Contingencies				Total Incl Cont			
	For Exch	Local (Excl Taxes)	Duties & Taxes	Total	For Exch	Local (Excl Taxes)	Duties & Taxes	Total	For Exch	Local (Excl Taxes)	Duties & Taxes	Total	For Exch	Local (Excl Taxes)	Duties & Taxes	Total
I INVESTMENT COSTS																
A CONSTRUCTION																
1 GENERAL CONTRACTS	7 649 03	3 862 22		11 511 24	764 90	386 22		1 151 12	1 044 19	407 52		1 451 71	9 458 12	4 655 96		14 114 07
2 SELF HELP	1 080 96	2 002 52		3 083 48	108 10	200 25		308 35	233 44	326 88		560 33	1 422 50	2 529 66		3 952 16
Sub total CONSTRUCTION	8 729 99	5 864 73		14 594 72	873 00	586 47		1 459 47	1 277 63	734 40		2 012 04	10 880 62	7 185 61		18 066 23
B FURNITURE AND EQUIPMENT																
1 VEHICLES	1 827 62			1 827 62	182 76			182 76	305 12			305 12	2 315 50			2 315 50
2 COMPUTERS	39 29			39 29	3 93			3 93	3 61	0 00		3 61	46 83			46 83
3 NON HEALTH RELATED MATERIALS	15 88	19 61		35 50	1 59		1 96	3 55	1 93			1 81	19 40		23 18	42 78
4 FURNITURE	351 57	434 19		785 76	35 16	43 42		78 58	52 86	49 57		102 38	439 58	527 13		966 72
5 NON - MEDICAL EQUIPMENT AND SUPPLIES	3 881 89	506 62		4 388 51	369 19	50 66		419 85	495 08	51 66		546 74	4 556 16	608 94		5 165 10
Sub total FURNITURE AND EQUIPMENT	5 926 25	960 42		6 886 68	592 63	96 04		688 67	858 60	102 99		961 59	7 377 48	1 159 46		8 536 94
C MEDICAL EQUIP AND PHARMACEUTICALS																
1 MEDICAL EQUIPMENT AND SUPPLIES	20 08			20 08	2 01			2 01	2 27			2 27	24 36			24 36
2 HEALTH RELATED MATERIALS	1 534 50			1 534 50	153 45			153 45	256 41	0 00		256 41	1 944 35			1 944 35
3 ESSENTIAL DRUGS	1 280 61			1 280 61	128 06			128 06	255 39	0 00		255 39	1 664 06			1 664 06
4 CONTRACEPTIVES	4 000 00			4 000 00	400 00			400 00	942 51	0 00		942 51	5 430 51			5 430 51
5 IODINE MODULES	1 165 61			1 165 61	116 56			116 56	233 01	0 00		233 01	1 515 17			1 515 17
Sub total MEDICAL EQUIP AND PHARMACEUTICALS	8 000 79			8 000 79	800 08			808 08	1 689 59	0 00		1 689 59	10 578 46			10 578 46
D SPECIALIST SERVICES																
1 INTERNATIONAL SPECIALISTS	3 182 40			3 182 40	159 12			159 12	388 76	0 00		388 76	3 730 28			3 730 28
2 TECHNICAL FEES	1 463 76	1 205 19		2 668 95	73 19		60 26	133 45	187 98			321 83	1 734 93		1 389 30	3 124 23
3 NATIONAL SPECIALISTS		2 262 97		2 262 97			113 15	113 15		260 41		260 41			2 636 53	2 636 53
Sub total SPECIALIST SERVICES	4 646 16	3 468 16		8 114 32	232 31		173 41	405 72	586 74			384 27	971 00	5 465 21	4 025 83	9 491 04
E TRAINING																
1 LOCAL MALIAN TRAINING		2 088 73		2 088 73			104 44	104 44				238 87	238 87		2 432 04	2 432 04
2 REGIONAL AFRICAN TRAINING	368 64			368 64	18 33			18 33	66 45			0 00	66 45	451 42		451 42
3 OVERSEAS TRAINING	375 85			375 85	18 79			18 79	61 76			0 00	61 76	456 41		456 41
4 TRAINING MATERIALS	974 31			974 31	48 72			48 72	106 77			0 00	106 77	1 129 79		1 129 79
5 TRAINING DEV AND EVAL		99 61		99 61			4 98	4 98				15 30	15 30		119 90	119 90
Sub total TRAINING	1 716 80	2 188 34		3 905 14	85 84		109 42	195 26	234 99			254 18	489 16	2 037 83	2 551 94	4 589 56
F POPULATION FUND	1 960 95	2 823 00		4 783 95	196 10		282 30	478 40	8 28			7 76	16 04	2 165 32	3 113 07	5 278 39
Total INVESTMENT COSTS	31 080 95	15 304 66		46 385 61	2 787 95		1 247 64	4 035 59	4 695 82			1 483 60	6 139 42	38 504 71	18 035 90	56 540 62
II RECURRENT COSTS																
A VEHICLE OPERATIONS	816 60	223 22		1 039 82	40 83		11 16	51 99	170 95			35 12	206 07	1 028 48	269 50	1 297 88
B EQUIPMENT MAINTENANCE	31 08	9 24		40 32	1 55		0 46	2 02	5 12			1 15	6 27	37 76	10 85	48 60
C INFRASTRUCTURE MAINTENANCE	14 42	4 45		18 88	0 72		0 22	0 94	2 76			0 65	3 41	17 91	5 32	23 23
D REPLENISHMENT OF MATERIALS / SUPPLIES	14 03	4 33		18 37	0 70		0 22	0 92	2 47			0 58	3 05	17 21	5 13	22 34
E PER DIEMS		636 45		636 45			31 82	31 82				103 63	103 63		171 90	171 90
F PRODUCTION OF RESEARCH / INFO MATERIALS	8 45	2 61		11 05	0 42		0 13	0 55	1 49			0 35	1 84	10 36	3 09	13 44
G OPERATING EXPENDITURES	557 75	172 21		729 96	27 89		8 61	36 50	109 70			25 81	135 81	695 24	206 43	901 77
H SALARIES	1 079 12	333 18		1 412 31	53 96		16 66	70 62	229 45			53 53	282 98	1 362 53	403 37	1 765 90
Total RECURRENT COSTS	2 521 45	1 385 69		3 907 15	126 07		69 28	195 36	521 95			220 61	742 55	3 169 47	1 671 59	4 885 06
Total	33 582 40	16 690 36		50 272 78	2 914 02		1 316 93	4 230 95	5 177 77			1 704 21	6 881 97	41 674 19	19 711 49	61 385 68

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TABLE 3

REPUBLIC OF MALI
SECOND HEALTH, POPULATION AD RURAL WATER SUPPLY PROJECT
FINANCING PLAN BY SUMMARY ACCOUNTS
(US$'000)

TABLE 4

REPUBLIC OF MALI
SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT
FINANCING PLAN BY PROJECT COMPONENTS
(US$ MILLION)

	INTERNATIONAL DEVELOPMENT ASSOCIATION		USAID		EUROPEAN DEV FUND		IAC		FEDERAL REPUBLIC OF GERMANY		LOCAL COMMUNITY PARTICIPATION		GOVERNMENT OF MALI		Total		for Each
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
A. HEALTH																	
1. COVERAGE AND QUALITY OF HEALTH SERVICES																	
SUPPORT TO 120 COMMUNITY HEALTH CENTERS	.	.	0.11	1.60					3.64	52.61	2.62	37.96	0.54	7.84	6.91	11.26	3.88
QUALITY IMPROVEMENT OF HEALTH SERVICES	0.26	2.80	1.17	12.51	7.66	83.69			.	-	.	-	0.86	0.79	9.15	14.91	5.18
ESTABLISHING 21 DISTRICT TEAMS	4.14	75.68	0.71	12.98	0.46	8.45			.	-	.	-	0.16	2.97	5.47	8.92	3.85
REGIONAL SUPPORT IN FIVE REGIONS	2.51	82.62	0.45	14.77					.	-	.	-	0.08	2.61	3.04	4.96	1.52
Sub-Total COVERAGE AND QUALITY OF HEALTH SERVICES	6.91	28.11	2.44	9.92	8.12	33.05			3.64	14.80	2.62	10.66	0.85	3.45	24.58	40.84	14.85
2. INCREASING THE EFFICIENCY OF RESOURCE USE																	
STRENGTHENING SECTORAL PLANNING	1.90	99.47	.		.				.	-		.	0.01	0.53	1.92	2.67	0.94
FACILITY PLANNING / MAINTENANCE	0.73	83.30	.	-	.	.		.	.	-		.	0.05	5.70	0.78	1.28	0.57
AVAILABILITY OF ESSENTIAL DRUGS	0.58	22.14		-	1.18	65.81				-		.	0.04	2.65	1.79	2.91	1.02
HUMAN RESOURCES DEVELOPMENT	0.31	89.69	.	-	.			-		-		.	0.00	0.31	0.31	0.51	0.31
HEALTH FINANCING	0.27	100.00	.	-	.	.		-	.	-					0.27	0.44	0.12
Sub-Total INCREASING THE EFFICIENCY OF RESOURCE USE	3.38	72.57	.	-	1.18	25.20			.	-		.	0.10	2.23	4.87	7.61	3.55
Sub-Total HEALTH	10.30	35.21	2.44	8.33	9.30	31.78			3.64	12.43	2.62	8.97	0.95	3.25	29.25	47.65	18.21
B. POPULATION AND FAMILY PLANNING																	
1. INSTITUTIONAL STRENGTHENING	1.81	100.00	.	.					.		.				1.81	2.95	1.13
2. CORE IEC FP PROGRAM	0.64	6.51	6.03	61.63	1.77	18.08			1.25	12.79			0.10	0.98	9.79	15.95	7.68
3. POPULATION FUND	0.57	11.12	1.86	32.26	1.25	24.44			1.25	24.44			0.40	7.74	5.13	8.36	2.10
Sub-Total POPULATION AND FAMILY PLANNING	3.02	18.03	7.88	45.96	3.02	18.08			2.51	14.98			0.49	2.95	16.73	27.25	10.91
C. RURAL SUPPLY OF POTABLE WATER																	
1. CONSTRUCTION OF 385 WATER POINTS	10.10	97.86							.		0.21	2.04			10.31	16.79	6.38
2. REHABILITATION OF 500 WATER POINTS	1.46	100.00	.						.	-	.	-			1.46	2.38	1.26
3. SUPPLY / INSTALLATION OF IODINE MODULES	.	.	.				1.69	100.00	.		.				1.69	2.76	1.61
4. STUDIES FOR FUTURE REHAB. EXTENSION	0.32	100.00							.						0.32	0.52	0.18
Sub-Total RURAL SUPPLY OF POTABLE WATER	11.88	86.19					1.69	12.28			0.21	1.53			13.78	22.45	11.42
D. PROJECT MANAGEMENT UNIT	1.42	87.24	.	-	.	-	.	-	.	-	.	-	0.21	12.76	1.62	2.65	1.14
Total Disbursement	26.61	43.35	10.13	16.50	12.32	20.08	1.69	2.76	6.14	10.01	2.83	4.62	1.65	2.69	61.38	100.00	41.67

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	Totals Including Contingencies (CFAF '000)							Totals Including Contingencies (US$ '000)						
	1992	1993	1994	1995	1996	1997	Total	1992	1993	1994	1995	1996	1997	Total
I INVESTMENT COSTS														
A CONSTRUCTION														
1 GENERAL CONTRACTS	646 839 23	1 057 627 71	1 156 832 03	569 807 28	108 486 31	31 268 20	3 570 860 75	2 556 68	4 180 35	4 572 46	2 252 20	428 80	123 58	14 114 07
2 SELF HELP	20 801 07	92 071 18	180 682 98	256 082 57	327 687 05	142 570 98	999 895 77	82 22	363 92	635 11	1 012 18	1 295 21	563 52	3 952 16
Sub-Total CONSTRUCTION	667 640 30	1 149 698 89	1 337 514 99	825 889 85	436 173 36	173 838 18	4 570 756 52	2 638 89	4 544 26	5 207 57	3 264 39	1 724 01	687 11	18 066 23
B FURNITURE AND EQUIPMENT														
1 VEHICLES	103 945 13	101 477 13	113 820 01	128 439 61	96 349 77	41 990 02	585 822 66	410 85	401 10	449 09	507 67	380 83	165 97	2 315 50
2 COMPUTERS	6 933 08	2 886 37	2 228 78				11 848 21	27 40	10 62	8 81				46 83
3 NON - HEALTH - RELATED MATERIALS	6 202 44	889 83	1 054 25	1 325 15	782 93	788 61	10 823 30	24 52	2 73	4 17	5 24	3 02	3 12	42 78
4 FURNITURE	73 470 94	41 856 93	35 444 53	42 291 93	36 445 57	15 089 01	244 578 91	290 40	165 44	140 10	167 16	144 05	59 56	966 72
5 NON - MEDICAL EQUIPMENT AND SUPPLIES	345 841 03	325 683 48	318 572 62	294 704 15	57 167 40	14 722 83	1 356 771 52	1 366 96	1 287 21	1 259 58	957 21	225 96	58 19	5 165 10
Sub-total FURNITURE AND EQUIPMENT	536 383 61	472 373 63	471 020 17	466 760 84	190 725 67	72 570 47	2 158 844 59	2 120 13	1 867 09	1 861 74	1 647 28	753 86	286 84	8 536 94
C MEDICAL EQUIP AND PHARMACEUTICALS														
1 MEDICAL EQUIPMENT AND SUPPLIES	2 757 00	2 089 40	310 13	322 22	334 79	347 50	6 161 04	10 90	8 26	1 23	1 27	1 32	1 37	24 35
2 HEALTH - RELATED MATERIALS	65 498 28	100 338 90	113 175 48	106 977 51	79 545 64	26 387 11	491 922 94	258 88	396 60	447 33	422 84	314 41	104 30	1 944 35
3 ESSENTIAL DRUGS	12 628 90	55 766 06	90 076 24	116 354 15	101 444 13	44 737 61	421 007 09	49 92	220 42	356 03	459 90	400 96	176 83	1 664 06
4 CONTRACEPTIVES	30 068 80	93 724 46	190 758 43	303 532 56	315 370 35	436 464 52	1 373 929 14	118 85	370 45	769 80	1 199 73	1 246 52	1 725 16	5 430 51
5 IODINE MODULES	39 881 51	48 658 62	63 621 41	86 102 85	80 945 06	84 018 42	383 338 67	158 07	192 33	251 47	261 28	319 94	332 09	1 515 17
Sub-total MEDICAL EQUIP AND PHARMACEUTICALS	150 845 40	300 577 44	481 942 70	583 289 11	577 639 96	591 956 16	2 676 358 77	596 82	1 188 06	1 824 86	2 345 02	2 283 16	2 339 75	10 578 46
D SPECIALIST SERVICES														
1 INTERNATIONAL SPECIALISTS	323 750 01	218 292 79	193 343 00	119 757 40	89 276 00	8 332 50	943 760 00	1 279 68	862 82	764 20	473 35	317 30	32 93	3 730 28
2 TECHNICAL FEES	175 288 38	209 278 88	167 578 57	173 383 41	55 177 73	9 782 38	790 431 31	692 84	827 19	662 13	685 31	218 09	38 67	3 124 23
3 NATIONAL SPECIALISTS	144 666 21	146 332 26	112 695 92	100 931 06	117 853 83	44 561 81	667 040 99	571 80	578 39	445 44	398 94	465 82	176 13	2 636 53
Sub-total SPECIALIST SERVICES	643 713 58	573 904 93	473 558 50	394 071 87	253 307 45	62 676 77	2 401 233 10	2 544 32	2 268 40	1 871 77	1 557 60	1 001 22	247 73	9 491 04
E TRAINING														
1 LOCAL MALIAN TRAINING	138 700 52	133 509 62	89 662 64	125 550 20	78 950 55	48 922 52	615 306 05	548 22	527 71	354 40	496 25	312 10	193 37	2 432 04
2 REGIONAL AFRICAN TRAINING	11 678 72	18 211 98	21 050 48	21 786 15	23 706 16	17 776 01	114 210 48	46 16	71 98	83 20	86 11	93 70	70 26	451 42
3 OVERSEAS TRAINING	16 819 40	21 052 92	20 281 78	16 366 89	20 349 99	12 498 76	115 470 87	66 48	83 22	112 18	64 69	80 42	49 40	456 41
4 TRAINING MATERIALS	158 720 91	28 671 78	32 343 73	33 235 53	29 011 13	2 854 90	285 837 98	631 31	113 33	127 84	131 37	114 67	11 28	1 129 79
5 TRAINING DEV AND EVAL	1 224 48	4 071 73	5 138 34	5 534 77	7 267 10	7 087 61	30 334 05	4 84	16 09	20 31	21 88	28 72	28 05	119 90
Sub-total TRAINING	328 145 04	205 519 02	178 576 95	202 473 49	159 294 93	89 149 80	1 161 159 23	1 297 02	812 33	697 93	800 29	629 52	352 37	4 589 56
F POPULATION FUND	108 687 78	262 527 22	264 604 68	329 742 08	219 850 97	149 219 00	1 335 432 12	433 95	1 037 66	1 045 87	1 303 33	868 19	589 80	5 278 39
Total INVESTMENT COSTS	2 436 525 70	2 964 601 29	3 155 217 99	2 762 227 34	1 836 782 34	1 139 411 73	14 304 776 34	9 630 54	11 717 78	12 510 74	10 917 89	7 260 05	4 503 60	56 540 62
II RECURRENT COSTS														
A VEHICLE OPERATIONS	13 980 10	36 150 91	48 727 15	70 192 91	85 558 79	78 754 15	328 384 02	55 26	119 17	192 60	277 44	342 13	311 28	1 297 88
B EQUIPMENT MAINTENANCE	854 93	2 964 11	4 120 04	1 400 32	1 452 19	1 504 84	12 296 42	3 38	11 72	16 28	5 53	5 74	5 95	48 60
C INFRASTRUCTURE MAINTENANCE	286 23	1 038 77	1 077 11	1 116 89	1 158 14	1 200 03	5 877 17	1 13	4 11	4 26	4 41	4 58	4 74	23 23
D REPLENISHMENT OF MATERIALS / SUPPLIES	858 69	890 37	923 24	957 33	992 69	1 028 60	5 650 92	3 38	3 52	3 65	3 78	3 92	4 07	22 34
E PER DIEMS	6 990 86	17 209 70	25 682 16	40 636 54	49 626 10	55 144 83	195 290 18	27 63	68 02	101 51	160 62	196 15	217 98	771 90
F PRODUCTION OF RESEARCH / INFO MATERIALS	238 52	824 42	683 88	443 21	735 33	476 20	3 401 57	0 94	3 26	2 70	1 75	2 91	1 88	13 44
G OPERATING EXPENDITURES	17 108 92	26 211 61	36 830 03	48 128 20	53 256 94	46 811 41	228 147 11	67 62	103 60	144 78	190 23	210 50	185 03	901 77
H SALARIES	22 669 41	36 000 78	60 788 66	89 116 85	115 229 73	122 985 81	446 772 23	89 60	142 30	240 20	352 24	455 45	486 11	1 765 90
Total RECURRENT COSTS	62 987 67	125 290 67	178 613 27	251 992 25	309 009 92	307 905 85	1 225 799 63	248 96	495 69	706 98	996 02	1 221 38	1 217 02	4 845 06
Total PROJECT COSTS	2 499 513 37	3 089 891 96	3 343 831 27	3 014 219 49	2 145 802 26	1 447 317 62	15 530 575 97	9 879 50	12 173 49	13 216 72	11 913 91	8 481 43	5 720 62	61 385 68

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REPUBLIC OF MALI
SECOND HEALTH POPULATION AND RURAL WATER SUPPLY PROJECT
Project Components by Year
(CFAF Million)

	Base Costs						Total	
	1992	1993	1994	1995	1996	1997	CFAF	(US$ Million)
A HEALTH								
1. COVERAGE AND QUALITY OF HEALTH SERVICES								
SUPPORT TO 120 COMMUNITY HEALTH CENTERS	44 16	138 33	232 67	343 35	395 26	215 51	1,369 29	5 41
QUALITY IMPROVEMENT OF HEALTH SERVICES	292 65	274 84	687 32	341 21	228 80	53 71	1,878 33	7 42
ESTABLISHING 21 DISTRICT TEAMS	1 98	115 35	244 85	273 46	269 26	181 18	1,086 08	4 29
REGIONAL SUPPORT IN FIVE REGIONS	99 51	378.32	56 12	38 47	35 87	32 58	640 88	2 53
Sub-Total COVERAGE AND QUALITY OF HEALTH SERVICES	438 31	906 64	1,220 96	996 50	929 20	482 98	4,974 58	19 66
2. INCREASING THE EFFICIENCY OF RESOURCE USE								
STRENGTHENING SECTORAL PLANNING	166.56	62 73	31 22	45 47	11 24	8 33	325 55	1 29
FACILITY PLANNING / MAINTENANCE	71 24	26 87	18 88	18 88	18 88	12 17	166 92	0 66
AVAILABILITY OF ESSENTIAL DRUGS	104 95	103 17	68 48	50 48	44 29	8 16	379 52	1 50
HUMAN RESOURCES DEVELOPMENT	29.64	16 26	18.63	0 24	2 71	0 24	67 71	0 27
HEALTH FINANCING	27.97	9 24	13 50	7 87	1 22	-	59 80	0 24
Sub-Total INCREASING THE EFFICIENCY OF RESOURCE USE	400 34	218 27	150 71	122 94	78 34	28 90	999 50	3 95
Sub-Total HEALTH	838 65	1,124 92	1,371 66	1,119.43	1,007 53	511 88	5,974 08	23 61
B. POPULATION AND FAMILY PLANNING								
1 INSTITUTIONAL STRENGTHENING	218 30	93 99	34 52	25 23	25 23	-	397 26	1 57
2 CORE IEC FP PROGRAM	437 95	333 73	268 58	315 17	286 56	341 47	1,983 46	7 84
3. POPULATION FUND	95 17	230.82	230 82	291 38	196.21	135 65	1,180 06	4 66
Sub-Total POPULATION AND FAMILY PLANNING	751 42	658 53	533 92	631 78	508 00	477 13	3,560 78	14 07
C RURAL SUPPLY OF POTABLE WATER								
1 CONSTRUCTION OF 385 WATER POINTS	454 48	604 34	604 34	454 99	23 65		2,141 80	8 47
2 REHABILITATION OF 500 WATER POINTS	-	98 22	98 22	88 76	10 66	-	295 86	1 17
3. SUPPLY / INSTALLATION OF IODINE MODULES	38 61	45 22	56 90	56 90	67 07	67 07	331 77	1 31
4. STUDIES FOR FUTURE REHAB EXTENSION	35 96	35 96	-	-	-	-	71 93	0 28
Sub-Total RURAL SUPPLY OF POTABLE WATER	529 06	783 74	759 46	600 65	101 37	67 07	2,841 35	11 23
D PROJECT MANAGEMENT UNIT	81 71	49 79	76 35	55 55	49 36	30 05	342 81	1 35
Total BASELINE COSTS	2,200 84	2,616 98	2,741 39	2,407 41	1,666 26	1,086 12	12,719 01	50 27
Physical Contingencies	173 34	222 59	239 19	206 10	138 15	91 07	1,070 43	4 23
Price Contingencies	125 34	240.32	363 26	400 71	341 39	270 13	1,741 14	6 88
Total PROJECT COSTS	2,499 51	3,079 89	3,343 83	3,014 22	2,145 80	1,447 32	15,530 58	61 39
Foreign Exchange	1,748 60	2,035 60	2,290 05	2,062 65	1,384 76	1,021 92	10,543 57	41 67

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REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

KEY DOCUMENTS IN THE PROJECT FILE/
SELECTION DE DOCUMENTS DANS LE DOSSIER DU PROJET

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4. Recurrent Costs in the Health Sector, World Health Organization, Geneva

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11. Enquête Démographique et de Santé au Mali, Centre d'Etudes et de Recherche sur la Population pour le Développement CERPOD, de l'Institut du Sahel, 1987.

12. Population Sector Memorandum, World Bank, February 1988.

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13. Aperçu de la Consommation Alimentaire et de la Situation Nutritionnelle au Mali, USAID, Mars 1988.

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REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

SPECIALIST SERVICES AND STUDIES

DESCRIPTION	INT'L/NATIONAL	YEARS OF PROJECT 1	2	3	4	5	6	TOTAL
		(IN MAN-MONTHS)						
- ARCHITECTE (INFRASTRUCTURE PROGRAM)	INT'L	7	7					14
- MIS SPECIALIST (REGION PERSONNEL MANAGEMENT)	INT'L		3					3
- DRUG SPECIALISTS								
* REGION MANAGEMENT	INT'L	1	1	1	1			4
* CENTRAL LEVEL (PHARMACY DIVISION)	INT'L	3	3	3	3			12
* PRESCRIPTION SPECIALIST	INT'L	2	2	2				6
* CENTRAL LEVEL (DRUG MANAGER/SPECIALIST)	INT'L	12	6	6	6			36
- HEALTH PLANNER (DNPFSS)	INT'L	2	2	2				6
- BUDGET SPECIALIST (CAF)	INT'L	4	2	2	2	1	1	12
- PERSONNEL MANAGEMENT SPEC. (DAF)	INT'L	6	2	1	1	1	1	12
- POPULATION AND SECTORAL SPECIALISTS	INT'L	8	8	8				24
- O&M SPECIALIST	INT'L	6	6					12
- IEC SPECIALIST	INT'L	6	3	1	1	1		12
FP DESIGN/DELIVERY SPECIAL.	INT'L	3	6	1	1	1		12
- FP CONSULTANTS	NAT.	48						48
- PHYSICAL INVENTORY SPECIAL.	INT'L		2					2
- PROCUREMENT SPECIAL.	INT'L		4					4
- FACILITY PLANNER	NAT.		12	12	12	12	12	60
- MAINTENANCE SPECIAL.	NAT.		12	12	12	12		48
- MOBILE TECHNICIANS	NAT.	24	24	24	24	24		120
- CONSTRUCTION SPECIAL.	NAT.	12	12	12	12	12		60
- (PROCUR., ENGINEER, AUDIT, ETC.)	NAT.	6	5	5	2	2	2	22
- EVALUATION SPECIAL.+ PROJECT PREPARATION	INT'L	3	3	12	11	9		38
- PCU	NAT.	108	108	108	108	108	108	648
PM - WATER SUPPLY ENGINEERS	INT'L							N/A
PM - IODINATION SPECIAL.	INT'L							N/A
		TOTAL MAN-MONTHS OR 101.2 MAN-YEARS						1 215

OF WHICH NATIONAL = 826 MAN-MONTHS OR 68%; INT'L = 389 MAN-MONTHS OR 32%

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

SUMMARY OF THE STUDIES PROPOSED

SUBJECT	OBJECTIVE	RESPONSIBILITY	PY1	PY2	PY3	PY4	PY5	PY6
I. ORGANIZATION AND FINANCING								
1. HOSPITAL EFFICIENCY STUDY	-DETERMINE COSTS NORMS AND STANDARDS TO OPTIMIZE HOSPITAL EFFICIENCY	DNSP WITH FAC ASSISTANCE	X					
2. STUDY OF BUDGET NOMENCLATURE, DEFINITION OF BUDGETARY NORMS, REFINING SECTORAL FINANCIAL ANALYSIS (ESPECIALLY) PRIVATE FINANCING	-ESTABLISH A STRONG COMPUTERIZED, TRANSPARENT BUDGET PREPARATION AND MONITORING SYSTEM	DAF WIT CONSULTANTS	X					
3. STUDY OF PERSONNEL AND O AND M (INCLUDING INCENTIVES AND CAREER PROSPECTS)	-RATIONALIZE THE STAFFING OF MSPAS AND IMPROVE PERFORMANCE INCENTIVES AND EFFICIENCY OF ITS PERSONNEL, ESTABLISH A COMPUTERIZED PERSONNEL MANAGEMENT SYSTEM	DAF WITH CONSULTANTS AND IN LIAISON WITH MINISTRY OF CIVIL SERVICES	X					
4. REVIEW OF IMPACT OF VARIOUS FEE SYSTEMS ON COST-RECOVERY AND UTILIZATION AND QUALITY OF HEALTH SERVICES	-GUIDE COMHC IN OPTING BETWEEN VARIOUS FEE OPTIONS	DNPFSS/DAF		X				
5. ANALYSIS OF JOB MARKET FOR HEALTH GRADUATES	-DETERMINE INTAKE OF HEALTH SCHOOLS	DNPFSS/DAF	X					
6. PROPOSALS FOR SAFETY NETS AT COMMUNITY LEVEL AND FOR COMMUNITY PAID INCENTIVES (OPERATIONS RESEARCH)	-GUIDE COMHCS IN CHOOSING BETWEEN OPTIONS TO PROTECT THE POOR AND IMPROVE PERFORMANCE	LOCAL CONSULTANTS	X	X	X			
7. REVIEW OF THE LEGAL FRAMEWORK FOR THE PROMOTION OF PRIVATE MEDICINE	-IMPROVE INCENTIVES AS NEEDED	LOCAL CONSULTANTS			X			
8. EVALUATION OF EXISTING CONTRACEPTIVES STOCK, INVENTORY AND LOGISTICAL SYSTEMS	-PROPOSE GRADUAL EXPANSION AND MERGING OF TWO EXISTING SYSTEMS	LOCAL CONSULTANTS			X			
9. DIAGNOSIS OF UMPP	-TO INCREASE THE EFFICIENCY OF THE DRUG SECTOR	DSF/AMPPF WITH ASSISTANCE FROM CONSULTANTS	X					

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

Cont'd.

SUMMARY OF THE STUDIES PROPOSED

SUBJECT	OBJECTIVE	RESPONSIBILITY	PY1	PY2	PY3	PY4	PY5	PY6
10. INTERNAL REVIEW OF PPM	-RATIONALIZATION OF THE DRUG SECTOR THROUGH COST REDUCTION AND INCREASED TRANSPARENCY	DNSP WITH ASSISTANCE FROM INT'L CONSULTANT	X					
11. PRICING OF CONTRACEPTIVES	-DETERMINE THE APPROPRIATE PRICING LEVEL TO ENCOURAGE CONTRACEPTIVE USE WHILE ENSURING ITS SUSTAINABILITY	DSF/AMPPF	X					
12. MONITORING THE IMPACT OF CUMULATED COST-RECOVERY	-PROVIDE A WARNING SYSTEM WHEN COST-RECOVERY EXCEEDS SUSTAINABLE LIMITS	MINPLAN WITH SAL BACK-UP	X	X	X	X	X	X
EPIDEMIOLOGY								
1. DEFINING THE PACKAGE OF REFERRAL CARE BASED ON MALIAN EPIDEMIOLOGICAL PROFILE AND PHC MINIMUM PACKAGE	-FINETUNE AND RATIONALIZE EXISTING PACKAGE IN LIGHT OF NEW DISTRICT-BASED HEALTH SYSTEM TO ALLOW START-UP IN PY-2	DNSP WITH LOCAL CONSULTANTS	X					
2. FERTILITY DETERMINANTS	(A) BENEFICIARY ASSESSMENT (B) FULL STUDY TO HELP REFINE AND MONITOR THE IEC STRATEGY	DNAS/AMPPF	X	X	X	X	X	X
3. EVALUATION OF IMPACT OF A FUNCTIONAL COMHC ON: - MORTALITY/MORBIDITY - SELF-CARE - FERTILITY	PROVIDE FEEDBACK TO IMPROVE COMHC EFFICIENCY	DNPFSS				X	X	X
4. STD/AIDS SURVEY	GUIDE THE FORMULATION AND IMPLEMENTATION OF AIDS PROGRAM	DNSP WITH LOCAL CONSULTANT			X			
C. SOCIOLOGY								
1. SURVEY OF SOCIOLOGICAL FACTORS IN THE SUCCESS OF COMHCS	IMPROVE THE CHANCES OF SUCCESS OF THE PROGRAM (BENEFICIARY ASSESSMENT)	DNAS WITH ASSISTANCE FROM LOCAL CONSULTANTS				X	X	X
2. SURVEY OF DIFFERENCES IN COMMUNITY PARTICIPATION BETWEEN URBAN AND RURAL AREAS	FINETUNE THE IEC AND COMMUNITY DEVELOPMENT ASPECTS OF THE COMHC PROGRAM	DNAS WITH ASSISTANCE FROM LOCAL CONSULTANTS						

XN4-1.N

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

PROCUREMENT PROCEDURES

Part A. Procurement of Goods and Works

1. Except as provided for in Part C hereof, works and goods (boreholes drilling, water pumps, furniture, medical and surgical equipment and materials totalling about US$13.9 million equivalent financed by IDA) would be procured under contracts awarded in accordance with procedures consistent with those set forth in Sections I and II of the "Guidelines for Procurement Under IBRD Loans and IDA Credits" published in May 1985 (the guidelines).

Part B. Preference for Domestic Manufacturers and Contractors

2. In the procurement of works and goods in accordance with the procedures described in Part A.1 hereof, the Borrower may grant a margin of preference of 15% to manufacturers and 7.5% to civil works contractors in accordance with, and subject to the provisions of paragraph 2.55 and 2.56 of the guidelines and para 5 of Appendix 2 thereof. During the appraisal mission, local authorities were informed that procurement under local procedures does not qualify for preference.

Part C. Prequalification would be required for the civil work contracts related to borehole drilling and pump installation.

Part D. Other Procurement Procedures

3. Civil works and goods contracts financed by IDA, estimated to cost between US$20,000 and US$200,000 equivalent per contract, which are small in size, involve widely dispersed sites, apply labor-intensive techniques and correspond to goods available locally at prices below the international market, would be procured under contracts awarded on the basis of competitive bidding advertised locally (LCB), in accordance with procedures satisfactory to IDA, provided that: (a) bidders are allowed a sufficient period for submission of bids (45 days minimum); (b) evaluation criteria are clearly specified--prices, capacity and capability to perform, adequacy of equipment and personnel, and financial capacity; (c) no preference margin is granted to domestic contractors, suppliers and manufacturers; and (d) eligible foreign firms are not precluded from participation and are not required to be incorporated in Mali in order to participate in the bidding. Aggregate amount of such procurement would not exceed the equivalent of US$2.6 million equivalent.

4. Items under category "operating costs" which cannot be grouped into bid packages of at least US$20,000 equivalent, provided the aggregate amount of such procurement would not exceed US1.2 million equivalent, would be procured through international and/or local shopping on the basis of quotations obtained from at least three foreign and/or local reliable suppliers in accordance with procedures acceptable to IDA.

5. Grant supporting the self-help construction program financed by other donors, would be provided in accordance with their own procedures. They represent subsidies to match the financial efforts of communities to construct, rehabilitate and equip Community Health Centers. Given the number and small size of contracts (about US$40,000 each), local shopping would normally be an appropriate method to procure small and simple works, provided the contract awards are based on comparing price quotations obtained from at least three contractors and/or suppliers.

Part E. Specialist Services and Training

6. Specialist services and training, including audit services, totalling US$6.8 million equivalent, would be contracted in accordance with IDA's guidelines. While IDA recommends inviting proposals from a short list of firms, it does not object to the Borrower requesting a proposal from a single firm or an individual specialist of its choice, provided that conditions for such a decision meet the guideline requirements and that IDA approves the firm invited and, subsequently, the contract. Where a number of consultants are to be invited to submit proposals, the selection procedure and evaluation criteria to be adopted should be determined prior to inviting proposals and be included in the letter of invitation. The short list should normally comprise a wide geographic spread of firms, with a lower limit of three and a upper limit of six.

Part F. Review of Procurement Decision by IDA

7. Prior review. About 15 bid packages/contracts are expected to make up the estimated US$16.5 million in the works and equipment categories. With a threshold of US$200,000 for prior IDA review of procurement documentation, about 20% of the total number of packages for works and goods would cover about 84% of the value contracted for works and goods. On that basis, between five and six contracts amounting to about US$13.9 million over the six-year procurement period would be subject to prior review, which represents a reasonable workload for IDA staff. For all contracts or bid packages of at least US$200,000 equivalent, each of the following stages in the procurement process would be subject to IDA's prior review and comment before they are implemented and finalized:

- Scope and cost of contract (list of equipment or summary of civil works);
- Proposal for bidding or selection process;
- Prequalification documents (for works and goods) or preparation of short list (for consulting services);
- Advertisement (procurement notice);
- Bidding documents and addenda;
- Bid evaluation and proposal for award of contract;
- Contract documents and subsequent major modifications.

8. Post-review. For all contracts or bid packages estimated at between US$20,000 and US$200,000 equivalent, two copies of the final contracts, together with the bidding documents, the bid evaluation report and the award decision, would be furnished to IDA for selective post-review before the first application for withdrawal of credit funds against these contracts. These documents should

be reviewed, as a minimum, on a sample basis to determine that contracts have been awarded following procedures prescribed in the Credit Agreement.

9. Selective post-review. The provisions of the preceding subparas of Part F (7) and (8) would not apply to contracts valued at under US$20,000 equivalent on account of which IDA has authorized withdrawals from the Credit Account on the basis of statements of expenditure. Such contracts should be retained at the Project Coordination Unit for selective post-review by IDA supervision missions and for regular annual audits.

Part G. Modification or waiver of the terms and conditions of contracts.

10. The figure of 10% would be specified for the purpose of para 4 of Appendix 1 to the guidelines. Before agreeing to any material modification or waiver of the terms and conditions of contract which would increase the cost of the contract by more than 10% of the original price, the Borrower should inform IDA of the proposed modification and reasons therefore.

Table 1

Procurement Profile of Value/Number of Contracts

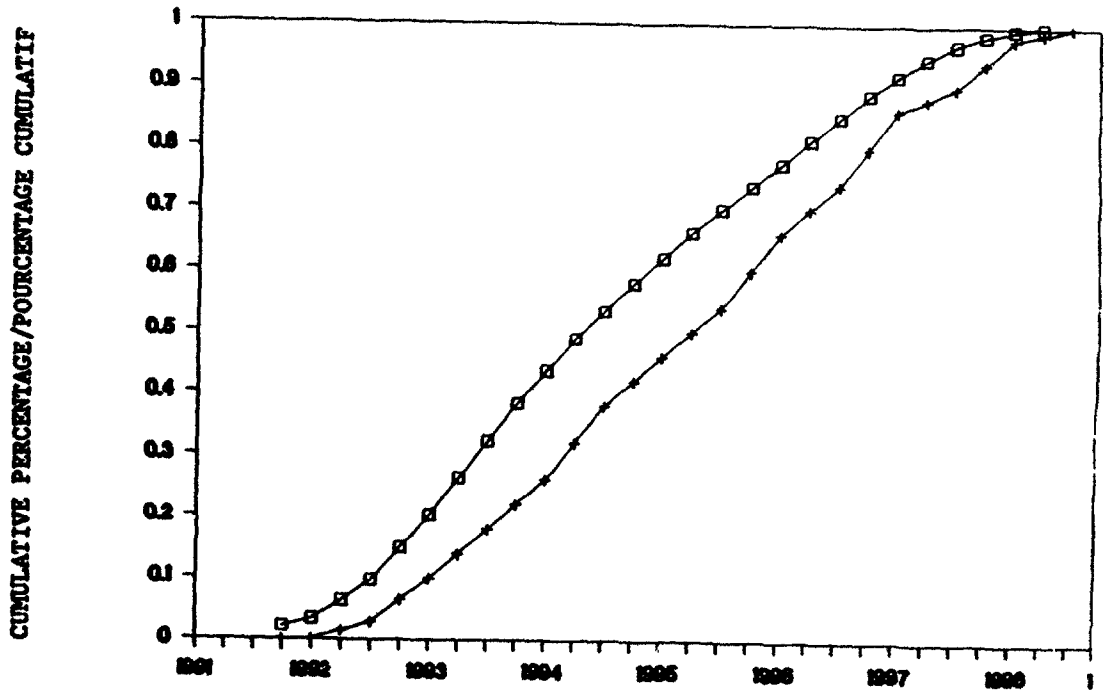
Estimated Contract Size (incl.conting.) (US$000) (1)	Estimated Number of Contracts (2)	Cumulative Value (Number) above Threshold (US$ million) (3)	(4)	% Total Value (Number) above Threshold (5)	(6)
WORKS					
Above 7,500	-	-	(-)	-	(-)
1,000 to 7,500	1	7.1	(-)	82%	(8%)
200 to 1,000	1	7.5	(2)	86%	(16%)
20 to 200	10	8.7	(12)	100%	(100%)
0 to 10	0	8.7	(12)	100%	(100%)
GOODS					
Above 7,500	-	-	(-)	-	(-)
1,000 to 7,500	-	-	(-)	-	(-)
200 to 1,000	4	6.74	(4)	87%	(22%)
10 to 200	14	7.76	(18)	100%	(100%)
0 to 10	0	7.76	(18)	100%	(100%)

Selected thresholds: US$200,000, resulting in 86% of total value of contracts for works and goods, subject to prior review.

Disbursement Profile/Profil de Decaissements

IDA Fiscal years and Quarters/ Annees budgetaires IDA et trimestres		Disbursements/ Decaissements: By Quarter/ Par trimestre (US$ Million)	Disbursements/ Decaissements: Cumulative/ Cumulatif (US$ Million)	Profile/ Profil: Project/ Projet (%)	Profile/ Profil: Country all Sectors/ Tous Secteurs a l'echelle du pays (%)
1991	1				
	2				
	3				
	4	0.6	0.6	2.2%	0.0%
1992	1	0.8	0.9	5.4%	0.0%
	2	0.8	1.7	6.4%	1.8%
	3	0.9	2.6	9.8%	3.8%
	4	1.4	4.0	15.0%	6.8%
1993	1	1.4	5.4	20.2%	10.0%
	2	1.6	7.0	26.2%	14.0%
	3	1.6	8.6	32.2%	18.0%
	4	1.6	10.2	38.2%	22.0%
1994	1	1.4	11.6	43.6%	28.0%
	2	1.4	13.0	48.9%	32.0%
	3	1.2	14.2	53.4%	38.0%
	4	1.2	15.4	57.9%	42.0%
1995	1	1.1	16.5	62.0%	46.0%
	2	1.1	17.6	66.2%	50.0%
	3	1.0	18.6	69.9%	54.0%
	4	1.0	19.6	73.7%	60.0%
1996	1	1.0	20.6	77.4%	66.0%
	2	1.0	21.6	81.2%	70.0%
	3	1.0	22.6	85.0%	74.0%
	4	1.0	23.6	88.7%	80.0%
1997	1	0.8	24.4	91.7%	86.0%
	2	0.8	25.2	94.7%	88.0%
	3	0.8	26.0	97.0%	90.0%
	4	0.4	26.2	98.5%	94.0%
1998	1	0.3	26.5	99.6%	98.0%
	2	0.1	26.6	100.0%	99.0%
	3				100.0%

[] PROJECT PROFILE/PROFIL POUR LE PROJET
* SECTOR PROFILE /PROFIL POUR LE SECTEUR



ASSUMING CREDIT EFFECTIVENESS IS AT THE END OF IDA'S FY91.
AVEC L'HYPOTHESE QUE LE CREDIT ENTRERA EN VIGUEUR A LA FIN DE L'ANNEE BUDGETAIRE 91 DE L'IDA.

REPUBLIC OF MALI

SECOND HEALTH, POPULATION AND RURAL WATER SUPPLY PROJECT

SUPERVISION PLAN

1. Bank supervision input. Regular supervision needs are described in Table 1 below. In addition, specific tasks such as review of progress reports, procurement and disbursement actions, audit reviews, etc., are estimated to require a total of four-staff weeks of various specialists inputs per annum.

2. Borrower's Contribution to Supervision

(a) Progress reports will be submitted twice a year, in April and October; they will comprise a summary of implementation under each project component, as well as financial tables. The Project Coordinating Unit (PCU) will collect inputs from each responsible Directorate and prepare the reports.

(b) Project coordination will be the responsibility of the PCU, under the overall guidance of the Project Monitoring Committee (PMC) throughout the life of the project, the PMC, consisting of responsible MOPHSA Directors, would meet monthly to review the status of implementation. The PMC will also meet four times a year with the Donors Monitoring Committee (DMC) to ensure that issues are addressed as soon as they emerge and in a coordinated fashion. The DMC will comprise the local representatives of the project's cofinanciers.

(c) Once a year, in November, a joint Government/donors review covering all aspects of the project will be held on the basis of a report prepared two months earlier by MOPHSA with assistance from UNICEF and from a Malian institution (e.g., INRSP) independent from the Ministry. This report will be based on inputs prepared annually through a bottom-up process by the Districts and the Regions which would both supervise the lower levels. Discussions of these inputs will, in and by itself, constitute an important form of supervision. The joint annual reviews will be chaired by the Minister of Health. High level representatives of the Ministries of Plan and Finance will participate in the discussion of the budgetary targets and the investment program. A mid-term project review will also be held arounD mid-1994.

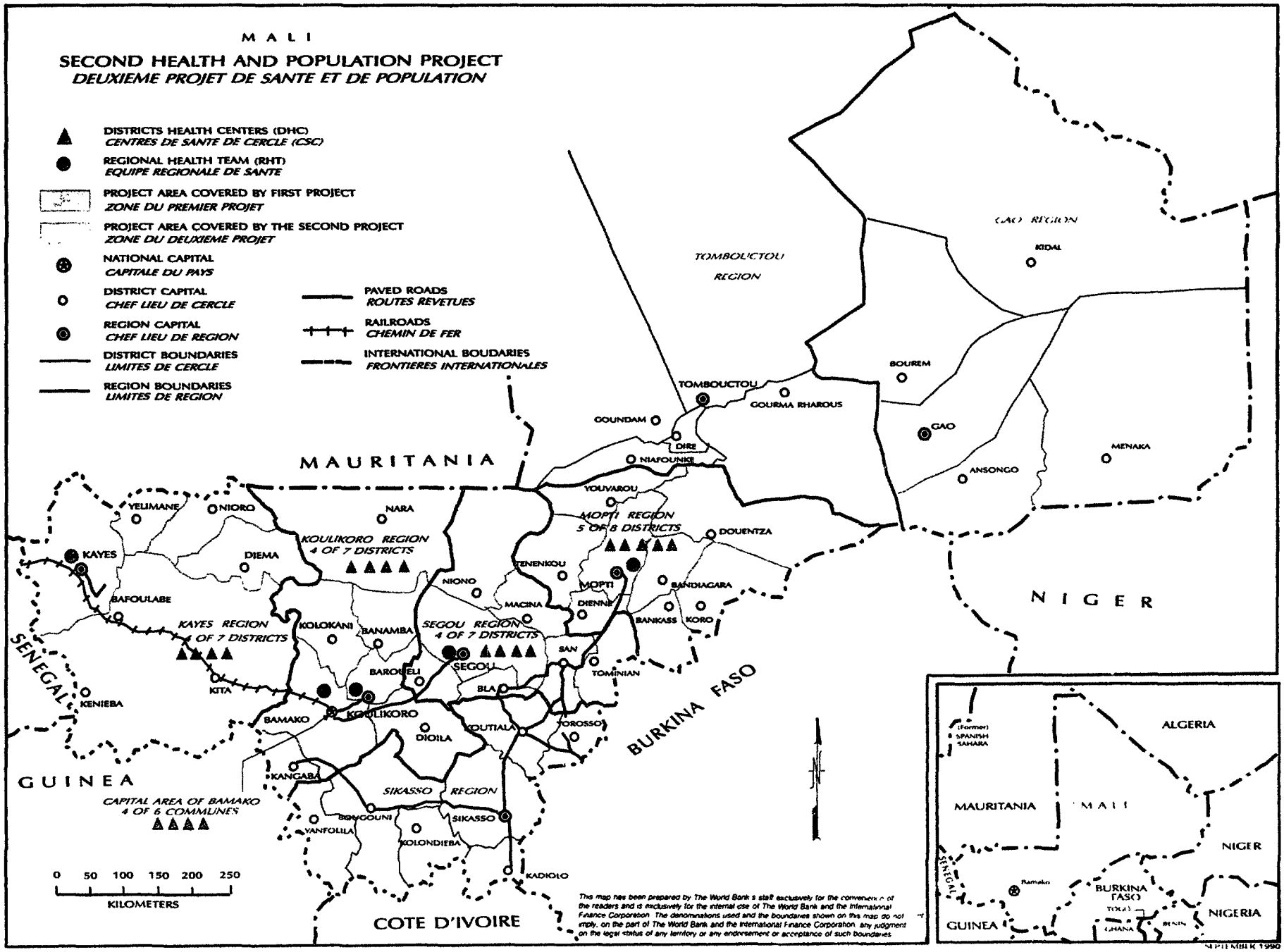
(d) The PCU will be responsible for coordinating arrangements for IDA supervision missions and for providing information to them. Two Malian officials from the concerned Directorates will accompany the missions on field trips.

(e) Mission briefing and wrap-up meetings will be chaired by the Minister and will include all MOPHSA Directors concerned, as well as the key Ministry of Finance and Ministry of Plan staff mentioned in (c) above.

3. Cofinanciers' Contribution to Supervision. Cofinanciers will share supervision tasks with the Bank as follows: (a) the November joint annual review will be a large multi-donor supervision mission, where the skills brought by the different donors are complementary; (b) separate, focused supervision missions will be conducted throughout the year, with full consultations on TORs, aide-memoires, and results. Availability of EDs at the grass-root level and detailed field operations of ComHCs and POPFUND sub-projects will be supervised routinely by UNICEF and on a random basis by the Bank.

TABLE 1 BANK SUPERVISION INPUT INTO KEY ACTIVITIES

APPROX. DATES (MONTH/YEAR)	ACTIVITY	SKILLS REQUIREMENTS	STAFF-WEEKS
02/91	REVIEW OF EFFECTIVENESS AND DISBURSEMENT CONDITIONS, AS WELL AS REVIEW OF THE ESTABLISHMENT OF PROJECT MONITORING AND MANAGEMENT TOOLS, DHDP PREPARATION AND DISTRICT SELECTION	- PHARMACY - MANAGEMENT	2
04/91	PROJECT LAUNCH SEMINAR INCLUDING ALL DONORS AND KEY ACTORS TO FINALIZE IMPLEMENTATION PLAN AND REVIEW START-UP, MANAGEMENT MONITORING TOOLS AND REVIEW PROCUREMENT DOCUMENTS	- PROJECT OFFICER - PUBLIC HEALTH - PHARMACY - CIVIL WORKS/IMPLEMENTATION - PROCUREMENT - FP (PROVIDED BY USAID) - IEC (PROVIDED BY UNICEF)	10
07/91	SUPERVISION MISSION	- PUBLIC HEALTH - HEALTH MANAGEMENT/PLANNING - ECONOMIST - NUTRITION	8
11/91	FIRST JOINT REVIEW	- PROJECT OFFICER - PUBLIC HEALTH - PHARMACY - CIVIL WORKS/IMPLEMENTATION	8
03/92	SUPERVISION MISSION	- PUBLIC HEALTH - PHARMACY - FP - IEC	4
07/92	SUPERVISION MISSION	- PUBLIC HEALTH - PHARMACY - HEALTH MANAGEMENT - ECONOMIST	8
11/92	SECOND JOINT REVIEW	- PROJECT OFFICER - PUBLIC HEALTH - PHARMACY - CIVIL WORK/IMPLEMENTATION - FP - IEC	8
03/93	SUPERVISION MISSION	- PUBLIC HEALTH - PHARMACY - FP - IEC	4
07/93	SUPERVISION MISSION	- PUBLIC HEALTH - PHARMACY - HEALTH MANAGEMENT/PLANNING - ECONOMIST	8
11/93	THIRD JOINT REVIEW AND MID-TERM REVIEW	- PROJECT OFFICER - PHARMACY - CIVIL WORKS/IMPLEMENTATION - HEALTH MANAGEMENT/PLANNING - FP - IEC	8
1994	TWO SUPERVISION MISSIONS AND ONE JOINT REVIEW, AS IN 1993		
1995	TWO SUPERVISION MISSION AND ONE JOINT REVIEW AS IN 1993		
1996	TWO SUPERVISION MISSION AND ONE JOINT REVIEW AS IN 1993		
12/97	COMPLETION MISSION		


MALI
SECOND HEALTH AND POPULATION PROJECT
DEUXIEME PROJET DE SANTE ET DE POPULATION
DISTRICTS HEALTH CENTERS (DHC)
CENTRES DE SANTE DE CERCLE (CSC)
REGIONAL HEALTH TEAM (RHT)
EQUIPE REGIONALE DE SANTE
PROJECT AREA COVERED BY FIRST PROJECT
ZONE DU PREMIER PROJET
PROJECT AREA COVERED BY THE SECOND PROJECT
ZONE DU DEUXIEME PROJET
NATIONAL CAPITAL
CAPITALE DU PAYS
DISTRICT CAPITAL
CHEF LIEU DE CERCLE
REGION CAPITAL
CHEF LIEU DE REGION
DISTRICT BOUNDARIES
LIMITES DE CERCLE
REGION BOUNDARIES
LIMITES DE REGION
PAVED ROADS
ROUTES REVETUES
RAILROADS
CHEMIN DE FER
INTERNATIONAL BOUDARIES
FRONTIERES INTERNATIONALES
MAURITANIA
TOMBOUCTOU REGION
GAO REGION
KIDAL
BOUREM
TOMBOUCTOU
GOURMA RHAROUS
GAO
GOUNDAM
DIRE
NIAFOUNKE
MENAKA
ANSONGO
YOUVAROU
MOPTI REGION
5 OF 8 DISTRICTS
DOUENTZA
NARA
YELIMANE
NIORO
KOULIKORO REGION
4 OF 7 DISTRICTS
KAYES
DIEMA
TENENKOU
MOPTI
BANDIAGARA
NIONO
MACINA
DIENNE
BANKASS
KORO
BAFOULABE
KAYES REGION
4 OF 7 DISTRICTS
KOLOKANI
BANAMBA
SEGOU REGION
4 OF 7 DISTRICTS
SAN
SEGOU
TOMINIAN
BAROUELI
BLA
KITA
KENIEBA
BAMAKO
KOULIKORO
KOUTIALA
TOROSSO
DIOILA
KANGABA
SIKASSO REGION
CAPITAL AREA OF BAMAKO
4 OF 6 COMMUNES
BOUGOUNI
SIKASSO
YANFOLILA
KOLONDIEBA
KADIOLO
0 50 100 150 200 250
KILOMETERS
SENEGAL
GUINEA
BURKINA FASO
COTE D'IVOIRE
NIGER
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(Former) SPANISH SAHARA
ALGERIA
MAURITANIA
MALI
NIGER
SENEGAL
Bamako
BURKINA FASO
TOGO
GHANA
BENIN
NIGERIA
GUINEA
SEPTEMBER 1990