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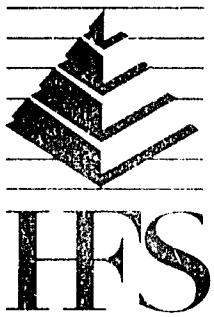

Health

Financing

and

Sustainability

Project

Technical Note 30

A SURVEY OF COSTS, REVENUES, AND STAFFING AT PHC HEALTH FACILITIES IN THREE PROVINCES OF BURKINA FASO

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By:

Suzanne McLees
HFS Project

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HEALTH FINANCING AND SUSTAINABILITY (HFS) PROJECT

ABT ASSOCIATES INC., Prime Contractor
4800 Montgomery Lane, Suite 600
Bethesda, MD 20814 USA
Tel: (301) 913-0500 Fax: (301) 652-3916
Telex: 312638

Management Sciences for Health, Subcontractor
The Urban Institute, Subcontractor

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ABSTRACT

This study summarizes the findings of a survey conducted in March 1994 of primary health care facilities in the provinces of Bazéga, Gourma, and Séno in Burkina Faso. The survey finds that all public health centers in Burkina Faso suffer from a variety of weaknesses that pose significant obstacles to their effective functioning. Shortages of health personnel, essential drugs, and equipment, and irregular supervision have the effect of reducing the already low demand for care at public health centers. In addition, the lack of accurate data on financial operations, including the level of expenditures and revenues, makes it difficult to determine the most appropriate policies to maximize the effectiveness and efficiency of cost recovery measures. It is particularly discomforting to realize the health facilities studied were selected by provincial health directors based on the criteria that they be as fully staffed and functioning as possible. In the absence of complementary changes in staffing, medicine supply, and financial management, it is likely that construction and upgrading of health facilities, as was proposed in the 1991-95 National Development Plan, will accomplish very little.

This survey was one of three research activities conducted by the Health Financing and Sustainability (HFS) Project with support from the USAID Mission in Burkina Faso. The other two activities were a survey of households in the same three provinces of Burkina Faso concerning their willingness and/or ability to pay for health care, and the development of a pricing structure methodology to be applied at health facilities.

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LIST OF ACRONYMS

AIS	Agent Itinérant de santé/Visiting nurse
BCG	Bacille Bilié de Calmette et Guérin (anti-tuberculosis vaccine)
BI	Bamako Initiative
CM	Centre Médical/Medical Center
CMA	Centre Médical avec antenna churigical/Medical Center with Surgical Unit
CSPS	Centre de Santé et de Promotion sociale/Health and Social Promotion Center
DEP	Direction des Etudes et de la Plannification/Planning and Studies Directorate, MSASF
FHHF	Family Health and Health Financing Project
GOBF	Government of Burkina Faso
GTZ	Gesellschaft für Technische Zusammenarbeit/German Agency for Technical Cooperation
MSASF	Ministère de la Santé, de l'Action sociale, et de la Famille/Ministry of Health, Social Action, and the Family
PHC	Primary health care
PDSN	Projet de Developpement Santé et Nutrition/World Bank Health and Nutrition Project
PSP	Poste de santé primaire/Primary health post
EPI/PEV	Expanded Program for Immunization/Programme élargi de vaccination
STC	Save The Children
ORS/SRO	Oral rehydration salts/Sels de réhydration par voie orale

EXECUTIVE SUMMARY

This document summarizes the findings of a survey conducted in March 1994 of Costs, Revenues, and Staffing at Primary Health Care Facilities in the provinces of Bazéga, Gourma, and Séno in Burkina Faso. Survey design and data collection activities were carried out by Messrs. Michel Bamogo, Directorate of Studies and Planning, Burkina Faso Ministry of Health, Social Action, and the Family, and Yann Derriennic, Data Analyst and HFS Consultant. This survey constitutes one of three research activities conducted by the Health Financing and Sustainability (HFS) Project with support from the USAID Mission in Burkina Faso. The other two activities are a survey of households, in the same three provinces of Burkina Faso, regarding their willingness and/or ability to pay for health care, and the development of a pricing structure methodology to be applied at health facilities.

The consequences of Burkina Faso's deprived economic situation are compounded by low literacy, high morbidity and mortality rates. The gross domestic product per capita was estimated to be US $304 in 1992 (World Bank). Despite declines since 1960-61, the infant mortality rate is still elevated, at 114.6 per 1,000 births. Life expectancy at birth for the total population, which has increased gradually from the 1960-61 estimate of 37 years, remained low at only 52.2 years in 1991 (Konaté et al., 1994). Low life expectancy and high infant and maternal mortality rates are reflective of the low quality, limited availability, and underutilization of Burkina's health services, as highlighted in the results of the 1994 survey of Willingness and Ability to Pay for Health Care. (See Sow, 1994.) The supply of health specialists in Burkina capable of providing the preventive and curative care that is so desperately needed falls short of WHO recommended minimum rates for Sahelian countries.

In addition to shortages of trained personnel at health centers, the lack of equipment and poor condition of existing equipment have contributed to many health centers becoming virtually non-functional. Further, the institutional capacity to handle maintenance and upkeep of equipment, for all practical purposes, is nonexistent. Not one of the Centers for Social Promotion and Health (CSPS) surveyed had a blood pressure monitor, orthoscope, gas burner, or a box of tongue depressors, all of which are considered part of the requisite complement of equipment according to established national guidelines. So limited are basic supplies such as syringes, gloves, or compresses, that many health facilities surveyed are obligated to save them for emergencies.

Serious constraints in the national health budget have led to poorly maintained and ill-equipped public health centers with limited supplies of essential drugs. The increasing inaccessibility of drugs at public health centers has led to increases in costs to patients who have to purchase medicines from private pharmacies, most often at higher prices, and dwindling public confidence in the ability of health centers to provide necessary care. Only two of all health facilities surveyed had antibiotics or quinine on hand at the time of the survey; none of the centers had chloroquine in stock as of March 1994.

Limited cost recovery activities were noted at the health facilities visited, e.g., in the form of payments for deliveries, hospitalization, health cards, drugs, etc. The variations in charges reported for consultation and vaccination cards reflect the lack of an enforced national fee policy for these services. The poor quality of financial records maintained by health facilities precludes any attempt to assess the effectiveness of current cost recovery efforts. For example, the Medical Center in Saponé appeared to

have a self-financing laboratory; however, due to the inadequacy of their financial records, it was impossible to ascertain the financial status of the laboratory or the facility as a whole.

Public health centers in Burkina Faso suffer from many weaknesses, all of which pose significant obstacles to their effective functioning. The shortages of health personnel, essential drugs, and equipment; and irregular supervision of CSPS and CM activities have the effect of reducing the already low demand for care at public health centers. In addition to the fact that facilities are not fully functioning, the lack of accurate data on financial operations, including the level of expenditures and revenues, makes it difficult to determine the most appropriate policies aimed at maximizing the effectiveness and efficiency of cost recovery measures. The results of the facilities survey demonstrate that all centers suffer from most of these shortcomings, to varying degrees. It is particularly discomforting to realize that the health facilities studied were selected by provincial health directors based on the criteria that they be as fully staffed and functioning as possible. In the absence of complementary changes in staffing, medicine supply, and financial management, it is likely that construction and upgrading of health facilities, as was proposed in the 1991-95 National Development Plan, will accomplish very little.

1.0 INTRODUCTION AND BACKGROUND

This document summarizes the findings of a survey conducted in March 1994 at selected public health facilities in the provinces of Bazéga, Séno, and Gourma, Burkina Faso, which constitutes one of three research activities supported by Ouagadougou Mission of the U.S. Agency for International Development (USAID). Survey design and data collection activities were conducted by Messrs. Michel Bamogo, Directorate of Studies and Planning, Burkina Faso Ministry of Health, Social Action, and the Family, and Yann Derriennic, Data Analyst and Health Financing and Sustainability (HFS) Project Consultant. Through a buy-in to the Health Financing and Sustainability (HFS) Project arranged in October 1993, USAID/Ouaga commissioned the following products:

a. A survey of households regarding their willingness and/or ability to pay for health services;

b. A survey of costs at public health facilities; and

c. The development of a pricing structure methodology to be applied at health centers.

The household survey was designed in late 1993 and conducted during 1994. (Additional details are available in the report analyzing findings of this survey; see SOW, 1994.) In consultation with the Government of Burkina Faso (GOBF) and USAID/Ouagadougou, it was determined that a Supply-Demand Model developed by Ricardo Bitran, HFS Applied Research Director, could be applied to the Burkina context to provide a tool for setting prices at health facilities. This model is intended to provide a policy simulation tool for the GOBF which it can use in determining levels of user fees in its ambulatory health system. This simulation takes the place of a pricing methodology based only on costs currently incurred by the facilities. The findings of both HFS surveys and the model will be presented to government policymakers during a workshop planned for September 1 and 2. Also at this workshop, policymakers will be trained in the use of the Supply-Demand model in different regions in Burkina Faso.

In the summer of 1992, USAID/Ouagadougou requested the HFS Project to propose financing activities to be undertaken as part of the their ongoing bilateral Family Health and Health Financing (FHHF) Project being implemented in the provinces of Bazéga and Gourma. This assignment was undertaken in October-November by a five-person team composed of one representative from the DEP, USAID, and REDSO/WCA, and two HFS staff. Among other suggestions put forth in the "Burkina Faso Family Health and Health Financing Project Protocol, Health Financing Subproject" were surveys of the willingness and ability of households to pay for health services and recurrent costs at public health facilities to collect data for the development of a pricing structure mechanism to apply at health centers; certain training activities intended to improve the health care delivery and drug management systems; the creation of community health committees; and development of financial management manuals for CM and CSPS supervisors.

By the time the proposal for health financing activities was finalized and delivered and USAID proceeded with a determination of preferred activities to be undertaken by HFS, the time available for implementing activities was severely constrained given the approaching termination date of September 18, 1994 for the HFS Project. This time constraint unavoidably limited the scope and duration of work that realistically could be completed by the project deadline. The survey of costs, revenues, utilization, and staffing at PHC facilities was conducted during a three-week field assignment. In the concluding section of this report, gaps in information are highlighted and suggestions are put forth for future activities that would provide a more detailed perspective on the level of revenues and expenses at public health facilities.

2.0 HEALTH AND SOCIOECONOMIC PROFILE

Burkina Faso is a land-locked country in the Sahel region of West Africa with over nine million people. Six countries share borders with Burkina Faso: Mali, in the north and west; Ivory Coast, Ghana, Togo, and Benin to the south; and Niger to the east. One of the world's poorest nations, Burkina had a gross domestic product per capita of US$304 in 1992. Agricultural production accounts for 44 percent of GDP and employs nearly 90 percent of the economically active population (World Bank, 1994). The consequences of a deprived economic situation are compounded by low literacy, high morbidity, and mortality rates. Malaria, tuberculosis, diarrhea, measles, and acute respiratory infections are among the leading causes of morbidity and mortality. The literacy of the Burkinabé population was estimated at 18 percent in 1990; only 9 percent of women and 27 percent of men are considered literate. These figures contrast with averages for the sub-Saharan African region of roughly 60 percent for men and 40 percent for women (World Bank, 1994).

Low life expectancy and high infant and maternal mortality rates reflect the low quality, unavailability, and underutilization of Burkina's health services, as highlighted in the results of the 1994 survey of willingness and ability to pay for health services. (See Sow, 1994.) *Exhibit 2-1* below provides demographic indicators for 1960-91. The crude birth rate, estimated at 45.3 per 1,000 population in 1991, has varied little over the past two decades. By contrast, the total fertility rate has continued to increase over the past 20 years or so, from 6.2 to 7.3 children per woman. Despite steady declines since 1960-61, the infant mortality rate is still elevated, at 114.6 per 1,000 births. Life expectancy at birth for the total population, which has increased gradually from the 1960-61 estimate of 37 years, remained low at only 52.2 years in 1991.

The supply of health specialists in Burkina capable of providing the preventive and curative care that is so desperately needed falls short of WHO recommended minimum rates for Sahelian countries. This is particularly true for doctors and midwives. Based on MSASF statistics, the population per physician is estimated to be 38,900, the population per nurse to be 4,528, and the population per trained midwife to be 22,700 (World Bank). The WHO recommends one doctor per 10,000 population, and one midwife per 5,000. The WHO standard for nursing personnel is identical to the recommended ratio of population per midwife, or one per 5,000 (Konaté et al.).

EXHIBIT 2-1
BASIC DEMOGRAPHIC INDICATORS

Indicators	1960-61[a]	1976	1985	1991
Total Population	—	5,638,203[b]	7,964,705	9,290,791[c]
Crude Birthrate	50[a]	46[a]	49.6[a]	45.3[a]
Total Fertility Rate	6.2[a]	6.7[a]	7.2[a]	7.3[a]
Crude Death Rate	32[a]	22[a]	17.5[a]	16.4[a]
Infant Mortality Rate	182[a]	167[a]	134[a]	114.6[a]
Life Expectancy	37[a]	42[a]	48.5[a]	52.2[a]

Notes:
a) Adjusted data
b) 1975 Census Population
c) Estimate

Source: Konaté et al. 1994. Demographic and Health Survey, 1993.

3.0 THE PUBLIC HEALTH SECTOR AND ITS EXPERIENCE WITH COST RECOVERY

The Government of Burkina Faso (GOBF) allocation to the MSASF rose modestly from 6 percent in the early-1980s to 7 percent in the mid-1980s, to 8 percent in the early 1990s. In 1992, the Ministry of Health's operating budget was FCFA 9.9 billion (US$37 million). Foreign aid is estimated to represent 40 percent of public sector expenditures, with the remaining 60 percent coming from the central budget. NGOs contributed roughly FCFA 1.3 billion (US$4.8 million) to the health sector in 1991.

There has been substantial variation in investment spending by the MSASF from one year to the next, with budgetary investment expenditures since 1987 hovering around FCFA 200 million per annum and aid-financed spending at FCFA 4 billion per annum. The World Bank estimates that 68 percent of all 1991 health sector aid disbursements was investment, of which 29 percent financed technical assistance, and the balance was evenly divided between construction/ rehabilitation of health facilities and equipment purchases. Seventeen percent of health aid disbursements covered operating expenses, primarily goods and services, including 5 percent for medical supplies and 3 percent for drugs.

The fact that 85 percent of the average health budget is used to cover only salaries, implies that there is a shortage of funds to support medicines, supplies, and other operating costs of the health system. It was estimated that, in 1991, the MSASF employed nearly 6,000 people, or approximately 17 percent of the total civil service. Nevertheless, the supply of staff at health facilities falls substantially short of requirements, and there is great disparity in the availability of staff at urban and rural health centers. Although the two main urban centers of Ouagadougou and Bobo-Dioulasso account for only 15 percent of the total population, health centers in the two provinces serving these urban concentrations (i.e., Kadiogo and Houet, respectively) claim nearly half of the MSASF's personnel, including 67 percent of the midwives, 40 percent of the nurses, 33 percent of trained birth attendants, and 60 percent of the doctors, medical technicians, and pharmacists. The disparity in the supply of health specialists across regions has led to the recent closing of roughly 30 rural health centers (CSPS) owing primarily to lack of personnel. Unfortunately, the greatest shortages of trained health personnel have been noted in northern provinces where rates of poverty, infectious disease, and malnutrition are highest.

Serious constraints in the national health budget have led to poorly maintained and ill-equipped public health centers with limited supplies of essential drugs. Searching for ways to address these problems, the Ministry of Health, Social Action, and the Family (MOHSAF) began to experiment with cost recovery measures. In the 1970s, fees were introduced in hospitals, urban maternities, and medical centers for consultations, hospitalization, and lab tests. Beginning in 1984, all locally-generated funds were forwarded to the Treasury where 25 percent is designated for general government revenue and 75 percent is deposited into a special account, the "*Caisse Maladie*" which is managed by the Ministry of Health. Current legislation specifies that the provinces' share be held by the *Caisse* until the end of the year when each provincial directorate is informed that the province has a credit in its name at the *Caisse Maladie*.

In 1991, the GOBF adopted a policy calling for self-financing (except salaries) of national and regional hospitals. The implementation of this policy, under which cost recovery revenues stay at the

facility level and are not returned to the Treasury, has contributed to reductions in the revenues flowing into the "*Caisse Maladie*". The MSASF's ability to redistribute funds from the tertiary level to the primary and secondary levels has been hampered by this loss of revenue for the Ministry, even though the policy also presumably reduced the drain of Ministry funds into the tertiary level. Consequently, finally in January 1993, legislation was passed permitting peripheral health centers, i.e., CSPS and CMA, to retain the funds they collect from fees and sales of drugs for purchase of more drugs and medical supplies. Further evidence of the GOBF's commitment to progress in its efforts to finance costs related to the provision of primary health care is the government's formal endorsement, in 1988, of the Bamako Initiative (BI), sponsored by UNICEF and WHO, which has as its goal the financing of a revitalized primary health care system through cost recovery mechanisms.

In early 1988, an operations research study in cost recovery of primary health care services in Burkina Faso was implemented as part of USAID's Strengthening Health Planning Capacity Project, with support from USAID and the World Bank. Based in the health zone of Garango in Boulgou province, the purpose of the Boulgou Cost Recovery Study was to test health financing strategies in ten clinics as a means of improving the quality of services and increasing utilization of health facilities. The study involved revolving fund pharmacies, user fees for laboratory tests, health cards, and hospital beds, as well as fees for certain types of consultations. Unfortunately, the poor quality and limited availability of data collected from detailed health information forms prior to July 1989 precluded any exact measurement of changes in utilization levels before and after the operations research study (Bekele, 1991). It is nevertheless estimated that the rate of utilization of health facilities increased modestly during the course of the study from 22 to 26 percent. (Meeus et al., 1991).

The goals of the study were to improve the quality of services and increase utilization of health facilities by at least 50 percent by the end of the first year of full-scale activities; to ensure availability and financial sustainability of essential drugs for the study zone population; and to recover all recurrent costs, except salaries of health personnel. The cost recovery experiment in Boulgou resulted in partial self-financing of the non-salary expenses. Revenue generated by both the sale of drugs and fees for health care services permitted the recuperation of roughly 45 percent of non-salary costs (e.g., medicines, facility maintenance, laboratory tests).

Individuals in the Boulgou study were found, at the time of the pilot study, to spend FCFA 2,800 ($US 10 at pre-devaluation rate of US$1 = FCFA 270) annually on health care. Of this amount, the estimated expenditure on modern treatment and drugs was FCFA 1,000, with the remainder spent on traditional medicine. Based on these parameters, the World Bank has extrapolated results of the Boulgou study to estimate that total private expenditures for health at the national level may approach FCFA 25 billion (US$93 million), or more than double the total national health budget of FCFA 9.9 billion in 1992. To date, there has been no comprehensive analysis of private health expenditures nationwide in Burkina. The lessons learned from the Boulgou study could provide useful guidelines for a feasible strategy to recover costs in the primary health care delivery system. Additional results and recommendations following from this study are cited in subsequent sections of the present report.

4.0 STRUCTURE AND FUNCTION OF CSPS AND CM FACILITIES

The health district in Burkina is an operating unit covering approximately 150,000 to 250,000 persons, and grouping approximately 10-20 CSPS around the CM which serves as a referral center. Each health district has one managerial team appointed to provide technical supervision and administrative control of CSPS and CM, including clinical activities, and management of human and financial resources, budgets, and medicines. The managerial team prepares development plans for the health districts (*"plan de développement du district sanitaire"—PDDS*) (World Bank). The current study was conducted in the health districts of Saponé in Bazéga Province; Fada and Pama in Gourma Province; and Seba and Dori in Séno Province.

The geographic limits of the area of responsibility for a CM usually are defined according to distances among health centers, as well as population size and density. Data on the population covered by CM were collected in the current study only for the medical center in Sebba which is estimated to cover a population of 102,980. CMs provide medical consultations that are referred to a doctor, laboratory exams, emergency care, deliveries, nutritional rehabilitation, and preventive care, such as MCH/family planning, and immunizations. The logistical and managerial activities of a CM cover financial and pharmaceutical management, provision of essential drugs, and health evaluations and education/information.

The CSPS is intended to serve a catchment of roughly 10,000 inhabitants (World Bank). Actual information collected for the current study offers a range in coverage for six CSPS which deviates substantially from the norm of 10,000 people. At the bottom of the spectrum is the CSPS in Ilpecé, covering 8,000 people; Gorgadji CSPS covers 20,205 people; and, at the top of the spectrum, is Matiacaoli CSPS, estimated to cover as many as 42,000 people.[1]

The CSPS is the first point of contact between the population and public health services. Minimum services provided by the CSPS include primary curative care, care of chronic illnesses (e.g., leprosy, tuberculosis), deliveries, prenatal consultations, well-baby care, family planning, and nutritional rehabilitation. Health education is considered an essential component related to the provision of all these services. The CSPS controls logistical and managerial activities related to the provision of care, as described, in addition to the financial and pharmaceutical management of essential drugs, and visits to residents of adjacent villages and neighborhoods. As mentioned previously, the resources available to CSPS to carry out all designated functions are severely limited.

[1] No comparable information was available for Bani and Tigba, two other CSPSs in the sample.

5.0 OBJECTIVES

The Survey of Costs, Revenues, and Staffing at PHC Facilities, together with the Survey of Willingness and Ability to Pay for Health Care, were conducted to collect information for a pricing structures methodology intended to help government policy-makers identify user fee options for ambulatory health facilities in Burkina Faso. To meet this objective, data were sought on current operating expenses, utilization levels, and revenues from CSPS and CM facilities. The current report addresses several aspects of health center operations, such as the availability of medicines and equipment at health centers, as well as staffing patterns, revenues, and fees. Such information should prove useful to policy-makers in future efforts to enhance the efficiency and quality of care available at health centers, and increase financial sustainability.

6.0 METHODOLOGY

Initial plans for both the household and facility surveys included samples drawn from the two provinces where USAID has been most active, Gourma and Bazéga. However, in developing questionnaires and examining possible survey samples, USAID/Ouagadougou determined that it would be advantageous to add a third province, Séno. A sample of households and health facilities from these three provinces, as opposed to Gourma and Bazéga alone, would permit the examination of a broader range of socioeconomic and other factors potentially affecting the willingness and ability to pay for health care, and the utilization of public health services in Burkina.

As can be seen from the map appended to the current report, Séno lies to the northeast of Ouagadougou, sharing a contiguous border with Niger. Southeast of the capital is Gourma whose southern and southeastern borders extend to Togo and Benin, respectively. The 1991 population estimates for Bazéga (358,300), Gourma (356,818) and Séno (271,200) combined represent approximately 10 percent of the total population of Burkina Faso. Population density is lowest in Gourma and highest in Bazéga which is closest to Ouagadougou. In general, greater distances separate health facilities in Séno and Gourma than in Bazéga. All three provinces depend economically on agriculture and livestock. Gourma is benefiting from a dam providing electricity and improving opportunities for fishing and aquaculture. With 2.3 percent of the country's public work force, Gourma ranks tenth among the thirty provinces in terms of it employment rate; Bazéga ranks thirteenth, with 1.7 percent of the total public work force. Although the three provinces are poor, small businesses seem to be more developed in Gourma than in Bazéga and Séno.

Data collected from the study on willingness and ability to pay for health services attest to the differences among the three provinces in average annual monetary income per person which is FCFA 19,000 in Bazéga; FCFA 36,000 in Gourma, and FCFA 30,000 in Séno. The average annual expenditures per person ranges from FCFA 18,671 in Bazéga to FCFA 36,365 in Gourma, and FCFA 40,820 in Séno.

In designing the current study of health facilities, the Ministry of Health considered it appropriate to look at CM and CSPS, rather than higher level health facilities such as hospital centers or CHN/CHR, because of the larger proportion of the population served by CM and CSPS and because of their key role in primary health care. Primary health posts (PSP), at the very bottom level of the health system pyramid, offer an extremely limited range of care. The only information on PSP activities included in the current study concerns their supervision by CSPS. The sample of facilities was drawn from the same three provinces as the household survey sample, with one CM from each province and a total of eight CSPS. Discussions with the provincial health directors in each of the three provinces led to the identification of specific centers to be surveyed. The criteria for selection were that the facilities be as fully staffed and functional as possible, in order to get as complete a cost estimate as possible for a desired level of care. The health centers selected for the current study are listed in *Exhibit 6-1*, according to province.

EXHIBIT 6-1 HEALTH CENTERS INCLUDED IN THE FACILITIES SURVEY, BY PROVINCE			
HEALTH FACILITY	PROVINCES		
	Bazéga	Gourma	Séno
Medical Center (CM	Saponé	Pama	Sebba
Health and Social Promotion Center (CSPS)	Ipelcé Koubri (Kounda)[1]	Comin-yanga Matiacoali Tigba	Bani Gorgadji Sampelga

[1]Of the nine CSPS and three CM originally identified for the survey, the CSPS in Kounda, Bazéga Province, was not visited because of time constraints.

In addition to data gathered in the field during February-March 1994 by an HFS data analyst and representative of the MSASF's Studies and Planning Directorate (DEP), data were collected at the central level from records maintained at the DEP and interviews with various donors such as the Germans (GTZ), Save the Children/Netherlands, and Save the Children/United Kingdom. Donors support various health activities, such as the Expanded Program for Immunization (EPI) and other outreach programs, in several provinces, and were therefore able to fill in certain informational gaps on costs and financing at health centers. Donors also provided data on vehicle maintenance expenses, and, in some cases, CM and CSPS operating expenses. Data on utilization levels at each facility, as well as on any central government support, were gathered from the Provincial Directorate in each province. It should be noted that all costs indicated in the present study are denominated in FCFA francs and were collected in March 1994, only two months after the FCFA devaluation. For this reason, the data in this report do not reflect the long-term impact of the devaluation.

7.0 FINDINGS

7.1 STAFFING PATTERNS

Standards for staffing public health centers in Burkina Faso were developed in 1992 by the Preparatory Committee for the Bamako Initiative (BI). The data in *Exhibit 7-1* compare actual staffing patterns with those proposed for the BI. It should be noted that the staffing norms specified for CM, do not refer to CMA, or medical centers with surgical units.

Among all CSPS facilities surveyed, the total number of staff ranged from two, in Gorgadji and Sampelga, both in Séno province, to five in Koubri, Bazéga province. As noted in *Exhibit 7-1* , the BI standard for total number of staff at CSPS is five which includes no physicians and only one staff member not trained in health care, an unskilled laborer. The only support personnel in the current study was an unskilled laborer at the CSPS in Comin-Yanga. In terms of nurses, six out of the eight CSPS had one state nurse on staff; Gorgadji and Koubri exceeded the BI norm with two state nurses, but each of these centers had no practical nurse on staff, as recommended. In fact, only Sampelga and Matiacaoli had a practical nurse on staff. Five of the eight CSPS had no visiting nurse on staff. Auxiliary birth attendants were present at five of the eight centers. Two positions considered non-essential by the BI, laboratory technician and state midwife, were filled at three centers; Comin-Yanga and Ilpécé reported one lab technician each, Koubri counted one state midwife among their five personnel.

The total number of personnel identified at CM facilities ranged from eight in Pama (Gourma province) to 18 in Saponé (Bazéga). As indicated in *Exhibit 7-1*, the BI norm for CM specifies ten health personnel and five support staff for a total of 15. The standard of ten health personnel includes one in each of the seven categories listed in *Exhibit 7-1*, the only exception being the recommendation of three registered nurses.

Pama and Saponé follow the norm for CM with one doctor; no doctor was reported to be on staff in Sebba. Two out of the three CM exhibit staffing patterns consistent with the norm of one state nurse, three practical nurses, and one visiting nurse. Pami was understaffed in nurses, with only one practical nurse, compared to the norm of three, and no visiting nurse. Pami's staffing profile also falls short of the norm in that there is no laboratory technician and no state midwife. Saponé has three state midwives and three auxiliary birth attendants, although the norm calls for one of each. Sebba has no auxiliary birth attendant on staff. Each of the three CM have five support staff, although the specific positions held vary. Sebba and Saponé have one attendant each, contrary to the norm. Also contrary to the norm, none of the CM has any staff member qualifying as either a secretary/clerk or a guardian. Saponé has two drivers, one more than BI specifications.

An additional set of norms for staffing CSPS and CM, more restrictive than those proposed for the BI, projects goals to be met by the World Bank's Health and Nutrition Project (PDSN) to be implemented from 1995-99. These minimum personnel requirements are proposed to insure the quality of care provided and therefore encourage use of public health facilities by the population, in addition to promoting financial self-sufficiency. The PSDN Project proposes the following:

EXHIBIT 7-1
COMPARISON OF ACTUAL STAFFING PATTERNS AT SELECTED HEALTH CENTERS WITH RECOMMENDED NORMS[a]

PERSONNEL	CSPS FACILITIES					CM FACILITIES				
	COMPARISON WITH NORM					COMPARISON WITH NORM				
	NORM	Consistent %	Understaffed %	Overstaffed %	Total %	NORM	Consistent %	Understaffed %	Overstaffed %	Total %
Health Staff	4	0.0	87.5	12.5	100.0	10	0.0	66.7	33.3	100.0
Physician	0	100.0	–	0.0	100.0	1	66.7	33.3	0.0	100.0
State Nurse	1	75.0	0.0	25.0	100.0	1	66.7	0.0	33.3	100.0
Practical Nurse	1	25.0	62.5	12.5	100.0	3	66.7	33.3	0.0	100.0
State Mid–wife	0	87.5	–	12.5	100.0	1	33.3	33.3	33.3	100.0
Auxiliary Birth Attendant	1	62.5	37.5	0.0	100.0	1	33.3	33.3	33.3	100.0
Laboratory Technician	0	75.0	–	25.0	100.0	1	33.3	66.7	0.0	100.0
Visiting Nurse	1	37.5	62.5	0.0	100.0	1	66.7	33.3	0.0	100.0
Other Health (e.g. "*matrone*")	0	100.0	–	0.0	100.0	0	33.3	–	66.7	100.0
Support Staff	1	12.5	87.5	0.0	100.0	5	–	–	–	–
Attendant	0	100.0	–	0.0	100.0	0	33.3	–	66.7	100.0
Secretary/Clerk	0	100.0	–	0.0	100.0	1	0.0	100.0	0.0	100.0
Unskilled Labor	1	87.5	–	12.5	100.0	2	66.7	33.3	0.0	100.0
Driver	0	100.0	–	0.0	100.0	1	66.7	0.0	33.3	100.0
Guardian	0	100.0	–	0.0	100.0	1	0.0	100.0	0.0	100.0
Other (e.g. volunteers)	0	100.0	–	0.0	100.0	0	66.7	–	33.3	100.0
TOTAL	5	–	–	–	–	15	–	–	–	–

Note: a) Preparatory Committee for the Bamako Initiative, "Document National Sur Le Renforcement des Soins de Sante Primaires au Burkina Faso," October 1992.
b) Includes the position of "*garçon/fille de salle*" which was not filled at any health center surveyed.

For CSPS

- one state **or** practical nurse;
- one auxiliary birth attendant;
- one visiting nurse **or** one unskilled laborer; and
- one pharmaceutical depot manager—**only** if justified by the volume of work

Total CSPS staff = Minimum three/Maximum four.

For CM

- one physician;
- one state midwife;
- three state **or** practical nurses;
- one auxiliary birth attendant; and
- one unskilled laborer

Total CM staff = Minimum seven.

In contrast to the 15 staff persons proposed for CM by the BI, the PDSN has targeted a total of seven staff; for CSPS, the PDSN proposes a minimum of three staff, one less than the BI norm. The CSPS in this survey also fell short of these more limited norms. The actual staffing patterns reported by CSPS for the facilities survey include a visiting nurse at only three of the eight centers; an unskilled laborer at only one CSPS; and auxiliary birth attendants at five centers (one of which also has a midwife on staff). Out of the eight CSPS, a total of ten state nurses are employed (two centers have two state nurses each), and four practical nurses at three health centers. The CSPS in Bani has the greatest number of nurses, i.e., one state nurse in addition to two practical nurses. There are no pharmaceutical depot managers among the personnel reported at any CSPS in the survey.

Actual staffing patters at each of the three CM by far exceed the limited standards projected for the PDSN Project. The number of employees at the CM studied ranges from 8 in Pami to 18 in Saponé, with the greatest numbers concentrated among state and practical nurses.

7.2 AVAILABILITY AND CONDITION OF EQUIPMENT

In addition to shortages of trained personnel at health centers, the lack of equipment and poor condition of existing equipment have contributed to many health centers becoming virtually non-functional. Further, the institutional capacity to handle maintenance and upkeep of equipment, for all practical purposes, is nonexistent. The data in *Exhibit 7-2* compare the actual supply of selected equipment items to standards presented in a document entitled, "National Health Policy, 1980-1990."

EXHIBIT 7-2
SUPPLY OF STANDARD EQUIPMENT ITEMS AT SELECTED HEALTH CENTERS AS OF MARCH 1994

EQUIPMENT	CSPS FACILITIES			CM FACILITIES		
	STANDARD QUANTITY	Meeting Standard Exactly	W/O One Functional	STANDARD QUANTITY[a]	Meeting Standard Exactly	W/O One Functional
		%	%		%	%
VEHICLES:						
Liaison/4x4	0	100.0	–	1	100.0	0.0
Ambulance	0	100.0	–	1	100.0	0.0
Motorscooter	1	87.5	12.5	2	66.7	0.0
Bicycle	1	12.5	87.5	2	0.0	33.3
OTHER EQUIPMENT:						
Bed	4	50.0	12.5	30	0.0	0.0
Refrigerator	1	100.0	0.0	0	–	33.3
Baby Scale	1	87.5	12.5	3	0.0	0.0
Adult Scale	1	100.0	0.0	3	33.3	0.0
Gas Burner	1	0.0	100.0	1	100.0	0.0
Tongue Depressors (Box)	1	0.0	100.0	10	–	0.0
Microscope	1	37.5	62.5	0	–	0.0
Orthoscope	1	0.0	100.0	0	–	0.0
Blood Pressure Monitor	2	0.0	100.0	4	0.0	0.0
Thermometer	4	25.0	12.5	15	0.0	0.0

Notes:
a) Extracted from "*Politique Sanitaire Nationale, 1980-90.*"
b) Numbers not provided.

7.2.1 Vehicles

Standards are specified for the supply of vehicles at health centers, since a means of transportation is critical for health facilities to reach the population they serve. One bicycle and one motorscooter are standard for CSPS. All CSPS surveyed have access to at least one motorscooter, with the exception of the CSPS in Bani which has a bicycle. It is noteworthy that staff at the CSPS in Comin Yanga, Matiacaoli, and Tigba all contribute to periodic repair and maintenance of motorscooters; such expenses average FCFA 1,500/month. Given the scarcity of funds to cover vehicle maintenance, health staff who agree to service the motorscooters themselves are permitted to use them for certain personal errands. The CSPS in Sampelga boasts a Yamaha 175 motorcycle made available to the center for their Expanded Program on Immunization (EPI), including monthly maintenance and fuel, by Save The Children (SCF)/United Kingdom (UK). Save The Children/UK also provides support to the CSPS in Gorgadji, including a motorscooter and the fuel to run it.

Two bicycles, two motorscooters, one ambulance, and one four-wheel-drive/"*liaison vehicle*" are considered the minimum requirement for a CM. The CM in Saponé and Sebba have two motorscooters each, and the CM in Pami has one. All three CM meet the requirement for ambulances and 4 x 4s, although Pami reports their ambulance to be non-serviceable. One vehicle, plus fuel, are made available to the CM in Sebba for their immunization team by SCF, and the CM in Saponé received their ambulance from NGOs working in the same health zone. Saponé is the only CM with a bicycle.

7.2.2 Other Equipment

Not one of the eight CSPS studied has a blood pressure monitor, orthoscope, gas burner, or a box of tongue depressors, all of which are considered part of the requisite complement of equipment. Fifty percent of the CSPS meet the standard of a minimum of four beds; three CSPS (Gorgadji, Samplega, and Tigba) have less than four beds, and the CSPS in Koubri has no beds at all. As a means of assuring availability of basic cleaning products, personnel at Tigba's CSPS indicated that they purchase certain supplies on a monthly basis with their own money, such as soaps (4 @ FCFA 100), two liters of bleach, five packets of soap powder, and one cloth for cleaning floors (@ FCFA 700). At least one functioning microscope can be found at three of the eight CSPS (i.e., Comin-Yanga, Ilpecé, and Koubri) and 100 percent of the CM studied. Among CSPS, 87.5 percent had at least one baby scale and 100 percent had an adult scale in working order. All CM had, at minimum, one baby scale and one adult scale; but only one CM met the standard of three adult scales. Functioning refrigerators are present at all CSPS and CM, except Sebba which has three freezers. The CM in Sebba is the only facility with any freezer, an item not considered to be standard. Presumably, the freezers substitute for the refrigerators. All three CM have at least one gas burner, box of tongue depressors, orthoscopes, and blood pressure monitors. Two of the three CM also have on hand items such as a typewriter or calculator which are not considered to be standard.

7.2.3 Pharmacies

Either private or communal pharmacies serving the MOH facilities are found in all centers surveyed, except the CSPS in Sampelga which has no pharmacy at all. Pharmacies at the CSPS in Gorgadji, Matiacaoli, and Tigba, together with the CM in Saponé and Sebba are private. Pharmacies at the CM in Pama and the CSPS in Bani, Comin-Yanga, Ilpecé, and Koubri are communal. The pharmacy in Ilpecé's CSPS contributed to the cost of lodging for the visiting nurse (AIS). The pharmacy in Koubri contributes FCFA 30,000/month towards operation costs of this CSPS. At least one pharmaceutical depot is attached to seven of the eight CSPS and all three CM. Pama's pharmacy gave FCFA 100,000 to the CM in 1993, and in February 1994 the CM took FCFA 65,000 from the pharmacy to repair the water pump.

7.3 AVAILABILITY OF MEDICINES AND SUPPLIES

7.3.1 Medicines

One reason cited by the Burkinabé population for low levels of utilization at public health centers, as documented by results of the HFS/MOH Willingness and Ability to Pay Survey, is the unavailability of medicines. Budgetary constraints over the past few years have restricted total government purchases of imported drugs to about FCFA 200 million, or slightly more than 2 percent of total drug imports (World Bank). The increasing inaccessibility of drugs at public health centers has led to increases in cost to patients, who have to purchase medicines at higher priced private pharmacies, and dwindling public confidence in the ability of health centers to provide necessary care. Although recent drug imports have increased significantly over earlier levels, the private sector is responsible for this trend. For example, the expenditure on imported drugs rose from FCFA 3 billion in 1986 to FCFA 9 billion in 1991, equal to 1.6 percent of the GDP. In light of last year's FCFA franc devaluation, further restrictions on the purchase of imported drugs can be anticipated. (World Bank, 1994). It is estimated that no more than 6 percent of the drugs found in government pharmaceutical depots are generic (Becker et al.).

The data in *Exhibit 7-3* provide an indication of how few basic drugs and medical supplies were on hand both at the time of the survey in March 1994, as well as last year. Only two of all facilities studied, the CSPS in Bani and CM in Pama, had antibiotics or quinine on hand at the time of the enumerators' visit. None of the centers visited had either "*vermox*" or chloroquine in stock as of early March 1994. Of all CSPS and CM studies, aspirin was found only at the CM in Pama. Vaccines of some type were reported to be in stock at all health centers visited.

7.3.2 Medical Supplies

So limited are basic supplies such as syringes, gloves, or compresses that the CSPS at Comin-Yanga, Gorgadji, Samplega, and Tigba, are obligated to save them for emergencies or indigent patients. At the time of the survey, only 62.5 percent of CSPS had compresses, cotton, and gloves on hand. Only 12.5 percent of all CSPS reported a supply of needles and finger caps. The CSPS in Koubri had no alcohol available at the time of the survey or at any point last year. Alcohol was in stock in March at 75 percent of the CSPS studied. Only two of the three CM reported a stock of items as basic as alcohol and

cotton, as of March. Personnel interviewed at the CSPS in Ilpecé indicated that they had slides for mi scopes in stock in March and all last year, but no laboratory technician on staff trained to use t supplies. It was revealed that one order of syringes received last year at the CSPS in Matiacoali arr without needles. Not one of the three CM had needles on hand at the time of the survey.

EXHIBIT 7-3
AVAILABILITY OF CERTAIN MEDICINES, CONTRACEPTIVES, AND SUPPLIES AT SELECTED HEALTH CENTERS AS OF MARCH 1994

Medicines and Supplies	CSPS Facilities Where Available %	CM Facilities Where Available %
MEDICINES:		
Aspirin	0.0	33.3
Antibiotics	12.5	33.3
Chloroquin	0.0	0.0
Quinine	12.5	33.3
ORS	75.0	100.0
Vaccines	100.0	100.0
Vermox	0.0	0.0
CONTRACEPTIVES:		
Condoms	37.5	100.0
Injectables	37.5	33.3
IUD	37.5	33.3
Pills	87.5	100.0
Spermicides	25.0	33.3
SUPPLIES:		
Alcohol	75.0	66.7
Compresses	62.5	0.0
Cotton	62.5	66.7
Dye	25.0	33.3
Gloves	62.5	100.0
Finger-stall	12.5	66.7
Knife	50.0	33.3
Slides	50.0	33.3
Syringes	0.0	33.3
Thermometer	87.5	100.0
Needles	12.5	0.0

7.3.3 Contraceptives

The inventory of contraceptives varied from one center to another. Oral contraceptives seemed to be most readily available, both at the time of the survey as well as last year. Condoms were available in March at 100 percent of the CM and only three of the eight CSPS—Bani, Koubri, and Sampelga. Half of the CSPS reported that condoms were in stock "zero" weeks during 1994. Staff interviewed at the CSPS in Comin-Yanga indicated that, although they had IUDs on hand in March and all last year, the nurse has no training in IUD insertion. Two of the three CM (Saponé and Sebba) had no spermicide, injectables or IUDs on hand in March. It is noteworthy that the percentages of Burkinabé women in union who utilize any modern contraceptive methods is negligible; for example, only 2.1 percent of women take oral contraceptives, and less than one percent take advantage of any of the following methods: IUD, sterilization, IUD, or condom. (Konaté et al.)

7.4 PRIMARY HEALTH CARE SERVICES

The data in *Exhibit 7-4* present information on new consultations and births at each center in 1993, in addition to activities related to the EPI (PEV) and supervision of other health facilities. No data were available on any surgical interventions. Despite the well documented need for outreach and contact between health staff and the population, only two of the 12 health facilities reported organizing any type of sensitivity/educational campaigns in addition to EPI. The regular conduct of such activities conceivably could increase utilization rates at health centers. It is interesting to note that the results of the 1993 Demographic and Health Survey (DHS) reveal that only 41 percent of all births are assisted by a health professional and nearly 31 percent by a traditional birth attendant. DHS results also indicate that only 35 percent of children aged 12-23 months have been immunized against all diseases in the EPI.

7.4.1 New Consultations and Deliveries

Of all CSPS surveyed, Koubri and Sampelga appear to have been the most active in 1993, based on the number of new consultations and births reported. The CSPS in Sampelga provided 3,581 new consultations last year, compared to 3,402 for Koubri, 2,318 for Gorgadji, and 2,023 for Ilpecé. The smallest number of new consultations, or 807 was reported by the CSPS at Matiacoali. At the CM, Saponé reported 9,523 new consultations, followed by Sebba with 3,673, and Pama with 1,540. The average number of new consultations last year was 2,264 for CSPS and 4,912 for CM.

The number of deliveries at CSPS ranged from 523 at Koubri, 311 at Ilpecé, 135 at Samplega, 118 at Gorgadji, 91 at Comin-Yanga, and 79 for Tigba, to 76 for Matiacaoli. No comparable data were available for the CSPS in Bani. The greatest number of CM deliveries last year, 230, were reported in Sebba, compared to 202 in Pama, and 164 in Saponé. The total number of deliveries in 1993 averaged 190 at CSPS and 199 at CM.

EXHIBIT 7-4
ACTIVITIES REPORTED BY SELECTED HEALTH CENTERS DURING 1993

ACTIVITY	CSPS FACILITIES		CM FACILITIES	
	Average[a]	Range	Average[a]	Range
New Consultations	2,264	807-3,581	4,912	1,540-9,526
Deliveries/Births	190[b]	76-523	199	164-596
Surgical Interventions	0	0	0	0
EPI SUPERVISION:				
Number of vaccination posts	21	7-43	27	11-57
Frequency of visits (per year)	14	6-24	16	12-24
Distance traveled (km)	676[b]	158-1,236	820	292-1,692
CSPS SUPERVISION:				
Number	–	–	6	3-9
Frequency of visits (per year)	–	–	16[c]	7-24
Distance Traveled (km)	–	–	377	320-454
HEALTH POST (PSP) SUPERVISON:				
Number	11	5-18	–	–
Frequency of visits (per year)	5[b]	4-12	–	–
Distance Traveled (km)	243[d]	162-348	–	–

Notes:
a) Rounded to nearest whole number.
b) Data not reported by 1 of 8 CSPS, average based on 7 CSPS.
c) Data reported by 2 CM only.
d) Data reported by 4 CSPS only.

Source: Data collected by HFS at health centers.

7.4.2 Expanded Program on Immunization (EPI)

All health centers participate in the EPI; the number of vaccination posts identified by the current study ranged from 45, to which visits are scheduled twice weekly, in the case of Bani's CSPS, to seven posts, one of which usually is visited each month for Koubri with one visit per month. Staff from the CM in Sebba traveled to 57 vaccination posts last year, compared to 13 posts for Saponé and 11 for Pama. On average each CSPS is responsible for 21 vaccination posts, compared to an average of 27 for each CM.

7.4.3 CSPS and PSP Supervision

CM hold responsibility for the supervision of CSPS activities in their health zone, and CSPS supervise activities at PSP. Supervisory activities are important to follow because they require financial and human resources, as well as time. CM, for example, employ a car or four-wheel-drive truck to supervise its CSPS, since a large vehicle is necessary to transport the team mobilized for this purpose. On the other hand, CSPS' supervision of PSP is usually conducted by one person who travels to the health posts on a motorscooter. The norm calls for quarterly supervision of CSPS by CM (as opposed to the monthly supervision carried out for the EPI). Given the nature of services provided at health posts, they require more frequent supervision than CSPS.

As can be seen in *Exhibit 7-4*, the frequency of supervision varies from one health center to another. Each CM surveyed supervised an average of six CSPS according to a schedule that ranges from seven a year to two a month. In contrast, each CSPS supervised an average of 11 health posts (PSP) during 1993 from four a year to once a month, depending on the CSPS.

7.5 FEES FOR SERVICES

The information collected on fees charged by health centers was not complete owing largely to inconsistencies and incomplete records kept by health center staff. In nearly every facility visited, there is some type of cost recovery in effect, e.g., in the form of payments for deliveries, hospitalization, health cards, drugs, etc. The data gathered for the current study are presented in *Exhibit 7-6*.

EXHIBIT 7-5
FEES BY SERVICE AT SELECTED HEALTH CENTERS IN THREE PROVINCES, MEAN[A] AND MODE FOR 1994 (FCFA)

Service	CSPS Facilities		CM Facilities	
	Mean	Mode	Mean	Mode
Deliveries/Births	375	300	300/stay	300/stay
Establishment of medical visit certificates	2,750	—[b]	—[b]	—[b]
Hospitalizations	150/day	150/day	—[c]	300/stay
Consultation Card	50	50	58	—[d]
Vaccination Card	36	25	67	25
Surgery	1,200[e]	1,500	1,000	1,000

Notes:
a) Rounded to nearest whole number.
b) Data not available.
c) Cannot be determined owing to different ways CMS cast hospitalizations, e.g. per visit vs. per day.
d) Three CMS surveyed charge FCFA—100, 25, 50 per consultation card.
e) Average based on 5 CSPS reporting surgery fees.

7.5.1 Hospitalization

Among the four CSPS reporting charges for hospitalization, the average fee was FCFA 150 per day. The CM in Pama and Saponé charge CFS 300 per stay (no durations specified) for hospitalizations, while Sebba bases their fee on FCFA 100 per day.

7.5.2 Consultation and Vaccination Cards

The average cost of consultation cards at CSPS is FCFA 50, compared to FCFA 58 at CM. Vaccination cards average FCFA 36 at CSPS and FCFA 67 at CM, but the most typical fee charged for a vaccination card, by CSPS and CM, is FCFA 25. At CSPS, the highest charge is FCFA 75 at Koubri, and the lowest is FCFA 25 at Bani, Comin-Yanga, Gorgadji, Samplega, and Tigba. At CM, Pama collects only FCFA 25 for a vaccination card, compared to the FCFA 150 collected by Saponé. The CSPS at Koubri reported a charge of FCFA 250 for prenatal consultations, and FCFA 50 for a well-baby consultation with a nurse. No comparable fees were reported by any other health centers surveyed. These variations in changes reflect the lack of an enforced national fee policy for these services, as well as providing services free of charge to indigents. The determination of levels for fees has been left up to individual health facilities.

7.5.3 Deliveries

The average fee charged by a CSPS to deliver a baby is FCFA 375, with a range of FCFA 200 at Ilpécé to FCFA 1,000 at Koubri. All CM surveyed collect FCFA 300 per stay for each delivery.

7.5.4 Surgery

At all CM, surgical procedures cost FCFA 1,000. The fee most typically charged for surgery at a CSPS is FCFA 1,500 which is slightly higher than the average fee of FCFA 1,200 calculated for the five CSPS reporting this information.

7.5.5 Medical Visit Certificates

CSPS charge an average of FCFA 2,750 for medical visit certificates. Actual fees charged range from a low of FCFA 1,000 at Ilpecé to a high of FCFA 4,000 at Koubri. No such fees are reported by the CM surveyed.

7.6 REVENUES AND EXPENDITURES

Data on general operating costs were not available for all health centers surveyed. Since the MOHSAF has been functioning under a centralized system, very little information is available on the costs of various inputs at public health facilities or even at the provincial level. Reductions in the MOHSAF's operating budget have resulted in the allocation of inadequate resources to the provinces. Since the facilities receive credits rather than cash from the central ministry, and suffer from inadequate stocks of various supplies, there is no financial management system in place to track costs. In most facilities, there are not even any stock systems to track government-provided inputs. This situation renders difficult the determination of what has been received and consumed by a given health center, as well as the value of anything that may have been received and consumed. In general the information available on facility revenues was very sparse. The revenues that are reported tend to be very modest, and there is no record of now that revenue was spent.

The data on revenues and expenditures in *Exhibit 7-7* were available for only one health center, the CSPS in Koubri. The monthly levels of revenue and expenditure at Koubri cannot be interpreted as representative of CSPS surveyed, or even CM. For example, in Section 7.1, it was mentioned that Koubri is the only health center surveyed whose staffing profile exceeds the BI norm. The CSPS in Koubri is further distinguished from most CSPS by the extensive cost recovery activities being conducted. Koubri is also the only center that reported the amount of an established transfer, i.e., FCFA 30,000, received monthly from a communal pharmacy. It is noteworthy, however, that 1994 expenses at Koubri exceeded revenue by CFS 4,270. Koubri's CPSS is able to function and prosper in close proximity to a non-profit, confessional health facility run by the brothers of the Abbey of Koubri. In fact, the CSPS in Koubri was the only example of a fully functioning health center surveyed.

Based on data collected from the Provincial Health Directorates for health centers in the three provinces studied, Koubri's aggressive cost recovery efforts do not seem to reduce the utilization of

services. Compared to the other seven CSPS, Koubri reports the greatest monthly average number of births, MCH and pediatric consultations. Undoubtedly, the BI will offer few advantages to this particular health center; its cost recovery activity will be legalized, and a source of generic drugs will be made available to the pharmacy of Koubri so that the impact of the BI on a fully functioning health facility can be monitored.

Limited cost recovery activities were noted at other health facilities. The CM in Saponé, for example, appeared to have a self-financing laboratory; however, due to the inadequacy of their financial records, it was impossible to ascertain the financial status of the laboratory or the facility as a whole. A previous HFS report indicated that the annual revenue of a provincial government pharmacy was approximately FCFA 45 million, with a 13 percent margin on drugs purchased from Ouagadougou and 24.2 percent margin for drugs purchased from abroad. (See Becker et al.) Profits are used to pay for personnel, taxes, transportation costs, etc.

EXHIBIT 7-6
REVENUES AND EXPENDITURES (MATERNITY AND DISPENSARY) FOR THE CSPS AT KOUBRI, 1993 (FCFA)

	1/93	2/93	3/93	4/93	5/93	6/93	7/93	8/93	9/93	10/93	11/93	12/93	Total	Mean
Revenue	138,000	149,350	114,000	151,725	137,460	133,400	129,600	124,900	207,256	217,340	143,840	134,350	1,781,821	148,485
Expenditures	167,496	161,370	133,910	150,335	150,095	122,085	138,555	120,480	207,205	149,010	152,225	133,325	1,786,091	148,841
Balance	(29,496)	(12,020)	(19,810)	1,390	(12,635)	11,315	(8,955)	4,420	51	68,830	(8,385)	1,025	(4,270)	(356)
Cash[a] on hand at beginning of month	51,805	22,309	10,289	(9,521)	(8,131)	(20,766)	(9,451)	(18,406)	(13,986)	(13,935)	54,985	46,510	–	–
Cash[b] on hand at end of month	22,309	10,289	(9,521)	(8,131)	(20,766)	(9,451)	(18,406)	(13,986)	(13,935)	54,895	46,510	47,535	–	–
CASH ON HAND (ACCOUNTING BOOKS)														
EXPENDITURES:														
Salaries	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	1,224,000	102,000
Other	65,496	59,370	31,910	48,335	48,095	20,085	36,555	18,480	105,205	47,010	50,225	31,325	562,091	6,841
REVENUE:														
Communal Depot	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	360,000	30,000
Other	108,000	119,350	84,100	121,725	107,460	103,400	99,600	94,900	177,256	187,840	113,840	104,350	1,421,821	–

Notes:
a) Unvariable expenses at the communal pharmaceutical depot = FCFA 42,000 for salaries and FCFA 30,000 for payments to the CSPS, total = FCFA 72,000.
b) Personnel expenditures at the CSPS = FCFA 102,000 monthly.

8.0 CONCLUSIONS

The current study offers insights into certain weaknesses of health centers all of which interrelate and pose significant obstacles to their effective functioning. The shortages of health personnel, essential drugs, and equipment; and irregular supervision of CSPS and CM activities have the effect of reducing the already low demand for care at public health centers. In addition to the fact that facilities are not fully functioning, the lack of accurate data on financial operations, including the level of expenditures and revenues, makes it difficult to determine the most appropriate policies aimed at maximizing the effectiveness and efficiency of cost recovery measures. The results of the facilities survey demonstrate that all centers suffer from most of these shortcomings, to varying degrees. It is particularly discomforting to realize that the health facilities studied were selected by provincial health directors based on the criteria that they be as fully staffed and functioning as possible.

The Government's second Five-year Development Plan called for an ambitious program of construction and upgrading of health facilities during 1991-95. In the absence of complementary changes in staffing, medicine supply, and financial management, it is likely that such upgrades will accomplish very little. For example, a policy decision to provide training that makes clear to health staff the benefits associated with maintaining accurate records and focusses on ways to increase individual motivation could be expected to generate more and better data on various aspects of health center operations. Also, revenue is lost from increasingly frequent and longer lasting stock outs of drugs. A policy encouraging improved planning could help in averting or reducing the frequency of stock-outs.

BIBLIOGRAPHY

Becker, Gregory C., Suzanne E. McLees, and Bineta Ba. 1992. Burkina Faso Family Health and Health Financing Project Protocol, Health Financing Subproject. Health Financing and Sustainability Project Technical Note. December.

Bekele, Abraham. 1991. Burkina Faso—Data Analysis of the Boulgou Cost Recovery Study. MCD International. Washington, DC. May 30.

Bitran, Ricardo. 1994. A Supply-Demand Model of Health Care Financing with an Application to Zaire—A Training Tool. EDI. Washington, DC: The World Bank.

Derriennic, Yann. 1994. Trip Report, Burkina Faso. Health Financing and Sustainability Project. Bethesda, MD. March 12.

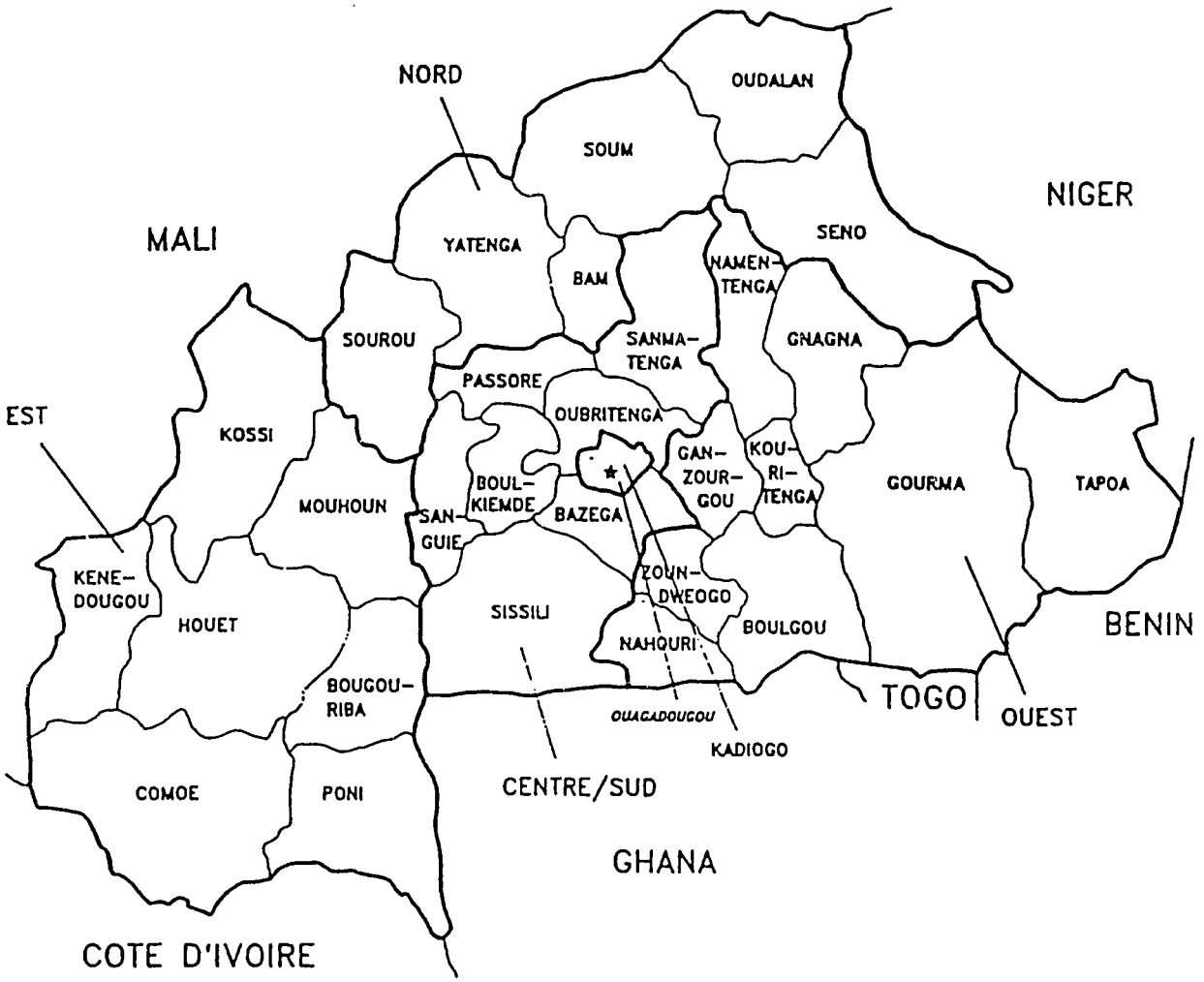
Konaté, Désiré Lohé, Tinga Sinaré and Michka Seroussi. 1994. Burkina Faso Enquête Démographique et de Santé 1993. Institut National de la Statistique et de la Démographie/Demographic and Health Surveys, Macro International Inc. Calverton, MD. June.

Meeus, Wilma, Bineta Ba, Alexandre Tiendrebeogo, and Daouda Nignan. 1991. Rapport d'Evaluation de l'Etude sur le Recouverment des Couts des services de santé dans la zone sanitaire de Garango, Province du Boulgou, Burkina Faso. Juin.

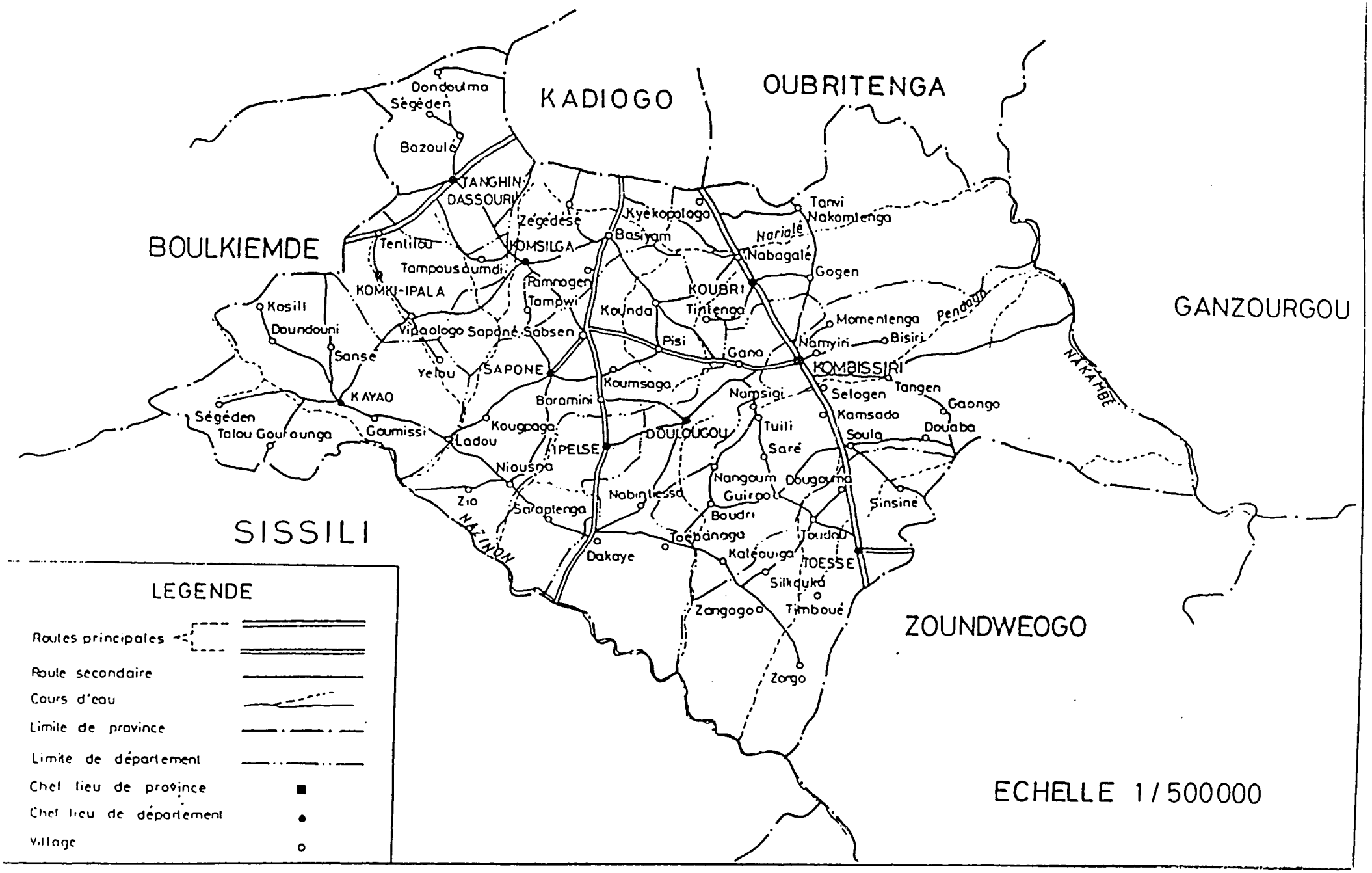
The World Bank. 1994. Staff Appraisal Report, Burkina Faso Health and Nutrition Project (PDSN). Washington, DC. March 11.

ANNEX

BURKINA FASO

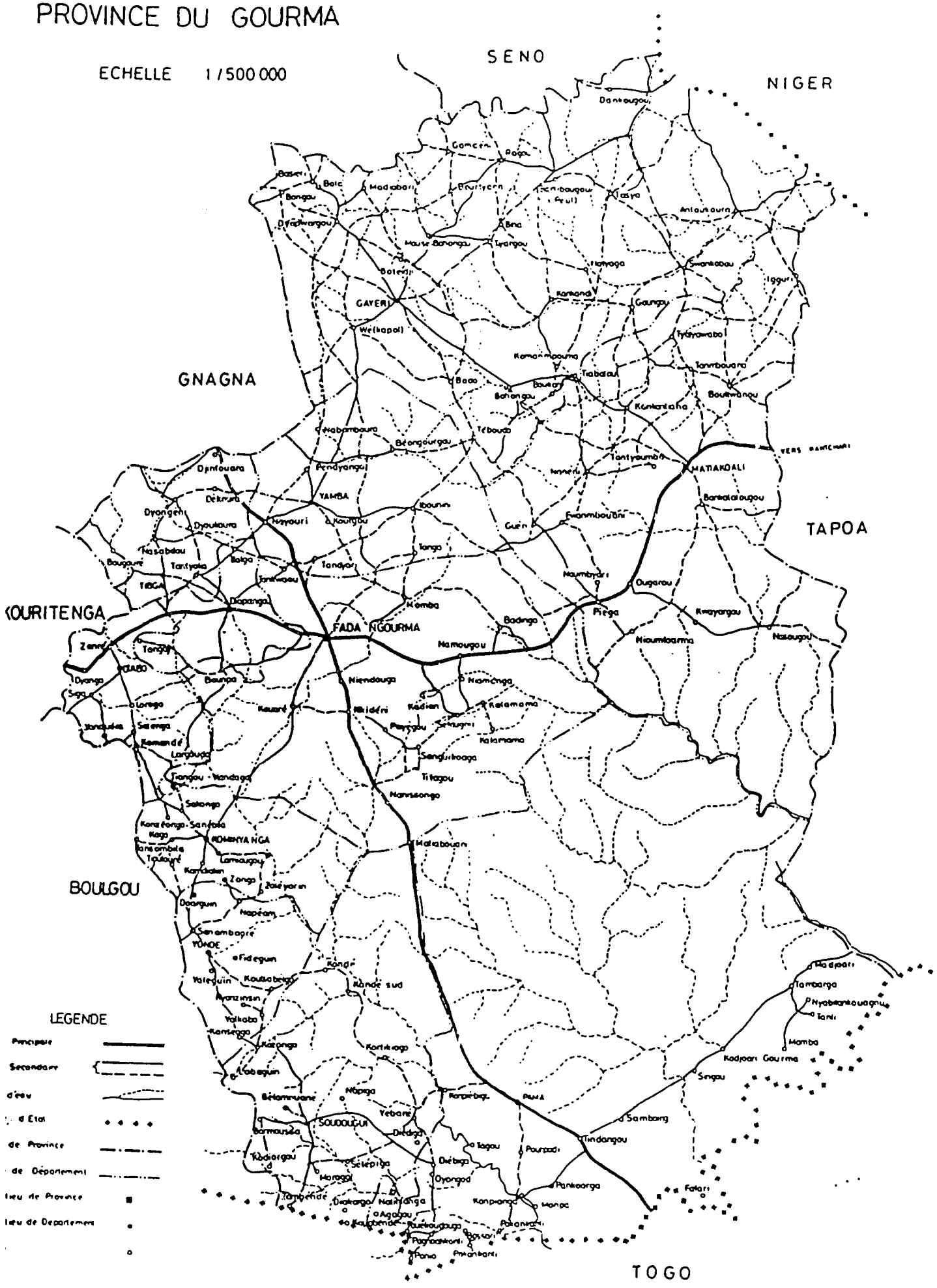


PROVINCE DU BAZEGA

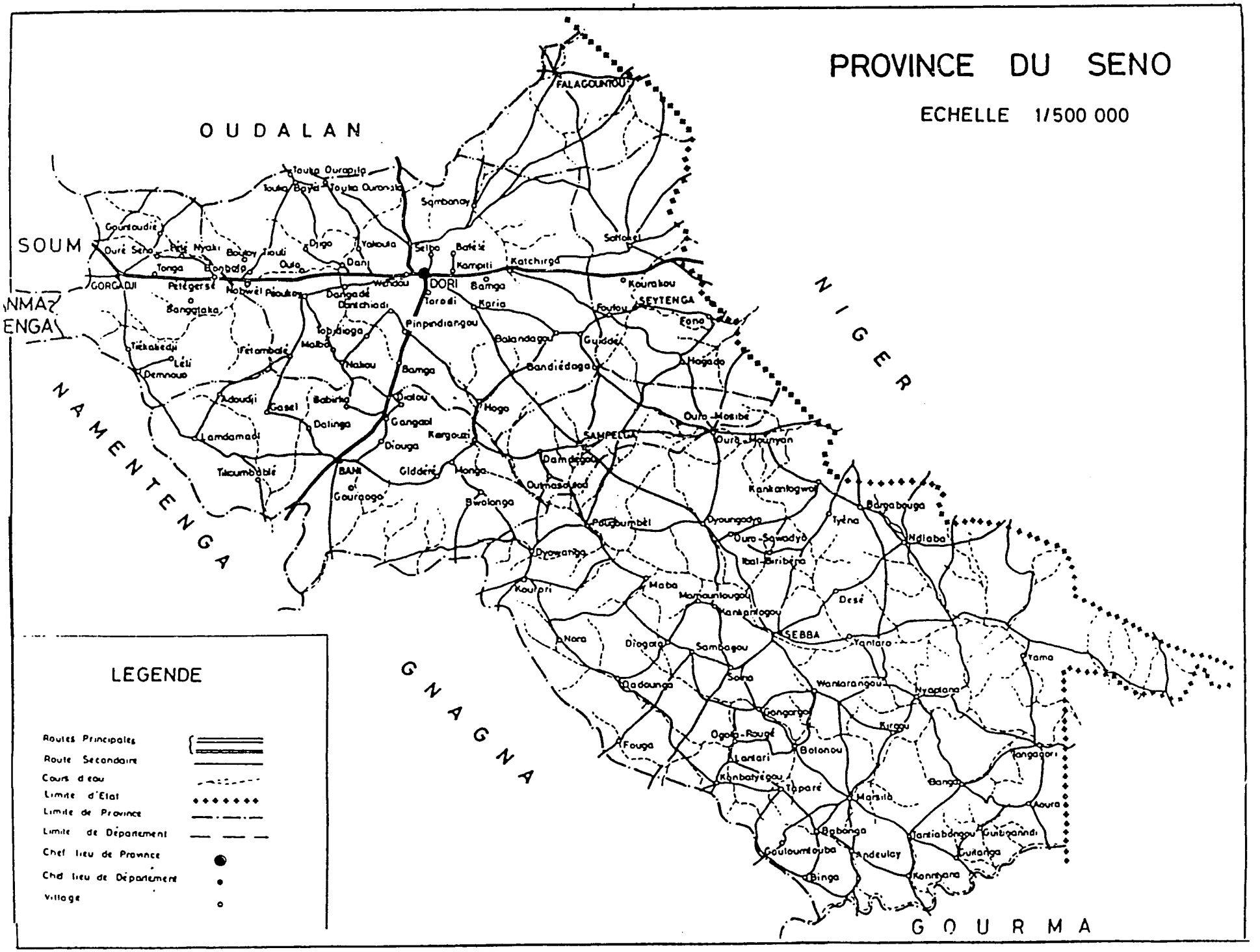


PROVINCE DU GOURMA

ECHELLE 1/500 000



UT GEOGRAPHIQUE DU BURKINA (Mars 1993)


PROVINCE DU SENO
ECHELLE 1/500 000
OUDALAN
SOUM
NAMENTENGA
NIGER
GNAGNA
GOURMA
FALAGOUNTOU
DORI
SEYTENGA
SAMPELGA
BANI
SEBBA
LEGENDE
Routes Principales
Route Secondaire
Cours d'eau
Limite d'Etat
Limite de Province
Limite de Département
Chef lieu de Province
Chef lieu de Département
Village