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Enhancing the Effectiveness of Public Spending
A Review of Three Sectors

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WEIGHTS AND MEASURES
Metric System

ABBREVIATIONS AND ACRONYMS

AEV	*Adduction d'Eau Potable*
AFD	*Agence Française de Développement*
ANC	Antenatal Care
ARI	Acute Respiratory Infection
CAA	*Caisse Autonome d'Amortissement* (part of MFE)
CAME	*Centrale d'Achat des Médicaments Essentiels*
CAS	Country Assistance Strategy
CCS	*Complexe Communal de Santé* (Communal Health Center)
CFAA	Country Financial Accountability Assessment
CFAF	CFA Franc
CHD	*Centre Hospitalier Départemental*
CNHU	*Centre National Hospitalier et Universitaire* (National University Hospital Center)
CNMP	*Commission Nationale des Marchés Publics* (National Procurement Committee)
COFOG	Classification of Functions of Government
COGEC	*Comité de Gestion Communal* (Communal Management Committee)
COGES	*Comité de Gestion Sous-Prefectoral* (Sub-Prefecture Management Committee)
CSA	*Centre de Santé d'Arrondissement*
CSC	*Centre de Santé de Commune*
CSSP	*Centre de Santé de la Sous-Préfecture* (District Health Center)
DA	*Direction de l'Administ*ration
DANIDA	Danish Aid Agency
DD	*Direction Départemantale*
DDSP	*Direction Départementale de la Santé Publique* (Regional Public Health Administration)
DGB	*Direction Générale du Budget* (Directorate General of Budget – part of MFE)
DH	*Direction de l'Hydraulique* (Water Directorate)
DHAB	*Direction de l'Hygiène et de l'Assainissement de Base*
DHS	Demographic and Health Survey
DIVI	*Direction de l'Inspection et de la Vérification Interne*
DPP	*Direction de la Programmation et de la Prospective* (Department of Planning and Projections)
EPE	*Équivalent en Point d'eau* (water supply point)
GDP	Gross Domestic Product

GNP	Gross National Product
GOB	Government of Benin
HIPC	Highly Indebted Poor Country
HZ	*Hopital de Zone*
IDA	International Development Association
IGF	*Inspection Générale des Finances*
INSAE	*Institut National de la Statistique et de l'Analyse Économique* (National Statistics Institute)
IMF	International Monetary Fund
MAEP	*Ministère de l'Agriculture de l'Elevage et de la Pêche* (Ministry of Agriculture, Livestock and Fishery)
MCPPD	*Ministère Chargé du Plan, de la Prospective et du Développement* (Ministry of Planning)
MDG	Millennium Development Goal
MDR	*Ministère du Développement Rural* (Ministry for Rural Development)
MEHU	*Ministère de l'Environnement, de l'Habitat et de l'Urbanisme* (Ministry of Environment, Housing and Urban Affairs)
MEPS	*Ministère des Enseignements Primaire et Secondaire* (Ministry of Primary and Secondary Education)
MESRS	*Ministère de l'Enseignement Supérieur et de la Recherche scientifique* (Ministry of Higher Education and Scientific Research)
MFE	*Ministère des Finances et de l'Economie* (Ministry of Finance and Economy)
MFPTRA	*Ministère de la Fonction publique, du Travail et de la Réforme administrative* (Ministry of Civil Service)
MISD	*Ministère de l'Intérieur, de la Sécurité et de la Décentralisation* (Ministry of Interior Affairs)
MMEH	*Ministère des Mines, de l'Energie et de l'Hydraulique* (Ministry of Mines, Energy and Water)
MSP	*Ministère de la Santé Publique* (Ministry of Health)
MTEF	Medium-Term Expenditure Framework (*Cadre des dépenses à moyen terme*; CDMT)
MTPT	*Ministère des Travaux publics et des Transports* (Ministry of Public Works and Transport)
NGO	Non-Government Organization
PADEAR	*Programme d'Appui au Développement de l'Eau et de l'Assainissement en milieu Rural* (Assistance Program for the Development of the Water Supply and Sanitation Sector in Rural Areas)
PEA	*Poste d'Eau Autonome*
PER	Public Expenditure Review
PERAC	Public Expenditure Reform Adjustment Credit
PIP	*Programme d'Investissement Public* (Public Investment Program)
PNHAB	*Programme National d'Hygiène et de l'Assainissement de Base*
PRSC	Poverty Reduction Support Credit
PRSP	Poverty Reduction Strategy Paper
PTA	Parent Teacher Association
SDH	*Services Départementaux de l'Hydraulique*
SHAB	*Services de l'Hygiène et de l'Assainissement de Base*
SIEMHAB	*Services Infrastructure, Équipement, Maintenance, Hygiène et Assainissement de Base*
SIGFIP	*Système Intégré de Gestion des Finances Publiques*

SONEB	*Société Nationale des Eaux du Bénin*
SSA	Sub-Saharan Africa
SSPR	Structural and Social Policy Review
TOFE	*Tableau des Opérations Financières de l'Etat* (Summary table on Consolidated Operations of the Central Government)
UEMOA	*Union Economique et Monetaire de l'ouest Africaine* (West African Economic and Monetary Union)
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VAT	Value-added tax
VLOM	Village Level Operation and Maintenance
WAEMU	West African Economic and Monetary Union
WB	World Bank
WHO	World Health Organization

Vice-President: Gobind T. Nankani
Country Director: Pedro Alba
Sector Manager: Alexandre V. Abrantes
Task Team Leader: Sajitha Bashir

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Executive Summary

Enhancing the Effectiveness of Public Spending in Benin – A Review of Three Sectors

Scope and Approach

The Country Assistance Strategy (August 2003) for Benin proposes progressively channeling IDA assistance through annual Poverty Reduction Support Credits (PRSC) that would support the government budget. Since 2001, Benin has embarked on a vast reform of public expenditure management, supported by the Bank's Public Expenditure Reform Adjustment Credits (PERAC) and other donors. A unified operating and investment budget is prepared within a medium-term expenditure framework (MTEF) guided by the objectives laid out in the Poverty Reduction Strategy Paper (PRSP). Sectoral ministries participating in the reform program prepare a three-year program budget on an annual basis, with performance, in principle, being monitored by the achievement of sectoral objectives. These ministries have been given the authority to make commitments and issue payment orders along with the devolution of reporting obligations and ex-ante financial control.

This Public Expenditure Review (PER), the first to be done since 1997, concentrates selectively on a few themes and sectors to fit the cycle of the PRSCs. The first PRSC focuses on policies and reforms with the highest poverty impact and is intended to contribute to: (i) maintaining macroeconomic stability and promoting growth; (ii) strengthening the public expenditure management reform; (iii) improving the delivery, quality and coverage of basic services while strengthening expenditure efficiency in these sectors; and (iv) financing the government's expenditure program in key sectors.

The PER covers three issues: (i) trends in public expenditures; (ii) outcomes and expenditures in health, education and rural water supply and sanitation; and (iii) stock-taking of the implementation of the public expenditure management reform agenda, generally and in the above sectors, more specifically. The main focus of the PER is on expenditures in the three sectors. These sectors have already been included in the PRSC-1 and an analysis of their public spending will help to sharpen the sectoral content of the PRSCs. This Executive Summary is structured around these three issues.

Public Expenditure Trends - Findings

Fiscal performance has been generally satisfactory and the budget is being framed and executed broadly in line with the priorities outlined in the PRSP. This was the result of a substantial increase in tax revenues and other revenues coupled with a slower growth in total expenditures. The government faced difficulties in achieving its fiscal targets in 2002 (due to higher than anticipated personnel expenditures) and in 2003 (due to lower than anticipated revenue collections), but restrained spending in domestically financed investment in order to contain overall expenditure.

Over the medium term, expenditure pressures are likely to gain momentum while the revenue base continues to be vulnerable. The rapid growth of the population will increase the demand for basic services (education, health, rural water, and others). Raising the quality of these services, currently at a low level, will impose additional costs. The decentralization program under way offers an opportunity for promoting accountability and citizen's satisfaction with basic services, but in the short term it can also increase the demands on public resources. On the revenue side, there is a high level of dependence on trade taxes and a large share of these taxes depends on trade with Nigeria. Trade liberalization and the regional trading arrangements can pose a threat to revenue mobilization in the short term. Administrative inefficiency, corruption and tax evasion reduce actual collections relative to potential tax revenues. The government proposes various measures to strengthen the capacity for collection of domestic taxes, as has been done in the case of customs collection.

More effective prioritization in expenditure policy will be required to face emerging fiscal pressures. For the moment, all sectors have benefited from increased resources, and in 2002, all sectors were affected by the cuts in domestically financed investment that were required to offset increased current expenditures. Those priority ministries that are most dependent on project aid received reduced budgetary shares as additional domestic resources were not allocated to them. The current development of a programmatic approach should facilitate prioritizing among sectors and programs, provided that further progress is made in strengthening the expenditure monitoring system. Further, the priority activities and programs in the budget should be identified, including identifying the priority activities of non-priority ministries (to be protected), as well as the non-priority activities of priority ministries (to be reduced). A review of the various projects of the sectoral Ministries is also required to eliminate duplication of activities. This will help in identifying compensating savings in non-priority programs and the required shifts in sectoral resource allocation when preparing the MTEF that frames the budget and the program budgets.

Education, Health and Water Supply: Findings and Recommendations

Sectoral Outcomes

There are four generalized findings on sectoral outcomes, which are detailed sector-wise in table 1:

- there has been significant progress in aggregate indicators in all three sectors over the period 1997-2003: the primary enrolment ratio, infant and child mortality rates and access to potable water in rural areas have improved. Infant and child mortality rates continue to be high, however. Maternal mortality and access to sanitation in rural areas are two indicators on which there seems to have been little progress.
- In both education and health, Benin has done well compared to other West African and sub-Saharan countries.

- Regional disparities are very pronounced in primary education, with poorer regions doing much worse, especially in relation to girls. Health indicators are also worse in poorer regions, but leaving aside the large difference between the poorest and the richest regions, there is only a modest band of variation between other regions. In rural water supply, there is no correlation between the poverty of the region and access rate: some of the poorest regions have a high access rate.
- Across wealth groups, disparities in education and health indicators are even more pronounced than regional disparities. In health, they have also widened between 1996 and 2001. In education, only 16 percent of children from the poorest quintile reach class 6 compared to 90 percent of children from the richest quintile ; the GER in lower secondary for the poorest 20 percent of children is 8 percent compared to 70 percent for the richest 20 percent of children. The infant and child mortality rates for the poorest households are more than double that of the richest households.

Further, in education, the poor quality of primary education nullifies much of the progress made in expanding enrolments, as most children in grade 3 do not have the required proficiency in the language of instruction (French) to continue their education. This contributes to the high level of educational inequality noted above.

Public Expenditure Issues

The main findings of the analysis of public expenditure issues for each sector are summarized in tables 2 (a), 2 (b) and 2(c) and key issues are presented briefly below:

- **Public expenditure trends**: In education and health, nominal public spending has doubled and the share of spending in GDP has gone up. The share of education in total government expenditure remained stable; that of health increased. Public expenditure on rural water supply declined in nominal terms, mainly due to the closure of major externally financed projects. The rural water supply and health sectors are highly dependent on external financing. The budget execution rate has improved in the health sector, but varies from year to year in education and rural water supply, mainly on account of shortfalls in capital spending.
- **Public expenditure composition and priorities**: The share of primary education remained stable, but the shares of technical/professional and higher education increased due to availability of foreign financing. Within health, the share of spending for "special budget lines", managed by the health ministry/finance ministry has increased substantially, relative to the spending by health administration at the regional and central levels. The share of expenditures on five major public health programs is driven by the availability of foreign funds, rather than by national health priorities; in addition, some important causes of childhood mortality and morbidity are not addressed.
- **Efficiency of spending**: In primary education, inefficiencies in teacher deployment mean that many schools have very high pupil-teacher ratios. In health, expenditure under the "special budget lines" (explained more fully in the main

report) is not transparent and is not clearly aligned with sectoral priorities. Peripheral health centers, which represent the first centers of contact for the majority of the population, receive an estimated 25 percent of total public recurrent spending. In rural water supply, unit costs of wells are higher than in other African countries, possibly due to limited competition in public procurement markets.

- **Equity in spending**: In primary education, there is a large variation in per pupil spending across regions due to imbalances in the allocation of teachers and the formula for transfers to parent teacher associations. In health, total public spending by region is not available, but there are significant differences in the amounts given to the regional health administration. Investment in water points is focused in a few regions, due to donor preferences; all regions receive the same recurrent expenditures, irrespective of the amount of investment.

- **Expenditure requirements for attaining Millenium Development Goals**: In both primary education and rural water supply, budgetary allocations will have to increase by at least three times over current levels. Estimated total expenditures on health would have to double and public expenditures would have to triple by 2015, compared to the base year of 2004.

- **Public expenditure management**: Significant reforms have been made in devolving spending authorities to line ministries. The move towards results-based budgeting and program budgeting is impeded at the sectoral level by the lack of institutional reform to create management responsibility for programs, especially in education and health. Personnel management and execution of personnel expenditures is still highly centralized with the Ministry of Finance and Economy; line ministries do not have a robust information base for sound programming of personnel expenditures. Expenditures of capital projects include significant recurrent expenditures, which can hide inefficiencies and also mean that incremental true recurrent costs of projects are not estimated for forward projections of resource requirements. The government has begun controlling various personnel related recurrent expenditures being charged to investment projects, but more needs to be done with respect to other non-personnel recurrent expenditures (such as for petrol)The management of and accountability for the use of *crédits délégues* is poor. Community organizations play an important role in all three sectors in expressing demand for services and in mobilizing and managing resources, including public resources; in the case of health, they are also expected to play a role in planning. However, their financial management skills are weak and they also lack overall management skills.

Sectoral Recommendations

The PER identifies six major areas for action in each of the three sectors, details of which are provided in tables 2(a)-2(c). These are:

- **Increase and diversify resource availability for the three sectors while containing costs**: The goals for universal completion of primary education, reductions in

infant and maternal mortality rates, and access to safe drinking water require substantial additional resources. Public funding will need to be enhanced for primary and secondary education, primary and preventive health care, and rural water supply. Private resources need to supplement public resources, for specific sub-sectors or services. In all three sectors, demand management will be important to contain overall resource requirements (for example, in regulating the flow of students between primary and secondary education).

- **Reform personnel management policies**: This is critical in education and health to enhance the effectiveness of public spending, increase regional equity in the availability of services and improve the quality of services. Without such reforms, the severe imbalances in primary pupil-teacher ratio or in the availability of health personnel across regions cannot be addressed. Reforms need to cover the issues of recruitment, compensation and professional development. While these issues are expected to be covered under the overall civil service reform, measures to accelerate progress in these specific sectors should be considered urgently.

- **Improve targeting of public funding to the poor**: In primary education, reform of the funding formula for transfers to parent teacher associations is required to ensure that poorer and underserved regions receive additional funds. Improving access to secondary education among the poor will require targeted scholarships; theexisting generalized transfers to parent teacher associations, which finances only part of the salaries of locally recruited teachers (with parents paying the balance) do not explicitly provide for the participation of poor students. In health, reductions in health services used by the poor (specifically for childhood diseases and reproductive health) should be considered, along with innovations in payment mechanisms. In rural water supply, increasing awareness in the southern regions in order to generate demand for water projects is necessary. Modified co-funding formulae can also be adopted to compensate for higher costs of investment in areas with difficult hydro-geological conditions.

- **Enhance the effectiveness of community institutions**: Additional training in financial management skills is required in all three sectors, but sector-specific training needs must also be assessed. The accountability of these institutions should be enhanced through greater public scrutiny of their use of resources and giving greater voice to users.

- **Make more effective use of the private sector in specific areas**: Both in education and health, a better understanding of the private sector is required to see where it can be used and with what instruments. The possibility of giving subsidies to the private sector to expand access in secondary education should be explored. In health, service contracts with private providers should be piloted and evaluated. In rural water supply, the private sector should be encouraged to manage and expand piped water supply systems through performance-based management schemes.

- **Implement sector-specific public expenditure management reforms**: As progress is made on the broader public expenditure management reform agenda, identification and implementation of measures that will enhance the effectiveness

of public spending should be encouraged by line ministries. Some of these are listed in table 3.

In addition to these six broad areas of action, there are some priority sector-specific actions which are not directly related to expenditure policy but which will have an important impact on the effectiveness of public spending. In primary education, the most urgent issue is to re-examine the pedagogical strategy for classes 1 and 2, specifically the issue of teaching in a language of instruction that is not familiar to young children, which affects retention and learning outcomes. Strengthening the pedagogical support and supervision system, as well as regular assessments of student learning, are also required. In health, strengthening the referral system and promoting rational use of drugs can have a major impact on lowering total and public costs.

Public Expenditure Management – Issues and Recommendations

Issues

An ambitious public expenditure management reform has been underway since 2001 and has many successes to its credit. Among its successes are the following: (i) the budget enforces the principles of unity and universality; (ii) the budget classification system is an effective instrument for administering the budget; (iii) the medium-term expenditure framework effectively frames budget preparation and has been effective in ensuring fiscal discipline and compliance with the priorities in the PRSP; (iv) there has been a move towards results-based budgeting and program budgeting; (v) responsibility for spending has been devolved to line ministries and the standard control system has been significantly simplified; and (vi) there is a greater degree of performance orientation in line ministries, with an initial set of performance indicators being developed.

However, this is a major reform effort requiring considerable time and considerable capacity-building efforts before there are significant visible results in terms of improving service delivery. The progress on these reforms have been discussed in detail in many other documents of the Bank (PERAC ICR, Program document of the PRSC-1, CPAR, CFAA). Important issues that are highlighted in this PER are: (i) the presentation, coverage and consistency of the budget documents and program budgets need to be improved; (ii) there is formal compliance with the MTEF ceilings at the time of budget preparations, but required program prioritization and trade-offs are not made during execution when there are cuts in resources or expenditure over-runs; (iii) given the extent of dependence on foreign financing, moving effectively towards program budgeting depends to a large extent on both donor willingness (i.e., willingness to shift from individual projects to a programmatic approach) and donor capacity (combining the necessary sector-specific skills with knowledge of PEM issues) to engage in a constant dialogue at all stages of budget formulation and execution; and (iv) at the budget execution stage, improvements are required in rationalizing commitment accounting, allowing multi-year commitment appropriations and reducing the use of special payment procedures. Other issues relating to procurement, internal and external audit are also briefly covered.

Recommendations

Many of the PER recommendations have been included as part of the PRSC triggers and prior actions. The recommendations are listed below; table 4 presents information on the PER recommendations that are already included in the PRSC-1.

Budget preparation

- Reinforce the budget preparation procedure, through strengthening the initial and strategic phase of budget preparation. An initial macroeconomic framework and MTEF should be prepared together with a budget policy paper and submitted to the Cabinet by April. The MTEF ceilings should be notified to line ministries by May.
- Unify the budget preparation process through transferring responsibilities for the PIP to the MFE and unifying the nomenclatures of the expenditure programming documents.
- Improve the structure of the program budgets, when needed, and to present in the program budgets the expenditures of the organizations involved in public service delivery in gross terms.
- Pursue improvements in the system of performance indicators.
- Improve the presentation of the budgetary documents, which should include the MTEF, a budget policy paper for the MTEF period, and the program budgets (or a summary presentation of the program budgets).

Budget execution

- Effectively implement the commitment appropriations (*autorisations de programme*) in the 2005 budget (prior action for PRSC-2).
- Pursue the development of the financial management information system, through completing the coverage of the budget execution system, ensuring proper interface with the government accounting system and other financial management systems (notably the payroll system).
- Pursue the implementation of measures aimed at increasing efficiency in budget execution (e.g., making transfer between budget line-items more flexible, eliminating all duplicate central controls).
- Ensure that budget funds are available in the region as soon as the budget is effective (i.e. make the *délégation de crédit* automatic)
- Empower the heads of the "*directions départementales*" of line ministries as "*ordonnateurs délégués*", taking into account the experience of delegating financialpowers within central ministries.
- Produce regularly the performance monitoring reports.

Other PEM Issues

- Implement the measures of the procurement reform action plan.
- Provide better training and adequate institutional incentives to line ministries staff involved in procurement.
- Encourage ministries to suggest and experiment with new management approaches, such as in the Ministry of Environment.
- Reinforce internal audit through, notably, creating an audit network.
- The end-of-year accounts should be prepared within a time limit of 6 months, with the view to submitting to Parliament the draft settlement law for the budget of the previous year at the same time as the draft budget for the current year.

	Table 1: Summary of Progress in Sectoral Outcomes		
	Education	**Health**	**Rural Water Supply**
Trends in quantitative indicators 1997-2003	1. Rapid growth in enrolment at all levels: 7 percent p.a. in primary education; 15 percent p.a. in higher education. 2. Private sector growth has been very important in higher and technical/professional growth; negligible in primary. 3. Primary GER rose from 80 percent in 1997-98 to 97 percent in 2002-03. 4. Primary completion rate is 50 percent. 5. Coverage in higher education is 445 per 100,000 population.	1. Steady improvement in basic indicators: infant mortality - 87 per thousand; under-five mortality - 158 per thousand; life expectancy - 54 years. 2. Maternal mortality is high - about 850 per 100,000 births. 3. Nearly half the deaths under five occur between the ages of 1-4 years; nearly 63 percent of maternal deaths occur within 24 hours of delivery. 4. Five health problems account for 80 percent of deaths among children: malaria, anemia, diarrhea, acute respiratory infection and malnutrition. 5. Stagnation in utilization rate of health services, but marked increase in utilization rates for infants and young children. 6. 70 percent of deliveries are assisted deliveries. 7. Progress on full basic coverage of immunization has been slow (59 percent in 2001 compared to 55 percent in 1996).	1. About 44 percent of rural/semi-urban population had access to potable water point in 2002 compared to 33 percent in 1997. 2. Despite this improvement, due to rapid demographic growth, the absolute number of people without access to potable water increased in the period. 3. Only 15 percent of rural households have installations for hygienic evacuation of excreta.
Quality	1. Fewer than 10 percent of children have adequate mastery of language of instruction (French) by grade 3 to engage in meaningful learning in later grades.		1. 20 percent of existing facilities are non-functional, yielding a coverage rate of 35 percent (2.1 million people). 2. There are no data on the quality of water, but there have been no reports of biological or other contamination.
Performance *vis-à-vis* other countries	1. Primary GER is the second highest in Francophone West Africa. 2. Secondary GER is relatively low compared to those in other countries with high primary GER - primary completion may be low. 3. Coverage of higher education is far greater than in other West African countries.	1. Better performance than other SSA countries where there has been a leveling off of infant and child mortality rates. Benin is now an above-average country for the region. 2. Life expectancy is among the higher ones in West African countries.	
Disparities - regional/gender	1. Disparities in primary GER and completion have widened across regions, and boys and girls. Primary GER for girls in Atacora-Donga is 69 2. Only 25 percent of 12 year old girls in Atacora-Donga reach class 6, compared to national completion rate of 50 percent.	1. Disparities between region are not as large as the disparities between the poorest and the richest households. 2. Substantial differences in percentage of assisted deliveries, but less so in immunization coverage and general utilization indicators.	1. Substantial differences in access to safe water: 61 percent in Atacora compared to 21 percent in Oueme. 2. These differences are not related to the poverty level of the region; in fact, some of poorer regions have higher access rate. 3. Larger settlements appear relatively under-served compared to smaller settlements.
Wealth disparities	1. Disparities at post-primary level are enormous: in lower secondary, GER for poorest households is 8 percent compared to 71 percent for richest households. 2. Access rate for primary is 60 percent for poorest households and 100 percent for richest. 3. Only 16 percent of poorest children complete 6 years of primary compared to 90 percent of richest children.	1. Infant and under-five mortality rates among poorest households are more than double (111 and 198, respectively) that in the richest households 2. These disparities worsened between 1996 and 2001. 3. Only half the children of poorest quintile received full package of vaccinations, compared to nearly three-quarters of richest children. 4. 50 percent of the poorest women had assisted deliveries compared with 100 percent of richest women.	

	Table 2 (a): Education – Public Expenditure Issues
Rationale for public intervention	1. Externalities associated with primary education. 2. Promote equity by increasing access of poor to higher levels of education and enabling them to benefit from growth.
Public expenditure trends and indicators	1. Nominal public spending doubled between 1997 and 2003; annual real rate of growth of 8.6 percent. 2. Education's share of government spending remained constant at about 19-20 percent. 3. At 3.7 percent of GDP, it is higher than average for African countries. 4. Per capita spending was US$15 in 2002. 5. Share of PIP expenditure has gone up from 15 percent to almost 20 percent in 2003; some of this PIP expenditure includes expenditure on teacher training, textbooks which should be recurrent. 6. Foreign financing accounts for 8 percent of total education expenditure. 7. Budget execution rate – 75-90 percent with greatest shortfall in capital spending. 8. Total spending on education (public and private) is not known.
Public expenditure composition and priorities	Share in total education expenditures: 1. Share of primary education stable at 49 percent; declined to 38 percent in 2003 (provisional figures). 2. Share of technical and professional and higher education increased to 9 percent and 24 percent, respectively, in 2003, mainly on account of increased capital spending.
Efficiency of spending	1. Differentials in per pupil public recurrent spending at different levels of education have narrowed, especially between primary and secondary levels. 2. Despite this, the differential in pupil-teacher ratio (one indicator of quality) between primary and secondary has widened because it has dropped sharply in secondary schools (41 to 28) while it has remained constant primary schools (55; rose in 2003 to 65). Benin's primary pupil-teacher ratio is higher while secondary pupil-teacher ratio is lower, than in most sub-Saharan African countries. 3. This is because at the primary level, there is a relatively high proportion of permanent staff at high public salaries; at the secondary level, the majority of teachers are locally hired staff at low public cost. High pupil-teacher ratio at the primary level compromises effectiveness of other investments. 4. Recurrent expenditures on non-personnel related inputs are negligible at primary and secondary level; these are still financed from the PIP. 5. Distribution of teachers across schools is inefficient resulting in wide disparities in pupil-teacher ratio. 6. Class sizes in grades 1 and 2 are too large for effective learning of foreign language. 7. In higher education, 31 percent of recurrent expenditure in 2002 was spent on scholarships and student transport subsidies.
Equity in spending	1. Funding formula for distribution of transfers to parent teacher associations in primary schools is not equitable with richer regions receiving higher per pupil transfers. 2. Wide disparities in pupil-teacher ratios in primary schools across regions. 3. There is currently no mechanism for ensuring that poor children can access secondary education. 4. Scholarships in technical and higher education are not targeted toward the poor.
Expenditure requirements for MDG	1. Allocations for primary education will need to rise by about 3-4 times the current level of public spending, to take into account demographic growth, universal completion and reduction in pupil-teacher ratio to 40. 2. Main policy issue here is the average salary cost of teachers. 3. At secondary and higher levels, the principal policy issue is managing the transition – the greatest impact on expenditure requirements will be due to transition level from primary to lower secondary level. 4. Cost-sharing and greater use of the private sector will be required.
Public Expenditure Management	1. Data on actual payment basis are not available for *crédits délégués*; there are also delays in sending funds to regions. 2. Expenditure on *credits délégués* broken down by primary and secondary education not known. 3. Executed expenditure on personnel not known to Ministry; personnel expenditure management still highly centralized. 4. Insufficient transparency and accountability of funds transferred to higher education institutions. 5. External oversight mechanisms, especially of community organizations, are weak. 6. Program-budgets are not comprehensive; limited flexibility in re-allocating resources; does not correspond to institutional framework. 7. Sub-sectoral trade offs and prioritization is weak – because there are three Ministries, this has to be done at the MFE level. 8. True incremental recurrent expenditures of capital projects are not known.

	Table 2 (b): Health – Public Expenditure Issues
Rationale for public intervention	1. Negative externalities of communicable diseases. 2. Out-of-pocket expenses can deter use of health services by the poor. 3. Hospitalization or emergency care can require catastrophic spending for most people.
Public expenditure trends and indicators	1. Between 1997 and 2001, nominal public spending more than doubled, declined in 2002 and 2003; annual real growth rate was 15 percent between 1997 and 2002. 2. Health's share of total government expenditure rose from 7.6 percent in 1997 to 11.5 percent in 1999 and then fell back to 7.6 percent in 2003. 3. Public spending rose from 1.2 percent of GDP to 2.0 percent in 2001 and then fell to 1.3 percent of GDP in 2003. 4. Public expenditures represent less than half of total spending in 2001, but share has risen from 34 percent in 1997. 5. Benin's "health effort" significantly lower than that of other SSA countries, but public expenditure "effort" at about median level (1997-2000). 6. Per capita public expenditure is just under US$7 per year. 7. Recurrent expenditure accounts for 65 percent of total spending but significant amount of PIP expenditure are recurrent expenditures. 8. Significant improvement in budget execution rate between 1997 and 2001 - due to better budget forecast of PIP expenditures.
Public expenditure composition and priorities	1. Share of recurrent expenditure going to "*directions departementales*": 43-53 percent. 2. Share on central level - 15-25 percent. 3. Share of "special budget lines" and transfers has risen from 20 percent in 2001 to 39 percent in 2003. 4. Share of total health spending going towards major public health programs is being driven by availability of donor funds rather than national health priorities. 5. Some of the main causes of child mortality and morbidity - ARI and malnutrition - are not addressed.
Efficiency of spending	1. Expenditure on special budget lines and transfers is not transparent and is not aligned to sectoral priorities: (i) "*appui au secteur sante*", for emergency measures, is controlled by MFE and details of spending are not available in SIGFIP; and (ii) "*assistance sanitaire*", for assisting poor people, has a variety of expenditures that are not linked to poverty. 2. Peripheral health centers receive a low share of non-personnel expenditures of the "*directions departementales*" (*crédits délégues*); a large proportion remains unallocated and managed at the regional level, for drugs purchase and rehabilitation. 3. Public expenditures finance between 20-30 percent of lowest level peripheral centers (complete data are not available); hence improving efficiency of spending will require improving management of funds from cost-recovery. 4. The estimated share of public recurrent expenditure that goes to peripheral centers is 25 percent - hence per capita public spending at the recurrent level is very low. 5. Bulk of the revenues of peripheral centers is from sale of drugs - can create perverse incentives for over prescription, raising total costs. 6. Utilization rates of second referral hospitals and zonal hospitals are low and vary by region and level. 7. High costs of treatment, mode of payment, delays and quality of care contribute to low levels of utilization.
Equity in spending	1. It is not possible to derive distribution of total or recurrent spending across regions. 2. Of expenditure directly allocated to "*directions departementales*", there is large variation in per capita spending with poorest regions receiving 20 percent less. 3. Variation is even more for personnel spending, reflecting very large imbalances in availability of public health personnel across regions; some have only one doctor for 50,000 people. 4. Hospitalization costs are high for the treatment of childhood illnesses and childbirth, which deter use of public services by poor.
Expenditure requirements for MDG	1. Estimated total expenditures on health would have to double and public expenditures would have to triple by 2015, compared to the base year of 2004. 2. A dramatic expansion of the production of high impact services is required along with the implementation of mechanisms to ensure adequate demand for and use of those services by those who need them, particularly the rural populations, the poor and among them women and children.
Public Expenditure Management	1. Management of and accountability of *crédits délégués* is poor. 2. Financial management in the peripheral health centers is weak due to the lack of capacity of community organizations (COGECS and COGES). 3. The structure of the program budget and the grouping of programs is not logical. 4. True incremental recurrent expenditures of capital projects not known.

	Table 2(c): Rural Water Supply - Public Expenditure Issues
Rationale for public intervention	1. Drinking water and sanitation facilities are private goods but positive externalities on health outcomes, and possibly on improving girls' participation in education, provide a strong rationale for public intervention. 2. In Benin's context, negative externalities associated with environmental degradation (pollution or excessive depletion of groundwater resources) are not so important.
Public expenditure trends and indicators	1. Total public expenditures on rural water declined from 7.4 billion CFAF in 1997 to 5.3 billion CFAF in 2002. 2. External financing accounted for nearly 90 percent of total spending between 1997-2001; in 2002, the share of domestic financing rose to 25 percent. 3. Closure of major externally financed projects has been responsible for the decline. 4.Domestic public spending on rural water represented between 1-3 percent of total government expenditure. 5. Budget execution rate varies substantially across years. 6. Government accounts for an estimated 90 percent of all investment in rural water supply.
Public expenditure composition and priorities	1. Only 3 percent of public spending is on recurrent costs. However, a substantial amount of recurrent expenditure is within the PIP, though it is not clear whether they are true recurrent costs.
Efficiency of spending	1. Unit costs of borehole equipped with hand pumps is high in Benin compared to those in some other African countries - limited competition in public procurement markets may be responsible. 2. The main inefficiencies are in operation and maintenance: about 20 percent of water points are not functional, reflecting lack of follow up by DH, low collection efficiency by user groups and inability to manage and use or manage funds for maintenance, repair and rehabilitation. Most water from pumps and wells is not sold at source and collections are made on ad hoc basis for repairs; communities with piped water supply schemes do sell water, but accumulated funds are not used for repair, rehabilitation or extension. 3. These inefficiencies result in DH spending part of its budget for rehabilitation, though this should be done by the communities.
Equity in spending	1. All regions receive same budgetary allocation for non-personnel recurrent expenditures, irrespective of level of investment in each region. 2. Investment is focused on a few regions and has been driven in the past by donor preferences.
Expenditure requirements for MDG	1. Attaining the MDGs will require more than trebling the current rate of construction of water points per year. 2. Annual investment will need to increase by 2-3 times over the present level (at existing unit costs).
Public Expenditure Management	1. Lack of clarity in classification of recurrent expenditures in PIP (which accounts for high share of some projects) hides inefficiencies in public spending that are hard to detect and also imply that the true incremental recurrent expenditures of capital projects are not known. 2. Low budget execution rates are due to delays in procurement (up to 12 months) and commencement of work (additional 3-6 months). 3. Users' associations do not manage resources intended for repairs and maintenance.

	Table 3: PER – Key Sectoral Recommendations		
	Education	**Health**	**Rural Water Supply**
Resource Requirements and Composition of Public Spending	1. Public spending on primary education should rise by at least 3 times over current level over next 10 years. 2. Update financial projections taking into account impact of proposed changes in personnel management and encouraging participation of poor. 3. Increase share of expenditure on primary education.	1. Enhance allocations for vertical health programs against the principal diseases, especially malaria. 2. Develop multi-sectoral programs (covering health education, nutrition and sanitation. 3. Increase allocations to peripheral health centers. 4. Ensure appropriate allocations for the treatment of childhood illnesses, ante-natal and post-natal care and emergency obstetric services. 5. Increase investment in disease surveillance systems and health monitoring.	1. Annual investment will need to rise by 2-3 times over the present level in order to reach MDG targets (total requirements CFAF 120-140 billion). 2. Diversify sources of finance by enhancing initial user contribution and promoting private sector participation. 3. Use accumulated funds of water user associations to develop and expand piped schemes in semi-urban areas. 4. Public resources should not finance extension of rural piped schemes and should give priority to communities without a potable water supply. 5. Allocate sufficient public funds to monitor water facilities, spare parts network and strengthen the network of artisans for providing pump maintenance services; the effect should be monitored.
Personnel management	1. Develop a holistic teacher management policy in primary education, covering teacher preparation, employment status, compensation and development, for all categories of teachers, permanent, contractual and locally hired staff; remuneration and other benefits should be linked to teacher competence, skills and professional knowledge required for the job. The comprehensive reform package should include: (i) formulation of expected teacher competencies and knowledge to implement the teacher reform; (ii) the strategy for preparing and certifying such teachers through pre-service and in-service training; (iii) the proposed system of compensation and promotion, based on certification and competence; and (iv) an estimate of total costs, covering existing and future teacher requirements, including possible costs of creating acceptance of proposed reforms. 2. Develop interim policy for hiring community teachers (including testing for minimum competencies, providing additional training/on-site support).	1. Reform human resource policy, covering compensation, career growth, professional development and distribution of the health workforce across different regions. Changes are required in the incentive framework and should include incentives other than compensation (e.g., eligibility for post-graduate training, promotions after minimum years of rural service).	
Targeting resources to poor	1. Increase per pupil transfers to poorer schools/regions; re-evaluate current formula for transfers to parent teacher associations of primary schools. 2. Evaluate possibility of transfers to poorer students to enable them to attend secondary schools.	1. Reduce user charges for specific services and/or groups of people (such as ante-natal services, obstetric care, childhood illnesses). 2. Reduce total cost to patient for specific services, by rationalizing drug prescribing practices and treatment protocols. 3. Devise flexible payment options in the public health system for hospitalizations (e.g., obstetric complications).	1. Enhance geographical equity in access to potable water by raising awareness in southern regions and providing special programs in zones with hydro-geological difficulties.

Community management	1. Provide training to parent teacher associations in recruiting/verifying competence of community teachers especially in poor regions and in targeting transfers to poor students.	1. Develop capacity of COGES and COGECs in: (i) resource management; (ii) analyzing and using data for decision-making; and (iii) accounting based on a more detailed analysis of their institutional framework and training needs.	1. Train water user associations in ensuring functionality of facilities. 2. Encourage them to collect water charges on a regular basis.
Private Sector	1. Undertake more detailed study of private sector in secondary, technical and professional, and higher education to explore possibility of using subsidies to the private sector to expand access to the poor. 2. In technical/professional and higher education, evaluate role of public and private sectors, and identify areas where public provision/financing is required and instruments for promoting private sector participation.	1. Pilot service contracts with private service providers and conduct evaluation with comparator public health facilities. 2. Undertake analysis of links between public health professionals and private sector to inform compensation/incentive policy in public sector and development of regulatory framework for the private sector.	1. Encourage private sector to construct and manage piped water schemes for semi-urban areas (2,000-10,000 inhabitants) through performance-based management systems.
Public Expenditure Management	1. Policy note by MFE to justify intra-sectoral trade-off in allocations between the three education Ministries. 2. Include primary education as a line item under each regional administration in the traditional budget. 3. Show in a transparent fashion the total expenditures on personnel in the program budget, including estimated expenditure financed by transfers to PTAs. 4. Undertake analysis of university finances, including own resources and public resources. 5. Improve analytic content and presentation of program budget to show rationale and effects of proposed policy changes.	1. Clearly identify public funds destined for peripheral health centers and inform community about resources allocated to each center, service norms and quality standards. 2. Revise the structure of the program budget to include recurrent and capital costs under each program. 3. Assess performance of hospitals and health centers that receive public funds on a sample basis.	1. Improve absorptive capacity by strengthening knowledge of budget administrators on procedures for budget execution, including preparation of tenders, contracting, multi-year commitments. 2. Promote competition by allowing regional companies to bid for contracts and reduce unit costs of borehole drilling. 3. Strengthen program budget as a tool for discussion with donors and develop indicators to monitor efficiency such as unit costs and per capita cost for water delivery. 4. Continue joint annual sector review by government and donors.
Other	1. Revise pedagogical strategy for classes 1 and 2 to enable acquisition of competencies in the language of instruction and reduce drop out and repetition. 2. Estimate costs of implementing this strategy and implications for teacher management policies.	1. Strengthen referral system , especially at the CHD level and specifically for services for obstetric complications and anemia among children. 2. Promote a rational drug policy to reduce costs. 3. Stimulate demand for public health services by strengthening outreach services of health services for preventive care and health information.	1. Revise policy that limits use of accumulated funds for replacement which limits development of the sector and enable private operators to develop the piped water schemes. 2. Information campaigns for improving knowledge about sanitation and health benefits of using safe water.

Table 4: Selected Public Expenditure Management Issues – PER and PRSC		
Budget cycle	**PER recommendation**	**PRSC**
Budget preparation	Prepare an initial macroeconomic framework and MTEF.	Submitted the draft 2004 budget law to the National Assembly consistent with 2004-2006 medium-term expenditure framework ceilings and PRSP priorities, including detailed medium-term program budgets for rural water, health, basic education, environment and urban sanitation, forestry management, and transportation. **PRSC-1 prior action**
	Pursue improvements in the system of performance indicators.	For each selected priority sector and/or sub-sector, under PRSC-1, the Government would focus on: (i) selecting a core set of relevant and realistic performance indicators; (ii) assigning professional human resources to M&E on a full time basis; (iii) developing performance measurement frameworks; and (iv) developing performance measurement and reporting and program evaluation capacity.
Budget execution	Effectively implement the commitment appropriations in the 2004 budget.	Present the 2005 budget in multi-year program authorizations and annual payment appropriations. **PRSC-2 trigger**
	Pursue the development of the financial management information system.	Under PRSC-1, the Government will focus on strengthening and improving spending procedures and ensuring the full functionality of SIGFIP (Action plan to redress budget management and government accounting as a pre-requisite for PRSC negotiations).
	Produce regularly the performance monitoring reports.	Submitted to the National Assembly the final performance audit reports prepared by the Chamber of Accounts of 2001 program budget implementation for 7 pilot ministries. **PRSC-1 prior action/PRSC-1 policy matrix**
Other PEM issues	Implement the reforms of the procurement action plan.	Submitted to the National Assembly the draft law amending the institutional framework of the procurement code creating and defining the attributions of the national regulatory agency for public procurement. **PRSC-1 prior action**
		National Regulatory Agency for public procurement is fully operational. **PRSC-2 trigger**
		Published two times a week since January 31, 2003, all the calls for bidding, evaluation reports of bids, and contract awards related to public procurement in the public procurement journal. **PRSC-1 prior action**
Audit	Preparation and submission of government accounts to Parliament in time.	Government issuance of a decree: (i) clarifying the organization and attributions of internal audit both at the level of line ministries and the overall government; and (ii) norms and standards in order to ensure an effective internal control consistent with result-based management. **PRSC-2 trigger**
	Reinforce internal audit through the creation of an audit network.	

Chapter 1

Context and Background

Introduction

Since 1992, Benin has achieved rapid economic growth with GNP per capita increasing by 2.3 percent per year, one of the highest growth rates in West Africa and higher than the average for low-income countries as well as for sub-Saharan Africa. The liberalization of the economy, encompassing both the dismantling of state ownership of production units and improving incentives for private investment, and the expansion of cotton production have been major factors driving the growth of output. Tariffs are the lowest in West Africa. Other reforms include the revamping of the tax system, the adoption of a new labor code and the modernization of business laws and regulations. Private investment increased to 11.4 percent of GDP in 2000, from only 4.5 percent in 1985-1989, and accounted for 79 percent of total investment.

Nevertheless, Benin remains a poor country as the recent period of sustained growth followed several decades of economic decline and sharply fluctuating output. The average per capita income in 2003 was only US$380. Promoting diversification of the economy is necessary for enabling a broader distribution of the benefits of growth and for widening the base for tax revenues that can be used for priority sector spending. The economy as a whole, and agriculture in particular, is crucially dependent on cotton production, which accounts for 87 percent of exports and is also critical for maintaining fiscal and macroeconomic balance. Employment and the banking sector are also dependent on cotton sector revenues.

Political stability and a functioning electoral democracy are other hallmarks of success. Three presidential elections and four legislative elections have been organized peacefully since 1992. Unlike most of the other countries of West Africa, Benin has escaped the ravages of internal conflict. However, stability in the neighboring countries, with which it has enormous trade, is an important factor for sustaining Benin's economic growth in the future. Despite the orderly transition of political power, misuse and diversion of public funds are perceived to be widespread as documented by surveys of the public.

The Reform Agenda

The reform of budgetary institutions and processes has been the center-piece of recent reform initiatives. This vast reform, supported by the Bank's Public Expenditure Reform Adjustment Credits (PERACs), introduced far-reaching changes in budget preparation, execution and reporting. A unified operating and investment budget has been prepared within the framework of a medium term expenditure framework and sectoral ministries participating in the reform program have been given the authority to make commitments and issue payment orders along with devolution of reporting obligations and ex-ante financial control. A three-year program budget is prepared by these sectoral ministries, with performance in principle being monitored by the achievement of sectoral objectives. Other reforms have covered improvements in public procurement and the creation of new

institutions, including the "*Chambre des Comptes*" for ex-post, external control of expenditure execution (already created as part of the Supreme Court) and, in future, an autonomous "*Cour des Comptes*".

The privatization of utilities – telecommunication, water and electricity – and the liberalization of the management of the port and of the cotton sector are part of the unfinished reform agenda. These reforms are considered necessary for accelerating private sector-led growth by improving the competitiveness of the private sector and enabling Benin to compete with its neighbors in external trade and to attract foreign direct investment.

Other major reforms have been discussed by the Government of Benin (GOB) and development partners, but progress has been slow in many of them. These include: (i) Decentralization, which divides the country into 77 local governments (communes and municipalities) which will have responsibility for primary education, the peripheral health centers, rural water supply, rural roads and natural resource management. The draft law was passed in 1999 and elections for the communes/municipalities were held in 2002; however, the procedures for effective transfer of responsibilities and commensurate resources are still being elaborated. (ii) Reform of the judiciary including creating tribunals in the headquarters of each *département (Tribunaux de Première Instance),* the creation of two additional appeals courts and instituting training of judges. (iii) Strengthening institutional mechanisms to fight corruption, including establishing a *Haut Commissariat* and a commission consisting of representatives of government and civil society; and (iv) civil service reform, including specifically the elimination of automatic promotion and introduction of merit-based promotion and remuneration. Measures for reforming the civil service have not yet been passed by the National Assembly.

Rationale and Scope of the PER

The last formal Public Expenditure Review for Benin was completed in 1997, before the initiation of the reforms in public expenditure management and the shift to programmatic lending. The Country Assistance Strategy (CAS, August 2003) proposes progressively channeling International Development Association (IDA) assistance through annual Poverty Reduction Support Credits (PRSCs) that would support the government budget. A PER was recommended in the CAS to provide inputs for the PRSCs and the country's budget process. The series of proposed PRSCs spans the three-year period covered by the Poverty Reduction Strategy Paper (PRSP) and will be synchronized with the budget cycle. The first PRSC for Benin has already been approved and the second one is scheduled for appraisal in September 2004. The PRSC-1 focuses on policies and reforms with highest poverty impact and is intended to contribute to: (i) maintaining macroeconomic stability and promoting growth through the privatization program; (ii) strengthening the public expenditure management reform program in order to increase the poverty impact of public expenditures; (iii) improving the delivery, quality and coverage of basic services while strengthening expenditure efficiency in these sectors; and (iv) financing the government's expenditure program in key sectors.

Increased budgetary allocations have been made for the "priority sectors" as part of the PRSP implementation and supported by the enhanced Highly Indebted Poor Country

(HIPC) initiative, but a review of these sectoral expenditures has not been made during this period.[1] Since 2000, HIPC savings have been allocated to four line ministries: education, health, rural water and public works. An audit of "HIPC expenditures" has been done, but this covered only a small part of the sectoral expenditures. A broader review of the trends, composition and poverty focus of public spending in these sectors has been considered necessary.

This PER concentrates selectively on a few issues and sectors which are important for the PRSCs. It covers the following three broad issues: (i) trends in public expenditures; (ii) outcomes and expenditures in health, education, and rural water supply and sanitation; and (iii) stocktaking of the implementation of the public expenditure management reform agenda, generally and in the above sectors, more specifically. The main focus of the PER is on expenditures in the three sectors. These sectors have already been included in the PRSC-1 and an analysis of their public spending will help to sharpen the sectoral content of the PRSCs. The choice of issues and sectors has been driven by the need to complete the PER before the next PRSC.

A special focus of this PER has been to look at the geographical distribution of public spending, since poverty in Benin is geographically concentrated. Analysis of the incidence of public spending on poor households was not possible as there has been no recent household survey and the computation of relevant unit costs in some sectors has proved difficult with the available data.

The main data sources are government budgetary sources and information gathered through the PER mission. Different GOB documents present different budget execution figures by categories of expenditure. Compiling a time series on aggregate as well as sector expenditures to analyze past trends has been difficult for this reason. Since 2001, the GOB's expenditure cycle has been computerized with the introduction of the *Système Integré de Gestion des Finances Publiques* (SIGFIP). Apart from its contribution to expenditure management and control, SIGFIP represents an enormous advance in the availability of timely data. However, there still remain many issues with the use of SIGFIP data for past years. It had operational difficulties in 2001 and until 2004, it did not include expenditures of externally financed projects, for which the main data source is still the Ministry of Planning (*Ministère Chargé du Plan, de la Prospective et du Développement* – MCPPD). Classification mistakes have also been made for earlier years, making annual comparisons difficult.

For the reasons described above, time series data provided by the *Direction Générale du Budget* (Directorate General of Budget, hereafter cited as DGB) at the Ministry of Finance and Economy have been used for total public expenditures and sectoral aggregates. The time period under analysis is 1997-2002; some data are provided for 2003, but these must be treated as provisional. The SIGFIP database has been used for the detailed sectoral analysis of recurrent expenditures in 2002 and the *Programme d'Investissements Public*

[1] Benin reached the Decision Point in July 2000 and the Completion Point in March 2003, under the enhanced HIPC initiative.

(PIP) for capital expenditures. Other data sources include the program budgets of the three sectors.

The PER builds upon earlier analytic work of the Bank and also draws upon studies funded by other donors as well as other research to supplement its own findings. Earlier Bank work include: (i) the Structural and Social Policy Review (SSPR), which comprehensively reviewed economic and social developments in the nineties; (ii) the Country Status Report on Education (2001) which had data until 1998; (iii) a study on decentralization; and (iv) the Poverty Assessment of the World Bank (September 2003).[2] The European Union and the Swiss Cooperation have done studies on the health sector while the USAID has done an important evaluation in the education sector.

Structure of the Report

This report is structured as follows: the rest of this chapter briefly provides background on the administrative regions, decentralization and the poverty profile of Benin. Chapter 2 discusses the trends in public expenditures. Chapters 3, 4 and 5 present the analysis of public expenditures in education, health, and rural water supply and sanitation, respectively. Chapter 6 summarizes the main reforms in public expenditure management that have been implemented and identifies medium-term priorities.

Country Background

Benin now has 12 administrative regions (*départements*), with each of the six old regions having been bifurcated.[3] The sectoral ministries have deconcentrated administrative services (*directions départemantales* – DD), corresponding to the six old regions; each DD now looks after two administrative regions. Data are sometimes available only for the old administrative classification, combining two *départements*.

The decentralization law has the potential to radically transform the public sector structure and the distribution of public expenditures. The 1999 law transformed the *sous-préfectures*, the lowest level of territorial administration, into local governments. There is no corresponding level of the deconcentrated administration, the lowest level of which is the *départements* (*préfectures* and, for the individual ministries, the *directions départementales*). Since the election of councils for the communes and municipalities was organized in 2002, in principle, all public investments and some aspects of service delivery are the responsibility of the communes and municipalities. In 2002, some fiscal transfers were made by the Ministry of Interior Affairs (*Ministère de l'Intérieur, de la Sécurité et de la Décentralisation* – MISD) for the communes; further, some of the transfers going to community organizations from sectoral ministries are now expected to go through the communes. The respective roles of the Central and local governments in administering and financing these services have yet to be clarified. Since the communes

[2] An informal PER in the health sector was done in 2003 but the coverage of public expenditures was incomplete; the analysis relied on budget (not executed) figures. The Bank's Implementation Completion Report for PERAC has been just completed.

[3] These are Atlantique, Littoral, Mono, Couffo, Ouémé, Plateau, Zou, Collines, Atacora, Donga, Borgou and Alibori. Each successive pair comprises the old administrative region which went by the first name in each pair (for example, the old region was called Atlantique and was divided into Atlantique and Littoral).

had just begun functioning, this PER does not analyze the finances of the communes although this is an issue that will need to be analyzed in any subsequent review.

Poverty in Benin is widespread and in 2003, close to two-fifths of the population (2.6 million) could be considered poor and over one-fifth (1.5 million) extremely poor.[4] These estimates are based on poverty lines set at an annual consumption expenditure per adult equivalent of US$277 and US$208, respectively (CFAF 166,000 and CFAF 125,000, respectively).[5] About 47 percent of rural people live below the poverty line compared to 29 percent of urban people. Over three-quarters of both the extremely poor and the poor live in rural areas. The average expenditure of the rural poor is 31 percent lower than the average yearly consumption expenditure; that of the urban poor is 28 percent lower. Not surprisingly, the incidence of poverty and extreme poverty is highest in agriculture and among farmers. What is remarkable, however, is the high levels of poverty among cotton farmers, with 50 percent being poor and 27 percent extremely poor.

The highest levels of concentration of poverty are in the four *départements* of Atacora, Donga, Alibori and Mono, with more than half the population being poor and close to two-thirds among them extremely poor. With the exception of Mono, the other three *départements* are in the north, emphasizing the geographic concentration of poverty in Benin. Living conditions in the arid north are harsher. The Poverty Assessment emphasizes that, even in this group, Atacora stands out for its extremely high levels of poverty. Another two *départements* (Zou and Plateau) have a poverty incidence of just under 50 percent. Collines and Borgou, in the center of the country, have a poverty incidence of 30 percent, along with Ouémé and Couffo, in the southern part of the country. The most favored *départements* are those in the south, Atlantique and Littoral (i.e. Cotonou) with a poverty incidence of 22 and 9 percent, respectively.

Progress in poverty reduction during the nineties is difficult to evaluate and presents a mixed picture. Government estimates quoted in the Poverty Reduction Strategy Paper (PRSP) indicate a rise in the incidence of poverty in rural areas, with 33 percent of rural people being under the poverty line in 1999-2000 compared to 25 percent in 1994-1995. In urban areas, poverty incidence declined from 28 percent to 23 percent. However, the methodology for deriving these estimates is not considered reliable: for example, between the two years, the poverty line increased by 22 percent in rural areas and 88 percent in urban areas which may be the result of over-estimation of the minimum expenditure required for leading a productive life. Nevertheless, the picture of a deterioration in the living standards of the poor is corroborated by many qualitative studies. On the other hand, the Demographic and Health Surveys (DHS) record an overall improvement in assets owned by households between 1996 and 2001. The growth in the percentage of

[4] The ensuing analysis is based on the World Bank 2003. "Benin: Poverty Assessment," Washington, D.C.: World Bank, September.

[5] As explained in the Poverty Assessment, the first poverty line is defined at two-thirds of, and the second poverty line (defining extreme poverty) at one-half of the average welfare index; i.e., the average yearly adult equivalent consumption. In 2003, this average was estimated to be 318,300 CFAF in urban areas and 211,000 CFAF in rural areas. These poverty lines are therefore relative poverty lines and they do not necessarily reflect the minimum needed to eat enough and afford basic non-food items. As the absolute dollar values show, however, both poverty lines reflect an annual consumption of less than US$1 per day.

rural households owning assets was more than that of urban households. The greatest increase among rural households occurred in ownership of a radio and in access to piped water in the house, in the compound or at a public kiosk. There was substantial regional variation in the increase in assets, with the departments of Ouémé, Borgou and Zou showing the greatest increase. The rise in household wealth, of course, does not indicate that poverty (as measured largely by the expenditure on food consumption) has reduced. It is possible, for instance, that increases in income have led to households purchasing radios and other assets, without increasing expenditure on food for children.

Chapter 2

Public Expenditure: Trends and Composition

Introduction

This chapter presents a quick overview of the trends in public spending between 1997 and 2003. The first section discusses fiscal developments using the summary table on consolidated operations of the government (*Tableau des Opérations Financières de l'Etat* – TOFE). The second section presents the economic composition of public expenditures. The functional composition of public spending is analyzed in the third section, using data provided by the Ministry of Finance (*Ministère des Finances et de l'Economie* – MFE); for the years 2001-03, these are produced by the computerized budget management system, SIGFIP. Data gaps and inconsistencies between these sources mean that only broad expenditure trends can be presented. The last section discusses some important fiscal challenges.

Fiscal developments

Fiscal aggregates

Over the period 1997-2003, fiscal performance has been satisfactory with the overall fiscal deficit ranging from 1 to 4 percent of GDP (on a payment order basis and excluding grants). This was the result of a substantial increase in tax revenues coupled with a slower growth of total expenditures (table 2.1). Tax revenues rose from 12.7 percent of GDP in 1997 to about 15 percent in 2002 and 2003[6], while total revenue rose from 14.6 percent of GDP to 16.8 percent in 2002. Government expenditures increased from 18.8 percent of GDP in 1997 to 20.1 percent in 2000 and 21 percent in 2003.

The deficit, on a payment order basis, declined from 4.2 percent of GDP in 1997 to 1.1 percent in 1998 and 1.6 percent in 1999, but reverted to 4.2 percent in 2001-2003. The primary balance, narrowly defined, declined from 3 percent of GDP in 1997 to 1 percent in 2002 and this is partly explained by an increased share of capital expenditures being financed by domestic resources.[7] From 1997 to 2003, domestically financed investment expenditures increased from 1.1 percent of GDP to 2.9 percent of GDP (by 1.8 percentage points of GDP), while investment expenditures financed from abroad decreased from 5.7 percent of GDP to 4.3 percent of GDP (by 1.4 percentage points of GDP).

With the exception of the ratio of tax revenue to GDP criteria, the GOB complies with the convergence and stability fiscal policy criteria established in the Convergence, Stability, Growth and Solidarity Treaty of the West African Economic and Monetary Union (WAEMU), December 1999 (table 2.2).

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[6] Data for 2003 are preliminary.

[7] Total revenue minus expenditure (excluding externally-financed investment, interest payments and net lending).

Table 2.1: Consolidated Government Operations (percent of GDP)

	1997	1998	1999	2000	2001	2002	2003 Est.
Revenue	14.6	15.5	16.0	16.6	16.2	16.9	16.8
of which tax revenue	12.7	13.4	13.7	14.6	14.2	15.0	15.1
Expenditure and net lending	18.8	16.5	17.6	20.1	20.3	20.4	21.0
Current expenditures	12.0	10.5	10.9	12.4	12.5	13.8	14.0
Wages	5.0	4.7	4.5	4.7	4.6	4.8	5.1
Goods and services	3.3	3.0	2.9	4.0	3.4	3.1	4.0
Transfers	2.0	1.8	2.6	2.9	3.6	5.1	4.2
Interest	1.7	1.1	0.9	0.9	0.9	0.8	0.8
Capital expenditure	6.9	5.9	6.3	7.6	7.8	6.4	7.1
Overall balance (grants excluded)							
Payment order basis	-4.2	-1.1	-1.6	-3.5	-4.2	-3.5	-4.2
Cash basis	-5.4	-4.8	-3.0	-5.5	-4.1	-4.6	-4.5
Primary balance – narrow definition[a]	3.2	4.7	4.1	2.8	1.3	1.1	0.7

a/ Total revenue minus expenditures excluding externally financed investment, interest payment and net lending.
Source: IMF.

Table 2.2: WEAMU Convergence criteria on fiscal parameters

Convergence criteria	Norm	Actual	
		Benin[a]	Other WAEMU countries[b]
Base fiscal balance[c] to GDP ratio %	>=0	0.6	-1.0 to 1.8
Debt to GDP ratio %	<=70	45.3	44.8 to 102.7
Arrears accumulation	0	0	0 to 21.3
Personnel expenditures to tax revenue ratio %	<=35	31.0	27.9 to 47.4
Domestically financed investment to tax revenue ratio %	>=20	24.0	8.0 to 32.7
Tax revenue to GDP ratio %	>=17	14.6	10.9 to 18.3

a/ Data from the government operation table differ slightly, but this does not change the overall assessment.
b/ Excluding Guinea-Bissau.
c/ Revenue (excluding grants) minus expenditure (excluding externally financed investment).
Source: UEMOA 2003. *Résumé du rapport semestriel d'exécution de la surveillance multilatérale, Décembre.*

In 2002 and 2003, the government faced difficulties in achieving its fiscal targets. In 2002, personnel expenditures exceeded budget estimates by about 20 percent. In 2003, actual revenue collection was CFAF 10 billion (0.5 percent of GDP) below the budget forecast, primarily due to shortfalls in collection of customs duties which account for just over half of all tax revenues. Personnel expenditures also exceeded budget estimates by about 5 percent. The overall balance has been kept at its planned level, but only because of under-spending in domestically financed investment, including in the priority sectors.

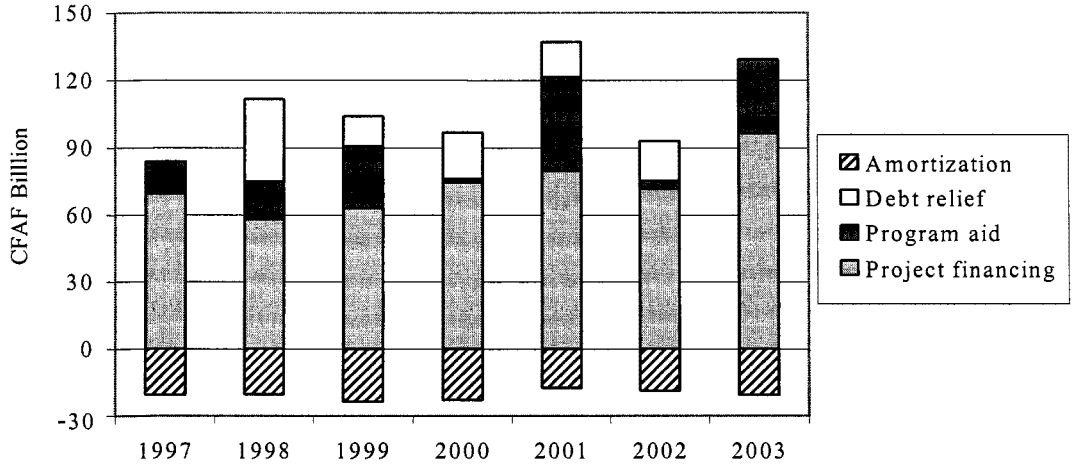
Further improvements in the fiscal situation are dependent on broadening the tax base. An action plan is being implemented to strengthen customs administration, which includes extending the area covered by the import verification company, improving inter-agency collaboration, better monitoring of unpaid obligations, and combating fraud and corruption in collection. Efforts are also being made to improve the administration of domestic taxes by improving the taxpayer database, following up on delinquent taxpayers, improving tax collection, and strengthening tax audits.

Sources of Financing

Net foreign financing accounted for 5 percent of GDP in 1997. It sharply increased in 1998 to 6.7 percent of GDP and, due to debt relief, fell back to 5.4 percent and 4.6 percent of GDP in the two subsequent years. In 2001, net external financing rose to 6.9 percent of GDP, due to the mobilization of budgetary aid, but it fell back again to 4 percent and 4.8 percent in 2002 and 2003, respectively.

While the share of expenditures financed by project loans and grants has declined, external financing continues to be mainly in the form of project aid (chart 2.1). One of the aims of the reform measures implemented under the PERAC was to create the conditions for switching from project aid to program aid and thereby facilitate the move to multi-year program budgets for individual sectors. The share of expenditures financed by project loans and grants effectively decreased from about 30 percent in 1997 to 17-18 percent in the two subsequent years. Nevertheless, over the period 2001 to 2003 project financing was more three times larger than program aid. This continued heavy reliance on project aid compromises the effectiveness of the program budgets developed so far, since projects are not absorbed into government programs and implemented according to government procedures. Hence, while the program budgets in principle show the resources from all sources including project aid, in practice a significant part of the resources are tied up in individual projects that are governed by other procedures and mechanisms. A shift from project aid to budgetary support by the donors would facilitate the development of a programmatic approach by the government.

Chart 2.1: Composition of external financing



Source: Consolidated government operations table (TOFE) and IMF.

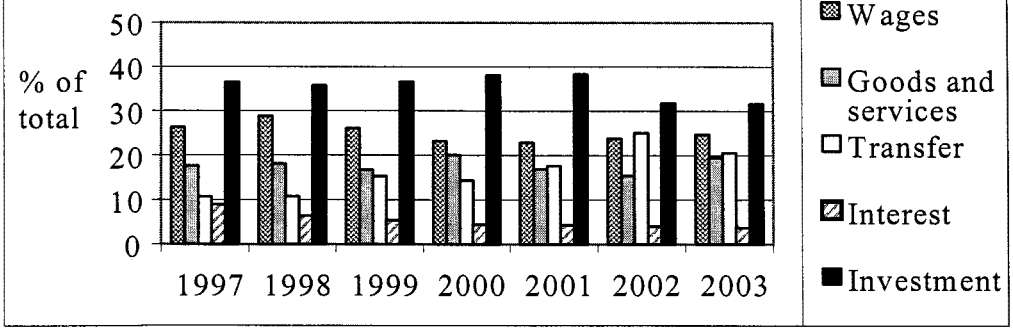
Benin reached the enhanced HIPC decision point in July 2000 and the HIPC completion point in March 2003. Debt relief under HIPC assistance was equal to about 45 percent of the annual debt service in 2002 and 2003. This debt relief has allowed Benin to increase social spending. A thorough financial audit of the HIPC initiative underscores its positive impact, particularly in ensuring that additional funds reached primary schools and peripheral health centers.

Taking into account the HIPC initiative and additional bilateral debt relief, the debt-to-exports ratio should fall from 10.5 percent in 2002 to 7.5 percent by the end of 2006 and continue to fall thereafter. According to the HIPC completion point document of February 2003, Benin's debt will be sustainable, provided that it pursues a prudent debt and fiscal policy and its economy is not affected by adverse developments in the international cotton market.

Economic Composition of Expenditure

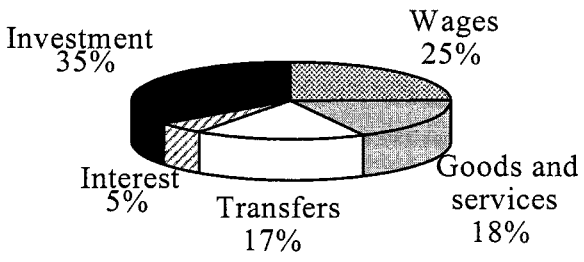
There have been no major shifts in the economic composition of spending, but the share of personnel expenditures has declined somewhat while the share of transfers has increased marginally (chart 2.2). On average, over the period 1997 to 2003, "investment expenditures" (including the current expenditure components of investment projects) accounted for 35 percent of total expenditures, personnel expenditures for 25 percent, transfers for 17 percent, interest for 5 percent and other recurrent expenditures for 18 percent (chart 2.3).

Chart 2.2: Economic composition of consolidated government expenditure



Source: Consolidated government operation table, IMF.

Chart 2.3: Economic composition of consolidated government expenditure 1997-2003



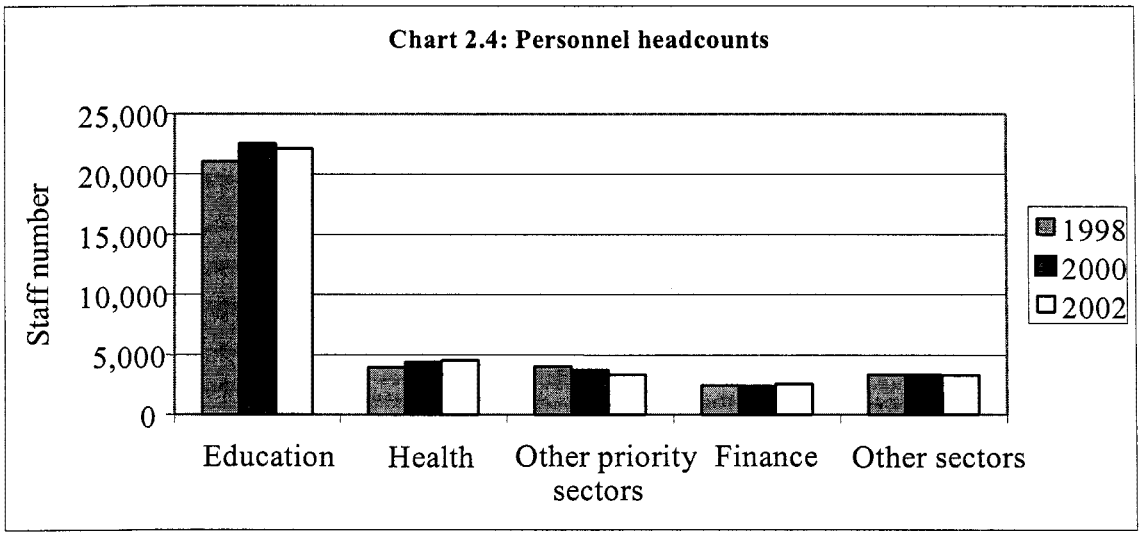
Source: Consolidated government operation table, IMF.

The share of personnel expenditures in total government expenditures has decreased from 26.4 percent in 1997 to 24 percent in 2003. The ratio of personnel expenditure to GDP declined from 5 percent in 1997 to 4.6 percent in 2001, but it increased in 2002 and 2003, reverting to its 1997 level. Nevertheless, personnel expenditures in Benin absorb less

domestic revenue than in the other WEAMU countries, except Mali and Senegal[8]. On average over the period 1997 to 2003, the education sector alone accounted for 40 percent of personnel expenditures, defense for about 15 percent and health for about 7 percent. Although these shares have fluctuated around their average values, there has been little change in the sectoral composition of personnel expenditures.

Personnel expenditures have been controlled both by restraining the growth in number of employees and, until 2001, in average salaries. The number of government employees in civil administration (permanent and contractual) increased slightly by 0.7 percent per year, from about 34,800 persons in 1998 to 35,800 in 2002. Staff in the education sector increased from about 21,000 persons in 1998 to 22,000 persons in 2002, and in the health sector from about 4,000 to 4,500 (chart 2.4). In the other sectors, staff remained stable, except in the agriculture sector where it decreased. This modest increase in the total number of staff has occurred through the hiring of contractual staff, whose share in total staff numbers rose from 12 percent in 1998 to 19 percent in 2000; the share fell to 14 percent in 2002. On the other hand, the total number of permanent staff declined from 31,100 in 1997 to 30,500 in 2001, with a marginal increase to 31,300 in 2002. On average, contractual staff receive 40 percent of the salaries received by permanent staff and most of them are primary teachers.

Chart 2.4: Personnel headcounts



Source: Ministry of Finance.

In 2002, due to strikes by civil servants, and in particular by school teachers, actual personnel expenditures (CFAF 96.7 billion) exceeded budget appropriations (CFAF 83.6 billion) by 16 percent.[9] The average monthly pay of staff rose by 54 percent between 1998 and 2002. As a result, cuts had to be made in other expenditure items. Domestically financed investments were the most affected by these cuts, with only 63 percent of the budget being executed in 2002.

[8] *Résumé du rapport semestriel d'exécution de la surveillance multilatérale. Décembre* 2003. UEMOA.

[9] *Situation des engagements et des ordonnancements au 31/12/2002*, SIGFIP, MFE.

Within running costs (i.e., expenditures excluding interest, transfers and investment), the balance between expenditures on personnel and non-personnel expenditures has been reasonable at the aggregate level, but there are significant imbalances in some ministries. Over the period 1997 to 2003, non-personnel expenditures (goods and services, and "socio-administrative" investments) accounted for 42 percent of total running costs while personnel expenditures accounted for 58 percent. This composition is similar to those found in neighboring countries.[10] However, in some ministries the share of personnel expenditures is excessive. Thus, in 2003, for the Ministry of Agriculture (*Ministère de l'Agriculture, de l'Elevage et de la Pêche* – MAEP), the ratio of goods and services expenditure to personnel expenditure was as low as 1 to 20. In practice, however, the expenditures on goods and services in the agriculture sector are sometimes financed through the budget of the investment projects. This is not a transparent process and can lead to inefficiencies. These expenditures should be included in the running costs of the ministry, but progress on this will depend on the adoption of a programmatic approach by donors. In the education sector, personnel expenditure accounts for about 80 percent of running costs.[11] As in agriculture, many of recurrent expenditures (for instance, on textbooks and teacher training) are included in the capital budget, being financed by donors. In other ministries, there has been progress in redressing the balance between personnel and non-personnel costs. In the Ministry of Public Works and Transport (*Ministère des Travaux publics et des Transports* – MTPT, hereafter cited as Ministry of Transport), the share of personnel in running costs has declined to 37 percent in 2002, from 80 percent in 1997. Similarly, the personnel share in the Ministry of Environment, Housing and Urban Affairs (*Ministère de l'Environnement, de l'Habitat et de l'Urbanisme* – MEHU, hereafter cited as Ministry of Environment) was 32 percent in 2002 compared to 72 percent in 1997. In the Ministry of Health (*Ministère de la Santé Publique* – MSP) the allocations for goods and services, and personnel within running costs are rough equal.

Targeted wage increases for certain categories of low-paid personnel in priority sectors may be required to improve quality in public service delivery. This is especially important for the education and health sectors and is discussed in more detail in the relevant chapters. The current approach of ad-hoc increases leading to in-year cuts in other budgeted programs should be avoided. This calls for additional efforts in revenue collection as well as in mobilizing external aid.

As noted, "capital expenditures" accounts for 35 percent of total government expenditures but this overstates the true level of public investment since they include the recurrent components of investment projects. The share of capital expenditures is similar to those in other West African countries.[12] The average ratio of public "capital expenditures" to GDP was 6.9 percent over the period 1997-2002 and 7.1 percent in 2003. However, a significant proportion of these expenditures include recurrent costs. In the 2003 budget,

[10] For the period 2001-2002, the share of wages in the running costs was 66 percent in Burkina Faso, 64 percent in Ghana, 58 percent in Togo, 54 percent in Niger (Source: IMF country reports).

[11] A more detailed analysis of personnel and personnel related expenditures is presented in chapter 3.

[12] For the period 2000-2002, the shares of "capital expenditures" in total government expenditures are as follows: Burkina Faso 51 percent; Mali 41 percent; Niger 35 percent; Senegal 33 percent and Togo 15 percent (Source: IMF country reports).

the budgeted investment projects included 26 percent of recurrent costs. After excluding these expenditures, the ratio of public investment to GDP would be about 5 percent. The current Gross Domestic Investment (GDI) ratio of 17.8 percent is still below the target rate of 20 percent of GDP to be achieved by 2005, if the poverty reduction objectives set out in the PRSP are to be attained. A more accurate estimation of government investment is required as some recurrent expenditures of projects are part of capital costs, while others are true recurrent expenditures associated with operations and maintenance.

Functional composition of expenditure[13]

Priority Sector Expenditures

The Government's expenditure policy, defined in the PRSP, gives priority to increasing public expenditures in the social sectors on basic infrastructure and on actions aimed at improving governance. The ministries responsible for these areas constitute the "priority sectors" in the PRSP.[14] Reforms in budget management have begun in these priority ministries, which prepare a multi-year program budget each year. However, the PRSP did not anticipate a significant shift in spending between the priority and non-priority sectors. The two scenarios in the PRSP are as follows:[15]

- In the base case scenario (scenario 1), using data presented in the PRSP, expenditures of priority ministries were expected to increase from an average of 9.5 percent of GDP over the period 1996-2001 to 11.6 percent over the period 2002-2005. Nevertheless, their share in total expenditures (excluding interest) was expected to remain more or less stable at about 58 percent. According to the PRSP, taking into account the expenditure programs of non-priority ministries that meet the PRSP objectives, the share of priority expenditures would increase from 59 percent in 1996-2001 to 61.5 percent in 2002-2005.
- In scenario 2, which is the scenario that the government intends to achieve, over the period 2002-05 total and priority ministries' expenditures are higher than in the base case scenario by 6 percent and 7 percent, respectively. Even so, the share of priority ministries increases only slightly, from 58 percent of total expenditures over the period 1996-2001 to 59 percent over the period 2002-2005.

Actual expenditure on the priority sectors has been consistent with the PRSP targets with substantial increases in absolute levels, but no significant changes in the share in total government spending. In absolute terms, spending on priority ministries increased from

[13] The functional expenditure classification has been implemented only in 2001 and does not yet cover all expenditure transactions financed by external sources. Therefore, in this section, the ministry will be used as proxy for the function.

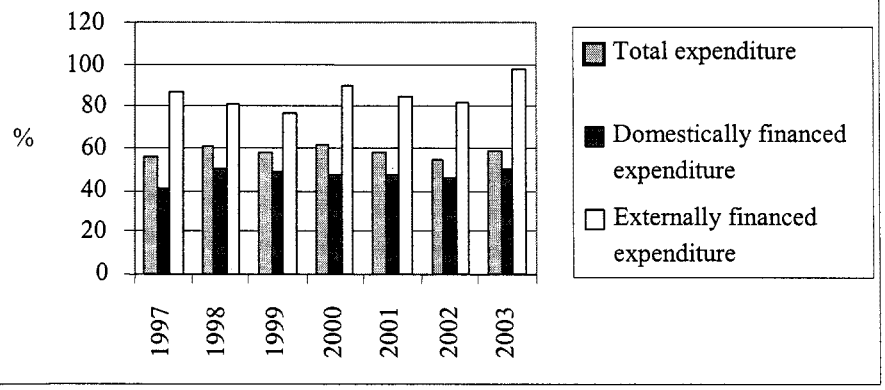
[14] The priority sectors are: the ministries responsible for the education sector, the health ministry, the Ministry of Transport, the Ministry of Mines, Energy and Water, the Ministry of Agriculture, the Ministry of Environment, and the Ministry for Justice and Human Rights (*Ministère de la de la Justice, de la Législation et des Droits de l'Homme* - MJDLH). Of course, this administrative-based separation between priority sectors and non-priority sectors gives only a rough estimate of the weight of priority programs: ministries of "non-priority" sectors can undertake some priority activities and not all activities of the "priority" ministries are priority. Implementing in an operational manner the functional expenditure classification will allow the priority sectors to be better defined.

[15] The projections of scenarios 1 and 2 are presented in annexes 6 and 7 of the Benin PRSP. Data presented in the PRSP differ slightly from the data used in the present report which are those communicated by the MFE in February 2004.

CFAF 113 billion in 1997 (9.1 percent of GDP) to CFAF 200 billion in 2003 (9.9 percent of GDP), an increase of 76 percent. The share in total government spending increased marginally from 56 percent in 1997 to 59 percent in 2001, but it declined to 54 percent in 2002. [16] In 2003, it rose again to 59 percent. However, as illustrated in chart 2.5, the share of the priority sectors in domestically financed expenditures (excluding interest payments) increased from 41 percent in 1997 to 50 percent. The share of priority sectors within externally financed expenditures fluctuated around 85 percent over the period under review.

A more accurate assessment of whether public expenditures are aligned with PRSP priorities will require the identification of activities and projects that meet PRSP objectives within each ministry. Expenditures of "priority" ministries can provide only an approximate indication. As noted in the PRSP, a number of expenditure programs that meet the PRSP objectives are carried out by non-priority ministries. Identification of such priority activities in all ministries could be done by giving a specific attribute to these expenditures that meet the PRSP objectives in the budget data base. A review of the various projects of the sectoral ministries is also required to eliminate duplication of activities.

Chart 2.5: Share of priority sectors in government expenditure: Share of priority sectors
(Budget execution)



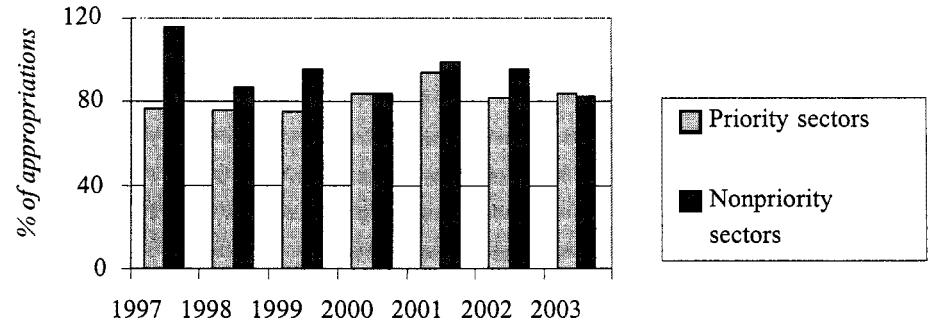
Source: Ministry of Finance and Ministry of Planning.

There has been an improvement in the budget execution rate for priority sectors, but the execution rate is lower than for non-priority sectors (chart 2.6). In 1998 and 1999, the budget execution rate in priority sectors was close to 75 percent. It improved over the next four years to between 81 and 94 percent of appropriations. The budget execution rate has been higher for the non-priority sectors in all years except 2003. Within domestically financed expenditures alone, the budget execution rate in the priority sectors deteriorated to 80 percent in 2000 but improved in the subsequent years and reached 91

[16] Note that the shares as derived from the MFE data for earlier years are slightly higher than those presented in the PRSP.

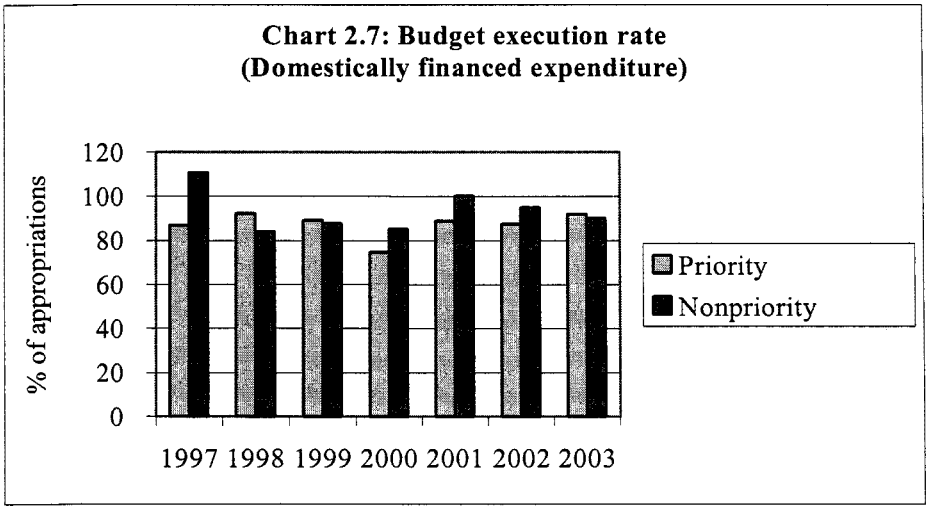
in 2003; again, the execution rate of non-priority sectors was, in general, higher (chart 2.7).

Chart 2.6: Budget execution rate



Source: Ministry of Finance.

Chart 2.7: Budget execution rate (Domestically financed expenditure)



Source: Ministry of Finance and Ministry of Planning.

Institutional Composition of Government Spending

Although there have been some changes in the share of expenditures of individual ministries in total spending, there has been no major shift in the institutional composition of public spending (tables 2.3 to 2.5). Reallocation of expenditures from other ministries has not been an important strategy in assigning additional resources to the priority ministries. In general, all sectors have benefited from increased resources and, when faced with budgetary constraints as in 2002, all sectors have been affected by the cuts in domestically financed investment that were required to balance increased recurrent expenditures.

Table 2.3: Actual budget execution by function
(percent of total expenditure excluding interest)

Percent of total	1997	1998	1999	2000	2001	2002	2003
General Administration	11.2	12.5	12.0	13.2	12.0	11.6	14.0
Defense	5.2	6.2	5.2	4.3	4.9	5.4	5.8
Interior affairs	1.6	2.1	2.2	2.1	3.3	3.9	4.5
Justice	0.6	0.8	0.7	0.8	0.5	0.7	0.8
Agriculture	8.6	10.1	8.1	7.7	4.5	6.4	8.2
Water and mining	4.3	5.3	2.9	3.3	1.1	2.3	2.4
Other economic	0.7	1.6	1.3	1.8	3.4	2.1	2.8
Transport	10.3	10.8	11.2	15.3	13.4	9.7	9.1
Environment	5.6	3.4	4.0	3.9	8.6	6.2	8.9
Health	7.6	9.8	11.5	11.2	10.4	8.9	7.5
Education	19.0	20.4	20.1	19.7	19.6	20.5	22.1
Other socio-cultural	0.4	0.8	1.2	0.9	1.6	1.8	2.4
Non allocated	24.9	16.2	19.4	15.7	16.6	20.6	11.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 2.4: Domestically financed expenditures – actual budget execution by function
(percent of total domestically financed expenditure excluding interest)

Percent of total	1997	1998	1999	2000	2001	2002	2003
General Administration	12.4	14.6	14.2	15.6	14.1	13.1	15.3
Defense	7.8	9.4	7.7	6.6	7.0	6.8	7.1
Interior affairs	2.3	3.2	3.2	3.2	4.3	4.0	4.4
Justice	0.9	1.2	1.1	1.2	0.6	0.9	1.0
Agriculture	4.4	4.6	4.4	4.2	3.5	3.4	4.4
Water and mining	0.9	1.3	0.9	1.0	0.8	1.6	1.5
Other economic	1.0	1.0	1.6	1.8	1.6	1.3	1.6
Transport	1.4	2.0	2.7	1.9	2.4	3.2	4.9
Environment	0.9	1.3	2.1	3.8	5.0	3.7	4.7
Health	8.0	10.7	10.5	9.4	10.4	9.4	8.5
Education	24.3	28.4	27.6	25.9	24.5	24.0	25.0
Other socio-cultural	0.6	1.2	1.4	1.3	2.2	2.3	3.0
Non allocated	35.2	21.1	22.5	24.1	23.6	26.1	18.5

Table 2.5: Expenditure by function
(Consolidated government sector)
% of GDP

Percent of GDP	1997	1998	1999	2000	2001	2002	2003
General Administration	1.8	1.8	1.8	2.1	2.3	2.1	2.3
Defense	0.8	0.9	0.8	0.7	1.0	1.0	1.0
Interior affairs	0.3	0.3	0.3	0.3	0.6	0.7	0.8
Justice	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Agriculture	1.4	1.5	1.2	1.2	0.9	1.2	1.4
Water and mining	0.7	0.8	0.4	0.5	0.2	0.4	0.4
Other economic	0.1	0.2	0.2	0.3	0.7	0.4	0.5
Transport	1.7	1.6	1.7	2.4	2.6	1.7	1.5
Environment	0.9	0.5	0.6	0.6	1.7	1.1	1.5
Health	1.2	1.4	1.7	1.8	2.0	1.6	1.2
Education	3.1	2.9	3.1	3.1	3.8	3.7	3.7
Other socio-cultural	0.1	0.1	0.2	0.1	0.3	0.3	0.4
Pensions	1.1	1.1	1.0	1.0	1.0	0.9	0.9
Interest	1.7	1.1	0.9	0.9	0.9	0.8	0.8
Non allocated and discrepancy	3.8	2.4	3.4	4.9	2.3	4.3	4.5
Total	**18.8**	**16.5**	**17.6**	**20.1**	**20.3**	**20.4**	**21.0**

Spending on improving governance, including a major decentralization reform, has increased rapidly. The share of the Ministry of Interior Affairs in total expenditures increased from 3.3 percent in 2001 to 4.5 percent in 2003 (0.8 percent of GDP; table 2.5); in nominal terms, expenditures increased from CFAF 11 billion to 15 billion. Most of this increase is for transfers to local governments. The share of ministries and institutions classified under the "general administration" function increased because of greater spending on core legislative and executive functions (e.g., the Supreme Court, the Parliament, the Ministries of Finance and Civil Service). In nominal terms, the expenditure on these ministries increased nearly fourfold, from CFAF 470 million in 1997 to 1.9 billion in 2003. The share of the Ministry of Defense in total expenditure has remained roughly constant (5.2 percent in 1997 compared to 5.8 percent in 2003).

Within the group of priority ministries, the Ministry of Agriculture and the Ministry of Mines, Energy and Water, saw a decrease in their expenditures, both as a share of government expenditures and as a proportion of GDP. In agriculture, this was because both external financing, which contributes most of the resources, as well as domestic financing remained stable in nominal terms over the period 1997-2002. In 2003, however, budgeted domestic financing on investment projects amounted to CFAF 5.5 billion against 1.7 billion in 2002, which could reflect an increased priority given to the sector. About 90 percent of the expenditure of the Ministry of Mines, Energy and Water (*Ministère des Mines, de l'Energie et de l'Hydraulique* – MMEH, hereafter cited as Ministry of Mines) is on investment, with three-quarters of the latter being externally financed. The completion of external projects accounts for the decline in its share in total spending.

Expenditures of the Ministry of Environment have risen both as a share in total government spending and in GDP. These expenditures increased from 0.9 percent of GDP

and 5.6 percent of total expenditures in 1997 to 1.5 percent of GDP and 8.9 percent of expenditures in 2003. Investment accounts for 90 percent of the budget of the sector and these are increasingly financed from domestic resources (39 percent over the period 2001-2003, against only 20 percent in the period 1997-2000). Domestically financed resources in this ministry increased from 0.9 percent of total domestically financed expenditures in 1997 to 4.7 percent in 2003; reflecting the high priority given to the sector.

The share of expenditures on health and transport increased up to 2001 but have seen substantial declines thereafter, mainly on account of declining external financing. The share of health expenditures in total expenditures was highest between 1999 and 2001, when it was between 10.4 - 11.5 percent, but by 2003 its share was back to the 1997 level of 7.6 percent. The expenditures of the Ministry of Transport which accounted for 1.7 percent of GDP and 10 percent of total expenditures in 1997, increased to 2.4 percent of GDP and 15 percent of actual budget expenditures in 2000; but by 2003, it had decreased to 1.5 percent of GDP and 9 percent of actual expenditures. The budget of this ministry is highly dependent on external financing - 95 percent of the budget consists of investment expenditure, with 85 percent of the investment being financed by external sources. The budget of the road fund is an "annex budget" presented separately from the "general budget" and, hence, from the budget of the Ministry of Transport. Expenditures from the road fund increased from CFAF 4 billion in 2000 to 6 billion in 2003. In 2003, actual investment expenditures (CFAF 28 billion) accounted for 4.5 times the expenditures of the road fund.

The education sector accounts for about 20 percent of total expenditures. This share meets, more or less, the objective of 20 percent formulated in 2002 at the Eighth Conference of Ministers of Education of African Member States (MINEDAF VIII). It is still, however, inferior to that of a number of other West African countries.[17] The ratio of education expenditures to GDP increased from 3.1 percent in 1997 to 3.7 percent in 2002 (table 2.5). The share of education in domestically financed expenditures fluctuated around 25 percent. In absolute terms, expenditures nearly doubled from CFAF 36 billion in 1997 to CFAF 69 billion in 2003.

Nevertheless, despite these favorable results, recent developments in the education sector raise some concerns. In 2002, the education budget execution rate was near 100 percent, and in 2003 about 94 percent, but these favorable results have been achieved only because of increased personnel expenditures. The budget execution rate of non-personnel expenditures was only 68 percent in 2002 and 73 percent in 2003 (80 percent for domestically financed expenditures in both years, and 39 percent and 54 percent, respectively, for externally financed expenditures). This disappointing result is explained by both inefficiencies in project implementation and the fact that the education budget has been affected by the freezes in appropriations required to meet the aggregate fiscal objectives.

[17] For example, according to the UNESCO Institute for Statistics, in 2000-2001 the education sector accounted for 21.5 percent of total public expenditures in Côte d'Ivoire, 25.6 percent in Guinea, and 23.2 percent in Togo.

The amount of transfers and "direct interventions" managed by the Ministry of Finance under the budget section "non-allocated expenses" *(charges non réparties)* has shown a declining trend as a share of total spending. The absolute amounts vary from one year to the other. These budget items cover various expenses such as subsidies, international contributions, support to institutional reform and election expenses. In 2002, these transfers peaked in nominal terms at CFAF 44 billions, notably because of the subsidy to the cotton sector. In 2003 they declined to the CFAF 26 billions, but are expected to increase in 2004 to 32 millions on account of increased election expenses (CFAF 13 billion). It will be important to keep these expenditure items under control to protect resources allocated to priority ministries.

Functional Composition of Investment expenditure

Transport and public works absorb the largest share of total capital expenditure, around one-quarter between 1997 and 2003 (table 2.6). There was a significant decline in the share of investment projects going to agriculture, from 16 percent in 1997 to 12 percent in 2002, though the share rose to 16 percent in 2003. Taken together, the share of investment going to health and education has risen from about 14 percent to about 19 percent of total capital expenditure. However, in the 2003 budget, the recurrent component of the investment projects accounted for 21 percent of the total projects costs for the Ministry of Health and 28 percent for the Ministry of Primary and Secondary Education (*Ministère des Enseignements Primaire et Secondaire* - MEPS).

The execution rate for public investment projects is about 75 percent and has been lower for domestically financed investment expenditures than for externally financed expenditures. This is partly due to insufficient implementation capacity, but it also reflects the fact that domestically financed investment expenditures are often treated as an adjustment variable whenever the government faces revenue downturns or budget overruns. In 2002, budget overruns caused cuts in domestic capital expenditure. Even priority sectors were only partly protected. The budget execution rate decreased between 2001 and 2002 from 84 percent to only 63 percent; for priority sectors the rate fell from 77 percent to 68 percent, and for non-priority sectors from 102 percent to 51 percent. The execution rate has been especially low in transport and public works but overall has shown improvement over the years, from 24 percent in 1997 to 65 percent in 2002.

Table 2.6: Distribution of public investment by sector
(percent of total government capital expenditures)

Percent of total	1997	1998	1999	2000	2001	2002	2003
Education	7.4	5.6	6.7	9.0	11.5	9.3	11.5
Transport	24.5	23.5	23.4	32.9	29.5	25.4	22.3
Health	6.5	8.1	12.5	13.1	11.2	9.9	7.1
Agriculture	16.0	18.1	13.4	12.3	6.3	11.9	16.0
Environment	14.0	7.6	8.4	5.5	17.6	16.3	22.8
Mine-Energy-Water	10.4	11.8	6.0	6.8	2.1	5.5	4.9
Other Economic	1.0	2.6	1.9	3.2	6.2	3.9	5.4
Other	20.1	22.7	27.7	17.2	15.6	17.8	9.9

Composition of project aid

About half of all externally financed capital expenditure continues to be concentrated on transport and agriculture. The functional composition of external assistance has remained more or less stable, the only noticeable change being the increased spending on environment (17 percent of total externally financed investment in 2002 and 27 percent in 2003, according to the preliminary budget execution data) and a sharp decline in 2003 of the external financing to investment projects in the health sector.

The contribution of project-aid to budget financing decreased from 34 percent of total expenditures over the period 1997-2000 to 23 percent over the period 2001-2003. On the basis of preliminary data for 2003, this share had declined to 18.7 percent (table 2.7). The dependence on project aid declined in all sectors, with the most significant reductions occurring in health, and mines, energy and water. The share of external projects in health, which had risen to about 45 percent in 2000, declined to less than 10 percent in 2003. In the Ministry of Mines, the share of project aid fell from 83 percent in 1997-2000 to about 49 percent in 2001-2003. For the same two periods, in transport, this share fell from 89 percent to 72 percent in 2001-03 and in agriculture, from 66 percent to about 55 percent. Project aid accounts for only 8 percent of expenditure in the education sector in 2003.

Table 2.7: Share of project aid in total and sectoral expenditures (percent)

Percent of total	1997	1998	1999	2000	2001	2002	2003
Total	32.7	34.7	34.4	34.5	29.7	21.1	18.7
Education	13.5	9.0	9.9	14.2	12.2	7.3	7.9
Transport	90.8	87.7	84.2	92.0	87.3	73.7	56.2
Health	29.1	28.6	40.2	44.9	29.8	16.2	7.5
Agriculture	65.7	70.6	64.1	64.1	46.1	58.0	56.0
Environment	88.8	75.2	65.8	36.1	59.7	52.9	57.1
Mining-Energy-Water	86.2	84.1	80.1	80.8	51.4	44.8	49.5
Non-priority ministries	9.7	16.2	19.6	9.5	11.2	6.7	1.0

Fiscal Challenges

There are emerging fiscal challenges on both the expenditure and revenue sides. Expenditure pressures will continue to grow due to three factors: (i) demographic growth; (ii) demand for higher quality of public services; and (iii) decentralization. Constraints on the revenue side include: (i) the existing narrow base for tax revenues; and (ii) inefficiencies in tax administration and collection.

High demographic growth will continue to raise demand for public services in the social sectors, notably for health and education. With an annual population growth of 3 percent and a high proportion of children under the age of 15 years, resources required for expanding services even at the existing level of quality will increase. A large proportion of the population will continue to reside in rural areas, where the costs of delivery are higher and there are few economies of scale.

Raising the quality of service will impose additional costs, although changes in management practices can also improve quality without requiring more resources. As the chapters on

individual sectors show, quality is very low in primary education and primary curative health care. Both these sectors are labor-intensive and, without improving personnel norms and investing in the quality of the workforce, improvements in quality standards will be difficult to bring about.

Decentralization can promote local accountability, competition and citizen's satisfaction with public services, but in the short run it can also increase the demands on resources, accentuate spending inequalities between communes and inefficiencies in spending within communes. The reform has created elected local governments with apparent autonomy in delivery of basic social services (education and health). Currently, funds are transferred for specific line-items of the respective ministries' budgets (transfers to Parent Teacher Associations (PTAs) in primary and secondary education; transfers to the *Comité de Gestion Communal* (Communal Management Committee, hereafter cited as COGECs) in health) and the allocations to individual establishments are decided at the central level. These decisions are expected to be devolved to the commune level in the future. Eventually, decisions on capital expenditures and personnel are also expected to be decentralized. With greater recourse to "block grants" to be used at the discretion of the communes, costs of service delivery can rise (for instance, too many small, unviable schools located at close proximity to each other while many villages are left without schools), unless there are incentives for cost containment. The capacity of communes to undertake expenditure decisions will also need to be built.

On the revenue side, although the tax to GDP ratio is comparatively high, the revenue base is vulnerable. Value-added tax (VAT) is the most important source of government revenue but its further growth is impeded by the failure to update the tax payers' registry and contributors' lists, despite a long period of growth. Direct tax revenues are estimated to depend largely on twenty large corporations (World Bank 1999. Benin - Social and Structural Policy Review). Dependence on trade taxes is very high, accounting for over 40 percent of revenues; moreover, a large share of these taxes depends on trade with Nigeria. Trade liberalization and the regional trading arrangements, including a common external tariff, can also pose a threat to revenue mobilization in the short term, even if there are long-term effects on economic growth that can boost revenue.

Administrative inefficiency, corruption and tax evasion reduce actual collections relative to potential tax revenues. The reality is that those with economic ability are few and unwilling to pay tax, and due to their proximity to political power are able not to pay. There is a problem of incentives as those who pay taxes do not perceive that they get adequate services from the government, the more so as government expenditures are increasingly supposed to be on "pro-poor" sectors and programs. The government proposes various measures to strengthen the capacity in collection of domestic taxes, as has been done in the case of customs collection.

Facing these emerging fiscal pressures will require more effective prioritization between sectors, and within sectors to reallocate resources away from low priority sectors and low priority programs within priority ministries. More determined efforts for expenditure reallocations should be undertaken in the context of framing the medium-term expenditure framework (METF), the program budgets and the annual budget.

Chapter 3

Education

Introduction

The education sector in general and primary education, in particular, is considered important in achieving the poverty-reducing development outcomes in the PRSP. The Education Policy and Sector Strategy Declaration of 1998 guides the educational development of the country and a ten-year program for educational development was created on this basis. Giving top priority to primary education, the policy framework emphasizes universal completion of primary education and improvements in quality. At higher levels of education, the objectives are to control pupil flows, improve quality and improve cost-effectiveness.

Raising public expenditures on education has been implicitly considered the prime policy instrument for improving educational outcomes and thereby contributing to poverty reduction. The education sector was also given the status of "priority sector" which benefited from the budgetary reforms initiated under PERAC as well as higher budgetary allocations. Primary and secondary education have been included within the ambit of the PRSC. Due to high demographic growth which will raise the demand for educational services over the medium term, there will be further pressure to increase public resources for this sector.

This chapter examines the recent achievements in educational outcomes at various levels; the trends and composition of public expenditures in the sector as a whole and in sub-sectoral allocations; a more detailed analysis of expenditures in each of the sub-sectors, focusing on the year 2002; the medium-term financing requirements for meeting the Millennium Development Goals (MDGs) and public expenditure management issues in the education sector.

The education sector in Benin

Education in Benin is divided into several stages: (i) pre-school; (ii) six years of primary; (iii) four years of lower secondary; (iv) three years of upper secondary; (v) technical and professional education, which is an alternative to general secondary education (i.e., the academic stream); and (vi) higher education, comprising a four-year undergraduate level and postgraduate levels of varying duration. The theoretical age groups corresponding to the primary, lower secondary and upper secondary stages are 6 - 11 years, 12 – 15 years and 16 - 18 years, respectively. Higher education is open only to those who have passed the general secondary school leaving certificate.

Until 2001, the sector was under the administrative management of a single ministry. There are now three ministries, one each for primary and secondary education, technical and professional education, and higher education. Although most public expenditures on education are captured by the respective ministries, one significant part, namely the expenditure on contractual teachers in school education, are included in the budget of the

Ministry of Finance and details can be obtained only from the Treasury. Expenditures by other ministries on education are insignificant.

There are three categories of teachers in school education. Two of them, permanent teachers (*Agents Permanent de l'Etat* – APE) and contractual teachers are fully paid from public resources. The third category of locally hired teachers (*communautaires* in primary education and *vacataires* in secondary education) is partly financed by government transfers to PTAs and partly by household contributions; the latter are more important at the secondary level. The number of teachers of each type has been taken from the education statistics (*Annuaires Scolaires*) of the MEPS.

Enrolment Growth and Quality of Education

The main success of the education system has been sustained and rapid growth in enrolments at all levels; its main weakness is the appallingly low quality of education and of learning outcomes at the primary level. The low quality of primary education undermines the achievements of quantitative expansion, reduces quality at higher levels and accentuates inequities in educational attainment between poor and rich households.

Enrolment grew between 1997/98 - 2002/03 at 7 percent per annum in primary education, and at close to 10 percent or above per annum at other levels (table 3.1). The most rapid growth in enrolment has occurred in higher education at 16 percent per annum. Enrolment in universities more than doubled during these five years.

Table 3.1: Enrolment Growth, Benin, 1997/98 - 2002/03

	Growth over period (%)	Annual growth rate (%)
Primary	43.2	7.5
Secondary	67.8	10.9
Lower	68.3	11.0
Upper	64.8	10.5
Technical and Professional[a]	42.2	9.6
Higher Education[b]	107.4	15.9

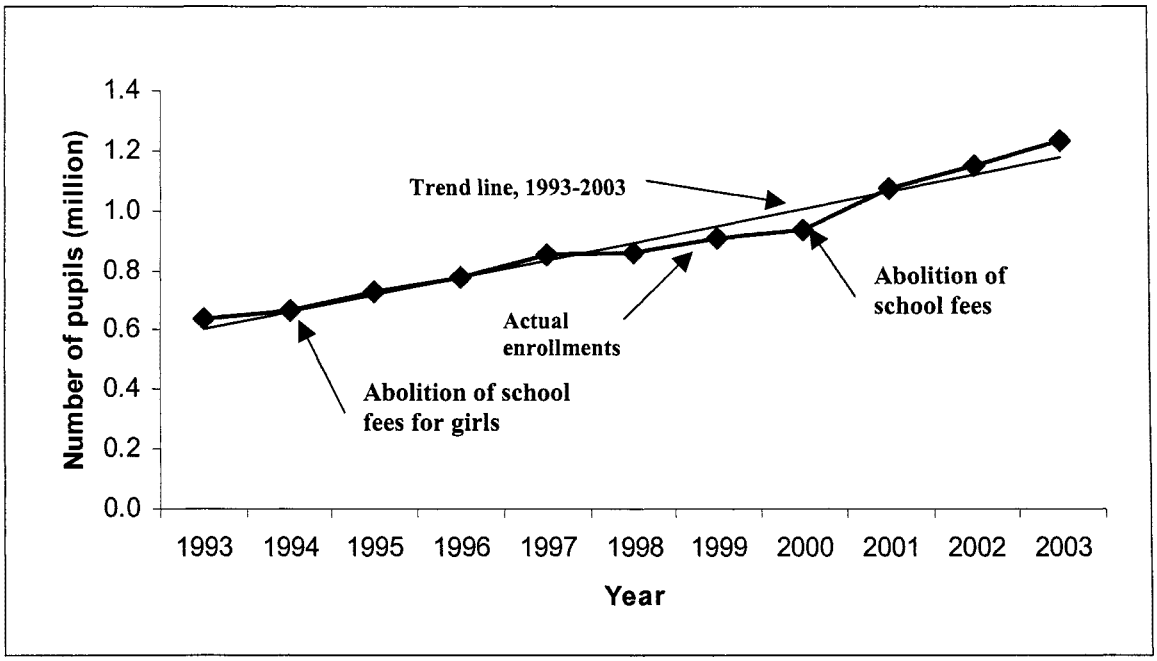
a/ 1997/98 - 2001/02 only.
b/ Public higher education only.
Source: 1992/93 to 1999/00 from World Bank 2002. *Le Système Éducatif Béninois: Performance et Espaces d'Amélioration pour la Politique Educative*, Human Development Department, Africa Region, Washington D.C.: World Bank, table 3, p. 22; 2000/01 and 2001/02 from *Annuaires Scolaires*.

Enrolment in primary education has shown steady growth over the last decade but has been boosted in some years by measures to reduce fees (chart 3.1). The abolition of school fees for girls in the 1993/94 school year saw enrollments grow by almost 9 percent between 1993/94 and 1996/97, compared to an annual growth of less than 5 percent prior to that.[18] However, in the next three years from 1996/97 to 1999/00, enrollments grew at only 3 percent per annum. In 2000, with Benin's participation in the HIPC initiative, primary

[18] Moulton, Jeanne 2003. "Improving the Quality of Primary Education in Africa: What has the World Bank Learned?" draft working document, Paris: Association for the Development of Education in Africa, p. 46; and World Bank 2003. "Benin: Poverty Assessment," Washington, D.C.: World Bank, September.

school fees were abolished for all children. Enrollments surged by 15 percent in 2000/01 before leveling off to about 7 percent per annum in 2001/02 and 2002/03.

Chart 3.1: Benin – Enrolment in primary education, Benin, 1992/93 to 2002/03



Source: *Ibid.*

Enrolment growth at the secondary level has been more rapid than at the primary level, and enrolment growth in higher education and technical and professional education has accelerated since 1996/97. Enrolment growth in both lower and upper secondary education has been 11 percent per annum between 1997/98 - 2002/03. These growth rates were roughly similar to those of the previous five years. In higher education, however, the enrolment growth since 1996/97 (15 percent per annum) was nearly 4 times the rate in the early nineties (4 percent per annum). A similar spurt can be seen in technical and professional education where enrolment grew at 8 percent per annum in the early to mid-nineties and rose sharply to 31 percent per annum in the next two years before slowing down to less than 6 percent between 1999/00 and 2001/02.

The fee-paying private sector has contributed to the growth of enrolments in higher education, and technical and professional education and, to a lesser extent, in secondary education. Enrolment in private sector higher education institutions grew at about 70 percent per annum (from a very low base) compared to 9 percent in public sector enrollments, raising the private sector's share of total enrollments up from less than 2 percent in 1992/93, to 10 percent in 1996/97 and to 21 percent in 1998/99.[19] The private share in technical enrolment has always been high; it rose from 55 per cent in 1992/93 to a high of 68 percent in 1998/99, falling back to 57 percent in 2001/02. Enrolment has grown rapidly in private secondary schools as well, albeit from a low base (at 29 percent

[19] Data on private sector enrolment are not available for more recent years.

per annum compared to 12 percent in government schools in the lower cycle, and at 25 percent and 9 percent, respectively, in the upper cycle). In 2002/03, the private sector's share was over 14 percent in the first cycle and over 16 percent in the second cycle. However, the private sector's share in secondary education remains less than the average of about 20 percent for a sample of twenty-five African countries, and much less than, for example, Rwanda's share of about 45 percent.[20] In primary education, the private sector share appears to have declined from about 10 percent in 1997/98 to 6 percent in 2002/03.[21]

These enrolment trends are reflected in the rising population coverage of different levels of education. The primary gross enrolment ratio (GER) increased from 80 percent in 1997/98 to 97 percent in 2002/03; the primary school system therefore has an enrolment capacity which is close to the theoretical primary age population (table 3.2). The GER in lower secondary education is 38 percent, an increase of 13 percentage points in five years; the increase has been more modest in upper secondary education and for secondary education as whole, the GER is 25 percent. Most dramatic is the increase in higher education coverage which rose by 48 percent between 1997-98 and 2002/03 to 445 per 100,000 population, not taking into account private sector enrolment.[22] If the private sector share in enrolment had remained the same as in 1998-99, the current total number of students per 100,000 population would be 559, implying a rise of almost 86 percent.

Table 3.2: Gross enrollment ratios by level of education, Benin, 1992/93 to 2002/03

	School-age population (years)			Gross enrollment ratio [a]			Higher Education[b]
	6-11	12-15	16-18	Primary	Lower Secondary	Upper Secondary	
1992-93	894,993	457,439	289,072	71.0	15.2	5.9	207
1997-98	1,082,431	574,936	361,533	79.5	24.7	7.5	301
2002-03[c]	1,269,996	627,667	396,548	97.1	38.0	11.3	445[d]

a/ Technical and professional are also not included in lower or upper secondary GER calculations.
b/ Students per 100,000 population .
c/ Population data are from 2002 census. The population in the 6-11 year age group is taken from draft Census tables (unpublished). The population in the 12 - 15 and 16 - 18 year age groups has been estimated by Bank staff.
d/ Using public sector enrolment only.
Source: Population and GER estimates for 1992/93 and 1997/98 from World Bank 2002. *Le Système Éducatif Béninois: Performance et Espaces d'Amélioration pour la Politique Educative,* Human Development Department, Africa Region, Washington D.C.: World Bank, table 4, p. 22; GER estimates for 2002/03 are based on enrolment statistics from the *Annuaires Scolaires* and 2002 population data.

Benin's performance has been impressive vis-à-vis that of other West African and sub-Saharan African countries. The difference is most remarkable, again, in higher education where the ratio is almost one-third higher than any other West African country (using public sector enrolment only). The primary GER is the second highest in Francophone West Africa, after Togo and far higher than in Cote d'Ivoire which has almost double the

[20] World Bank 2004. Education in Rwanda: Rebalancing Resources to Accelerate Post-Conflict Development and Poverty Reduction, Human Development Department (AFTH3), Africa Region, Washington D.C.: World Bank, p. 33.
[21] It is not clear whether the reported absolute decline in private sector enrolment is due to closure of schools and children transferring to public schools (due to the abolition of fees) or due to non-response .
[22] In higher education, the discrepancy between the ages of the enrolled and reference populations tends to be wider than at the lower levels of schooling. Hence, the number of students per 100,000 population is a better reflection of coverage at this level of education than the GER computed using the theoretical age group for this level.

per capita income. However, compared to other countries with relatively high primary GERs, Benin has a low secondary GER, which indicates that completion of primary and transition to secondary education may be low (table 3.3).

Table 3.3: Benin's Gross Enrollment Ratios in Comparative Perspective,

	Per capita GNI (2002, current US$)	Pre-Primary	Primary	Secondary	Higher Education	
					Gross enrollment ratio	Number of students per 100,000 population
Benin (2002-03)	380	6	97	25	6	445
Other Francophone West Africa Countries (circa 2000)						
Burkina Faso	250	1	44	10	n.a.	n.a.
Cote d'Ivoire	620	3	79	23	7	n.a.
Guinea	410	n.a.	67	n.a.	n.a.	228
Mali	240	1	61	n.a.	2	n.a.
Mauritania	280	n.a.	83	21	4	339
Niger	180	1	35	6	1	n.a.
Senegal	470	4	75		4	n.a.
Togo	270	2	124	39	4	332
Other Sub-Saharan African Countries (circa 2000)						
Angora	710	n.a.	68	18	1	64
Comoros	390	2	86	21	1	132
Gambia	270	20	82	37	n.a.	n.a.
Ghana	270	59	80	36	3	329
Kenya	360	42	94	38	3	325
Sudan	370	20	59	29	7	n.a
Zambia	340	n.a.	78	24	2	251
Sub-Saharan Africa [b]	480	22 (28)	88 (39)	34 (37)	3 (22)	286 (33)

n.a.: not available.
a/ Using public sector enrolment only.
b/ Number of countries within parentheses.
Source: For countries other than Benin- pre-primary, primary and secondary from UNESCO Institute for Statistics; higher education based on data from UNESCO Institute for Statistics and U.S. Census Bureau, International Data Base for 1999/00 and 2000/01; per capita GNI, 2002 from World Bank National Accounts data.

Although the primary GER has improved in all regions, disparities have widened across regions and between boys and girls in access and completion. This naturally affects access to post-primary levels of education. The rise in the boys' GER in Mon-Couffo, Ouémé-Plateau and Zou-Collines has been responsible for the sharp increase in GER for the country as whole (table 3.4). By contrast, the GER in Borgou-Alibori, is only 65, over 30 percentage points below that of the country as a whole, and 15 percentage points below the national GER in 1998/99. For the country as a whole, the GER for girls is 84, compared to 110 for boys, but in Borgou-Alibori and Atacora-Donga, it is as low as 58 and 69 percent, respectively.

Table 3.4: Primary education gross enrollment rates by region, Benin, 1998/99 and 2002/03

Region	1998-99	2002-03		
		Boys	Girls	Total
Benin	81.4	109.9	83.6	97.1
By departement				
Atacora-Donga	62.2	95.8	68.7	83.0
Atlantique-Littoral	103.7	109.5	84.0	96.6
Borgou-Alibori	51.7	72.4	58.1	65.4
Mono-Couffo	83.3	135.8	105.3	121.3
Ouémé-Plateau	86.8	132.4	98.6	116.1
Zou-Collines	74.0	122.5	93.8	108.6

Source: 1998/99 from World Bank 2002. *Le Système Éducatif Béninois: Performance et Espaces d'Amélioration pour la Politique Educative*, Human Development Department, Africa Region, Washington D.C.: World Bank, table 25, p. 65; for 2002/03 calculated using enrollments from *Annuaires Scolaires* and population data from Census 2002.

About 50 percent of 12 year olds reach grade 6, but the completion rate is as low as 25 - 28 percent for girls in Atacora-Donga and Borgou-Alibori, the poorest regions of the country. This is the result of lower access and survival rates for girls in this region (table 3.5). The survival rate shown in the table (51 percent) is based on the transversal method which understates the true survival rate in an expanding system. Using data for two consecutive recent years (which are available only for public schools), the survival rate is 64 percent, up from 43 percent 4 years earlier.

Table 3.5: Regional and Gender Disparities in Access, Completion and Survival, Benin 2002/03

	All students			Girls		
	Access	Completion	Survival	Access	Completion	Survival
Atacora-Donga	83%	38%	46%	73%	25%	34%
Atlantique-Littoral	98%	50%	50%	90%	40%	44%
Borgou-Alibori	57%	36%	63%	53%	28%	53%
Mono-Couffo	129%	66%	51%	118%	46%	39%
Ouémé-Plateau	117%	59%	51%	104%	47%	45%
Zou-Collines	121%	54%	44%	107%	39%	37%
Rural	92%	42%	46%	82%	29%	35%
Urban	113%	64%	57%	105%	52%	49%
Benin	99%	50%	51%	89%	38%	42%

Notes: Access rate = new entrants in grade 1 divided by population of 6 year olds; completion rate = non-repeaters in grade 6 divided by population of 12 years olds; survival rate is calculated by cross-section method and is the product of access and completion rates.
Source: *Annuaires Scolaires*, 2002-03.

Disparities in education indicators between poor and rich households are enormous and they increase dramatically with levels of education. The source of information on this is the DHS for 2000/01, and the indicators derived from this are broadly congruent with those from education statistics (after allowing for the difference in time period). The access rate among the poorest households is under 60 percent, compared to over 100 percent for the richest households (table 3.6). Only 16 percent of 12 year olds from the poorest households complete 6 years of primary education compared to almost 90 percent of the richest. The disparity in the GER at the lower secondary level is astonishing: it is 8

percent for the poorest households and 71 percent for the richest households. The lower secondary GER for even the 2nd quintile drops sharply to 30 percent. Virtually no child from the poorest section reaches higher education. Post-primary education in Benin is largely the privilege of the richest children. The Bank's Poverty Assessment notes that getting into secondary school is difficult for rural students, especially girls, because of high direct costs, indirect costs (transportation or accommodation) and opportunity costs.

Table 3.6: Disparities in Education Indicators by Wealth Index, Benin 2000/01

	Primary Education				Gross enrolment ratio	
	Access	Completion	Survival		Primary	Lower Secondary
Poorest quintile	58%	16%	28%		47%	8%
4th quintile	82%	31%	38%		67%	12%
3rd quintile	102%	37%	37%		83%	20%
2nd quintile	94%	50%	53%		98%	30%
Richest quintile	101%	89%	88%		116%	71%
Benin	86%	46%	53%		81%	30%

Source: Demographic and Health Survey, 2001.

According to a recent external evaluation, fewer than 10 percent of children in early primary grades are able to speak, read or write the language of instruction (French) at the levels expected, thus virtually nullifying the positive impact of expanding enrolments and improved retention at the primary level. The external evaluation was conducted in April 2003 of 200 randomly selected schools.[23] These disappointing outcomes have occurred despite a major decade-long program of pedagogical reform, which began with the elaboration of a new program of studies that was tested in selected schools, and extended in 1999 to the first four grades of all schools (both public and private schools) in the country.[24] The evaluation team noted that "Student performance in CI and CP (grades 1 and 2) is in a state of failure. ... Less than 10 percent of students were able to participate in classes at the expected level. In CE1 (grade 3) ... less than 20 percent of children were able to perform in French at the expected levels. Overall, the majority of CI and CP students do not understand the teacher, cannot read materials, and are unable to participate in class. As a result, they cannot complete lessons, engage in interactive (or even frontal) learning, and are marginalized for the remainder of their primary years. For the most part, their poor language skills reduce any prospects for continuing in secondary or tertiary education."[25] The results of this evaluation are, however, not fully accepted by the MEPS since the findings differ quite substantially from the results of a learning

[23] Lous Berger/DevTech Team 2003. "Evaluation of Benin's Basic Education Reform Pedagogical Component," final report, mimeo prepared for USAID-Benin, April.

[24] The reform, known as *les Nouveaux Programmes d'Etudes* (NPE), was supported by USAID and included preparation, production and distribution of new curricula, textbooks and workbooks; provision of regular, intensive teacher training; supply of benches, tables and other school supplies; and creation of an educational supervision and support structure and an information management system.

[25] Although schools were closed for most of the week by the teachers' strike that began October 2002, the evaluation team visited schools on the open days.

achievement survey conducted by the MEPS in 2001. Under the PRSC, a survey of learning achievements is expected to be carried out to provide a more reliable picture.

Since French is the medium of instruction, these low levels of student performance are likely to lead to students dropping out before completing the primary cycle, repeating classes or being promoted without regard to performance. Poor children tend to drop out especially if they are asked to repeat. In order to keep students on the rolls, teachers resort to automatic promotion and the evaluation report notes that "upper grades are becoming filled with children unable to function at even the most basic level". Despite these efforts, repetition rates are high, varying between 19 - 25 percent between regions for the entire primary cycle (table 3.7). There is a marked increase in repetition rates after grade 3, when between 30 and 50 percent of children repeat classes in each year. In Atacora-Donga, for example, the repetition rate rises to 53 percent in grade 6. Further, while repetition rates have remained approximately the same in the lower three grades between 1998/99 and 2002/03, they have risen dramatically in the last three grades, with an average of 38 percent of grade 6 children repeating a year, compared to 24 percent four years previously.

Table 3.7: Disparities in primary education repetition rates by region, Benin, 2002-03

	1	2	3	4	5	6	Primary
	Repetition rate (%)[a]						
Region							
Atacora-Donga	18	20	19	29	33	53	24.8
Atlantique-Littoral	17	17	19	23	28	34	21.6
Borgou-Alibori	19	19	20	27	35	49	25.2
Mono-Couffo	15	16	18	23	29	29	20.1
Ouémé-Plateau	18	18	20	25	31	35	22.6
Zou-Collines	15	16	17	21	26	27	18.6
Benin	**17**	**17**	**19**	**24**	**30**	**36**	**21.9**

a/ Public primary schools only.
Source: *Annuaires Scolaires.*

Although dropping out of school is influenced by both demand and supply factors, the "U-shaped" pattern of drop out at the primary level seems to suggest that the quality of instruction and insufficient student learning are important factors in Benin. At the national level, the dropout rate falls from 10 percent in grade 1 to 5 percent in grade 3 before rising again to a high of 19 percent at grade 6. Many new entrants drop out after grade 1; those who remain continue through to grade 4, perhaps due to automatic promotion. After grade 4, both drop out and repetition increase significantly. Internal efficiency of the system is only 60 percent, taking into account both drop-out and repetition.

Half the students who register for the primary school leaving examination do not pass, reflecting the cumulative effect of low performance in the lower primary classes. [26] Gender differences in pass rates are relatively unimportant but regional differences are quite significant (table 3.8). [27] In 2002, only 29 percent of students in Atacora-Donga and 36

[26] *Certificat d'Études Primaires* (CEP).

[27] 2002 was an exceptional year that saw the passing rate in the CEP fall by almost 20 percentage points from an average of 69 percent in the previous 5 years (1997-2001).

percent of pupils in Borgou-Alibori passed, against 62 percent of the pupils in Mono-Couffo and Zou-Collines. Since these examinations are not reliable measures of student achievement, it is not evident that even those who pass have mastered the competencies expected at the end of the primary cycle.

Table 3.8: Primary school leaving examination (*Certificat d'Études Primaires*, CEP) pass rate by gender and region, Benin, 2002

Region	Boys		Girls		Total	
	Registered	Passed (%)	Registered	Passed (%)	Registered	Passed (%)
Atacora-Donga	6,980	30.1	2,771	27.1	9,751	29.2
Atlantique-Littoral	11,040	50.9	8,138	49.6	19,178	50.3
Borgou-Alibori	8,052	37.6	4,333	33.1	12,385	36.0
Mono-Couffo	11,359	62.9	4,967	58.5	16,326	61.6
Ouémé-Plateau	11,403	51.1	6,652	48.9	18,055	50.3
Zou-Collines	9,252	64.7	4,806	56.8	14,058	62.0
Benin	**58,086**	**51.1**	**31,667**	**47.7**	**89,753**	**49.9**

Source: *Annuaires Scolaires*.

There is limited evidence on the quality of secondary education, but low survival rates and high and rising repetition rates suggest that quality is low. In 1998/99, out of every 100 students who entered lower secondary education, only 53 reached the last year of lower secondary and 23 reached the last year of upper secondary. More recent data are not available. Repetition rates, at least in grades 7 to 10, appear to have risen quite sharply (table 3.9).[28] In grade 7, for instance, the repetition rate has risen from less than 13 percent in 1998/99 to about 28 percent in 2002/03. In grade 10 – the last year of the lower secondary cycle – the increase has been even more dramatic, from less than 25 percent to almost 44 percent over the same period. In general, repetition rates tend to rise with a rise in grade level. These patterns are repeated in all the regions. Benin's average repetition rate at the secondary level is higher than that of Ethiopia, Madagascar and Rwanda.

Table 3.9: Repetition rates in secondary education, Benin, 1998-99 and 2002-03

Grade		Repetition Rate	
		1998-99[a]	2002-03[b]
7	6 ème	12.9	27.5
8	5 ème	2.3	24.4
9	4 ème	14.0	37.0
10	3 ème	24.9	43.9
11	2 nde	1.2	10.2
12	1 ère	8.0	15.3
13	Tle	34.8	30.1

a. For public and private schools.
b. For public schools only. For grades 11-13, data are proportion of repeaters.
Source: 1998-99 estimates based on World Bank 2002. *Le Système Éducatif Béninois: Performance et Espaces d'Amélioration pour la Politique Educative*, Human Development Department, Africa Region, Washington D.C., table 22, p. 53; 2002-03 from *Annuaires Scolaires*.

Repetition is also high at the University level, the average proportion of repeaters being about 30 percent. These data, supplied by the Ministry of Higher Education and Scientific

[28] However, data for 2001/02 are for public schools only and the comparison across years may not be valid.

Research (*Ministère de l'Enseignement Supérieur et de la Recherche Scientifique* – MESRS), are for the nineties but there does not seem to have been any major change since then.

Overall Trends in Public Spending on Education

Between 1997 and 2003, nominal public spending on education has doubled; the average annual real rate of growth was about 8.6 percent (table 3.10). This expenditure includes only the direct spending by the three education ministries, and excludes the expenditure on contractual teachers incurred by the Ministry of Finance. In 2002, the expenditure on contractual teachers was estimated to be about 2.5 percent of the expenditure of the education ministries and hence does not affect overall trends.[29] The major increases in expenditure occurred in 1999-2001, mainly on account of increased capital spending driven by foreign projects. Since 2001, growth in real education spending has slowed to earlier levels.

Education's share in total government spending has remained constant at 19-20 percent for most of the period, rising to 22 percent in 2003. Public spending on education, as a proportion of GDP, increased from an average of 3.1 percent between 1997-2000 to 3.7 percent between 2001-2003. It is therefore now higher than the average of 3.2 percent of GDP among 54 other low-income countries, circa 2000, and higher than the average for sub-Saharan African countries. It is also close to the average of 3.8 percent among the countries deemed closest to achieving the goal of universal primary completion. Public spending per capita has increased from around US$11 in 1997 to over US$15 in 2002.

The share of recurrent spending has been lower since 2000 than in the late 1990s but has averaged around 80 percent of total education spending. The share of capital spending has gone up since 2000 and is currently about 20 percent. The share of personnel expenditure has been lower since 2000 than it was in the late 1990s, now accounting for about one-half of total education spending compared to over 60 percent in late 1990s. The share of domestic financing of capital expenditure has increased substantially and now exceeds that of foreign financing.

[29] There is no easily available figure on the salary expenditure on contractual staff by level of education. The payment made to all contractual staff of the MEPS for each month is available from the Treasury. This has been used to estimate the annual expenditure on contractual teachers for 2002.

Table 3.10: Evolution of public expenditure on education, Benin, 1997-2003

	1997	1998	1999	2000	2001	2002	2003
Total education expenditure (nominal, million CFAF)	38,425	39,940	44,940	50,000	66,282	69,502	75,046
Total education expenditure (real terms, 1997 million CFAF)	38,425	38,038	42,000	45,454	58,142	59,915	63,063
Real annual growth	5.5	-1.0	10.4	8.2	27.9	3.1	5.3
Education as % tot gov exp	19.0	20.4	20.1	19.7	19.6	20.5	22.1
Education as % GDP	3.1	2.9	3.1	3.1	3.8	3.7	3.7
Per capita public expenditure							
CFAF	6,631	6,712	7,355	7,971	10,297	10,525	n.a.
US$	11.36	11.38	11.95	11.20	14.05	15.10	n.a.
As percentage of total education expenditure							
Recurrent	84.8	88.4	85.2	79.6	73.9	83.9	80.6
Personnel	65.6	63.8	60.1	62.0	48.0	50.9	50.8
Non-Personnel	19.3	24.5	25.1	17.6	25.9	32.9	29.9
Capital (PIP)	15.2	11.6	14.8	20.4	26.1	16.1	19.4
Domestic	1.6	2.6	4.8	6.2	13.9	8.8	11.5
Foreign	13.5	9.0	9.9	14.2	12.2	7.3	7.9

n.a. : not available.
Source: GOB, *Direction Générale du Budget.*

Actual spending has been between 10-25 percent lower than budgeted expenditures and there has not been much improvement in the budget execution rate. Most of the shortfall is in capital spending (table 3.11). In the case of foreign funding, this could be due to inaccurate budget forecasts provided by the donors but the shortfall in domestically financed capital expenditures reflects poor programming capacity and limited implementation capacity. Within-year restrictions on spending to maintain fiscal balance has also affected domestically financed capital expenditures in some years. Underperformance in recurrent expenditure is mainly on account of non-personnel expenditures. Expenditure on personnel exceeded budget estimates in 2002 and 2003. Hence, despite the commitment to allocate increased resources for education, actual spending has not grown as much as was intended.

Table 3.11: Shortfall in actual versus budgeted expenditures on education (%), Benin, 1997-2003

	1997	1998	1999	2000	2001	2002	2003
Total public education expenditure	-25.1	-10.6	-10.3	-20.3	-8.3	-17.0	-13.7
Recurrent	-7.8	-6.6	-4.5	-18.6	-5.6	-1.4	-5.8
Personnel	-1.7	-5.2	-6.3	-5.2	-5.1	5.1	2.9
Non-Personnel	-23.7	-10.1	0.0	-45.7	-6.5	-10.0	-17.6
Capital (PIP)	-63.6	-32.8	-33.6	-26.5	-15.2	-54.4	-36.2
Domestic	-65.1	-45.8	-22.4	-61.1	-3.6	-46.5	-27.2
Foreign	-63.4	-27.8	-37.9	20.3	-25.4	-61.3	-45.9

Note: The shortfall is defined as actual expenditure divided by budgeted expenditure.
Source: GOB, *Direction General du Budget.*

The share of primary education within total education expenditures has not increased, despite the priority given to it in policy statements and despite the fact that universal coverage and completion is far from being attained.[30] The share of primary education in total public education spending declined in 2003 to 38 percent after remaining constant at about 46-49 percent in most years (table 3.12). However, figures for 2003 must be treated as provisional. The share increased in 2001 to 52 percent mostly on account of capital expenditures. Within recurrent spending, the share of primary education has been about 50 percent until 2003, when it fell to 42 percent. Within capital spending, the lion's share went to general administration between 1998-2000 – that is, spending on buildings, vehicles and equipment of the unified ministry, which was part of the donor financed program of institutional strengthening for primary education. Barring 2001 and 2002, the share of primary education has never exceeded 20 percent. In 2003, higher education and professional education accounted for over 70 percent of capital spending.

The shares of technical and professional education and of higher education have risen substantially after the creation of the two new ministries. Most of this has come through a rising share of capital funding, mostly financed by donors. Within recurrent spending, the shares of these sub-sectors have risen only modestly.

[30] The sub-sectoral shares are taken from the program budget documents, since the traditional budget and execution reports do not provide details by sub-sectors. Even after the introduction of SIGFIP, the allocations to the sub-sectors are determined by "*lignes de correspondence*" which shows the ratios of individual line items in the traditional budget going to various programs (sub-sectors in the case of education). Further, prior to 2001, there were no detailed budget execution reports of the ministry. For all these reasons, for the earlier years, the sub-sectoral shares must be treated as "best estimates" of the ministry. For technical and professional education, and higher education, the traditional budget provides accurate data after the trifurcation of the ministry. However, the shares of primary and secondary education have been estimated according to the program budget.

Table 3.12: Sub-sectoral allocations of public expenditure on education (% share of each category of expenditure), Benin, 1998-03

	1998[a]	1999[a]	2000[a]	2001[a]	2002[b]	2003[b]
Total (million CFAF)[c]	39,940	44,940	50,000	66,282	69,502	75,046
(as % of total)						
Primary	49.1	46.0	47.0	51.6	49.3	38.1
Secondary	15.9	13.6	16.7	16.8	16.2	17.2
Administration (primary and sec.)					8.3	11.4
Technical and Professional	3.1	2.3	4.9	5.8	7.4	9.2
Higher	16.7	18.0	14.7	17.2	18.9	24.1
General Administration (total)	15.2	20.1	16.7	8.6		
Recurrent (million CFAF)[c]	35,300	38,300	39,800	49,000	58,305	60,515
(as % of total recurrent expenditure)						
Primary	52.0	50.9	55.3	49.8	51.1	42.1
Secondary	15.2	14.6	18.4	18.9	17.1	21.9
Administration (primary and sec.)	n.a.	n.a.	n.a.	n.a.	9.8	11.1
Technical and Professional	2.4	2.4	2.8	2.9	3.4	4.5
Higher	18.4	20.3	15.0	17.7	18.6	20.5
General Administration (total)	12.1	11.8	8.4	10.8	n.a.	n.a.
Capital (PIP) (million CFAF)[c]	4,640	6,640	10,200	17,282	11,197	14,531
(as % of total capital expenditure)						
Primary	20.5	17.1	17.6	57.8	37.7	19.6
Secondary	23.2	7.9	10.8	9.3	11.5	3.2
Administration (primary and sec.)	n.a.	n.a.	n.a.	n.a.	2.5	8.8
Technical and Professional	9.4	1.6	12.2	16.1	28.0	29.1
Higher	0.0	3.9	13.7	15.6	20.4	39.2
General Administration (total)	46.8	69.5	45.8	1.1	n.a.	n.a.

a/ Sub-sector shares based on sources (a) and (b).
b/ Sub-sector shares for primary and secondary based on source (c) after deducting for shares accounted for by technical and higher education based on source (d).
c/ From source (d).
n.a: not available.
Blank: not applicable.
Source: (a) 1997-2000 from "*Ministere De L'Education, Project De Budget 2001, Tableaux De Synthese Par Programme*"; (b) 2001 from "*Annexe 2, Situation D'Execution des Budgets Programmes Gestion* 2001"; (c) 2002-2003 from MEPS, *Projet De Budget Gestion* 2004, *Tableaux De Synthese Par Programme* and (d) Data supplied by *Direction General du Budget,* Ministry of Finance.

Per pupil public expenditures by level of education

In real terms, per pupil public recurrent expenditure at the primary level has not increased between 1998 and 2002. Per pupil public spending at the primary level has also declined relative to per capita income from 10 percent to 9 percent. In 2002, Benin spent under US$40 per primary pupil in recurrent public costs (table 3.13). Households contribute to the financing of primary education (despite the abolition of fees) by paying for community teachers and building classrooms, but there is no estimate of their level. Hence, it is not possible to say whether total per pupil spending at the primary level has increased.

Benin has succeeded in narrowing the gap between per pupil public spending at the primary level and other levels. This has come about largely through greater dependence on private financing at post-primary levels even in public institutions. Per student expenditure on higher education is 14 times that at the primary level, which represents a decline from earlier years. Per pupil spending on secondary, and technical and professional education has increased but only marginally. In secondary education, this ratio (1.6 times the primary level spending) is relatively low compared to most other regions. Benin's expenditure patterns now mirrors those obtaining in Latin America and Asia and is unlike the pattern of relatively high per pupil spending in secondary and higher education which still persists in much of Africa.

Table 3.13: Per pupil recurrent expenditure by level of education, Benin, 1998-2002

	1998	1999	2000	2001	2002
Per pupil recurrent expenditure					
Primary (CFAF)	23,334	23,352	21,818	24,040	25,567
Primary (US$)	40	38	31	33	37
% of per capita income	10.2	9.7	8.5	8.9	9.0
As multiple of Primary					
Secondary	1.4	1.3	1.6	1.8	1.6
Technical and Professional	5.6	4.8	5.5	6.0	n.a.
Higher	17.1	17.8	11.6	14.5	14.1
General Administration (total)	0.2	0.2	0.1	0.2	
Administration (primary and sec.)					0.2

Blank: not applicable.
n.a.: not available.
Source: *Ibid* for public finance data; enrolments in public institutions from ministry data.

Primary and Secondary Education

Within primary education, the share of capital expenditures rose substantially enabling increase in access through construction of new schools, while within secondary education, this share has declined somewhat. The number of public primary schools increased by 968 between 1998/99 and 2002/03; the number of public secondary schools increased by only 74 between 1999/00 and 2002/03. At both levels, within recurrent spending, the share of non-personnel spending rose substantially after 2000; from 16 percent to 32 percent in primary and from 5 percent to 35 percent in secondary (table 3.14). This was mainly on account of increased transfers to PTAs to compensate for the abolition of fees, which enabled schools to hire teachers locally in response to teacher shortages. The impact on the increase in teachers (of all categories – permanent, contractual and locally hired) in public schools has been much greater in secondary education where the number rose by 4,625 with an enrolment increase of 75,000. At the primary level, the number of teachers (again, of all categories) rose by just 2,800 with an enrolment increase of 356,000; between 1998/99 and 2001/02, the total number of teachers increased by 4,300, but in 2002/03 there was a sharp absolute decline of 1,500 teachers, almost all of them permanent teachers.

Table 3.14: Composition of primary and secondary education expenditure, Benin, 1998-03

	1998[a]	1999[a]	2000[a]	2001[a]	2002[b]	2003[b]
Primary Education						
Total Spending (million CFAF)	19,299	20,641	23,805	34,381	34,001	28,330
Recurrent (% of total primary)	95.1	94.5	92.5	70.9	87.6	89.9
As % of primary recurrent spending :						
Personnel	84.2	82.9	73.0	69.5	65.6	68.4
Non-Personnel	15.8	17.1	27.0	30.5	34.4	31.7
Capital (PIP) (% of total primary)	4.9	5.5	7.5	29.1	12.4	10.1
Secondary Education						
Total Spending (million CFAF)	6,430	6,103	8,429	10,857	11,243	13,702
Recurrent (% of total secondary)	83.3	91.4	87.0	85.2	88.5	96.6
As % of secondary recurrent spending :						
Personnel	95.0	95.3	75.2	61.8	54.1	65.3
Non-Personnel	5.0	4.7	24.8	38.2	45.9	34.7
Capital (PIP) (% of total secondary)	16.7	8.6	13.0	14.8	11.5	3.4

a/ Sub-sector shares based on sources (a) and (b).
b/ Sub-sector shares for primary and secondary based on source (c) after deducting for shares accounted for by technical and higher education based on source (d).
n.a.: not available.
Source: (a) 1997-2000 from "*Ministere De L'Education, Project De Budget* 2001, *Tableaux De Synthese Par Programme*"; (b) 2001 from "*Annexe* 2, *Situation D'Execution des Budgets Programmes Gestion* 2001"; (c) 2002-2003 from MEPS, *Projet De Budget Gestion* 2004, *Tableaux De Synthese Par Programme* and (d) *Direction General du Budget*, Ministry of Finance.

As a result, the pupil-teacher ratio in public schools has been declining very rapidly at the secondary level from, 41 to 28, while at the primary level, it has remained more or less constant at about 54 - 55. All categories of teachers are used to calculate this ratio. In 2002/03, the primary pupil-teacher ratio in public schools rose to 65 as enrolment continued to increase while the number of teachers was reduced in absolute terms (table 3.15). Such high pupil-teacher ratios are not consistent with the stated policy objective of universalizing primary education with acceptable learning levels. The public primary pupil-teacher ratio is very high even by Sub-Saharan African standards, for which the average is 44. Benin's pupil-teacher ratio is exceeded only by that of Chad (72). By contrast, the public pupil-teacher ratio at the secondary level is low and similar to the level in other Francophone and sub-Saharan African countries. The disparities in service provision between primary and secondary levels are comparatively wider in Benin.

Table 3.15: Evolution of pupil-teacher ratios in public schools, Benin, 1998-99-2002-03

	1998-99	1999-2000	2000-01	2001-02	2002-03
Primary schools	54.0	55.9	58.5	55.3	65.4
Secondary schools	41.1	n.a.	35.6	31.9	27.8

n.a.: not available.

Analysis of 2002 recurrent expenditures by organizational level and category of expenditure

The SIGFIP database provides the most detailed picture of recurrent budget execution[31] but in 2002, nearly CFAF 2.7 billion, representing 7 percent of recurrent spending, were not captured. They comprise non-personnel expenditures and the lack of data on how this amount was spent constitutes an impediment to a comprehensive analysis. GOB is in the process of improving the reliability of SIGFIP data and its consistency with other data sources, especially those used by the Ministry of Finance's budget department. Neither the SIGFIP database nor the Ministry of Finance execution data by the ministry show the expenditure on contractual teachers.

Of the amount captured in the SIGFIP, about two-thirds of recurrent expenditures are spent directly in the *départements*, comprising mainly salary expenditures of teachers and regional staff (table 3.16).[32] Another one-quarter is spent under centrally administered expenditures, some of which benefits the regions (for instance, the special allowances for teachers, transfers to PTA and repairs and maintenance). About 8 percent of expenditures is on central administration (though this includes expenditures on utilities and socio-administrative equipment some of which benefits regional administrative units) and the teacher training institute. In terms of levels, therefore, the central administrative share does not seem excessive. This is also corroborated by the distribution of permanent staff across organizational levels, with only 2 percent working in central administration.

The expenditure category "personnel" seriously understates the true level of personnel related expenditures and almost 85 - 90 percent of recurrent expenditure is on personnel spending. Direct personnel costs (salaries and *primes/indemnities* under the *dépenses communes*) account for nearly three-quarters of total recurrent spending (SIGFIP data). Teachers absorb most of this spending; non-teaching staff account for only 4 percent of total recurrent expenditure. However, apart from direct personnel costs, a large part of the transfers to PTAs finance mainly teachers' salaries (community teachers in primary schools, and substitute teachers in secondary schools).[33] These transfers account for 11 percent of recurrent expenditures. Counting all transfers as staff costs implies that the expenditure on staff would account for 85 percent of the MEPS' recurrent expenditures. Expenditure on contractual teachers was estimated to be CFAF 1.2 billion in 2002; adding this to the MEPS spending would raise the personnel related expenditures to about 90 percent.

Recurrent expenditures on other inputs critical for raising quality are negligible. Textbooks and school supplies[34] together account for only 1 percent of recurrent spending. The single teacher training institution absorbs just 0.3 percent of recurrent spending. Part of

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[31] As discussed in chapter 6, the SIGFIP database did not include all externally financed capital expenditures until 2003. However, all recurrent and domestically financed capital expenditures were to have been included from 2001.

[32] Using the MFE figures, the personnel share of recurrent spending is slightly lower (69 percent), as the unallocated amount is on non-personnel expenditure.

[33] The transfers to primary schools are not intended only for teachers but in practice, it appears that most schools use them for hiring community teachers. Transfers to secondary schools are specifically for hiring substitute teachers against agreed upon vacancies.

[34] *Materiels pedagogiques* comprising mainly furniture for schools and teaching aids.

the reason for the low share of pedagogical and school materials is that they continue to be funded in the capital budget by external grants. In-service teacher training is also similarly funded and in part substitutes for the almost complete lack of pre-service training for teachers. It will be necessary to increase the share for inputs directly related to quality improvement in the recurrent budget, as the externally funded project, which currently finances these inputs, is due to end shortly. Compared to this low share for these critical inputs, the expenditure on office furniture and equipment ("socio-administrative equipment") is relatively high (3.5 percent). Various unallocated expenditures and a variety of small programs absorb nearly 10 percent of recurrent expenditures. This share would be as high as 15 percent if the expenditures not captured by SIGFIP were to be included. A review of the rationale for and effectiveness of the other recurrent expenditures, including those on administrative equipment and unallocated categories, will be useful to identify areas of possible savings that could be allocated to pedagogical materials.

Table 3.16: Primary and Secondary Education - Actual Recurrent Expenditure by Organizational Level and Expenditure Category (%), Benin, 2002

Expenditure Category	SIGFIP database				All Levels	MFE data
	Central Administration[a]	Regional[b]	Central Pedagogical Support[c]	Central Common[d]		
Total (million CFAF)	3,267.2	28,275.7	107.7	10,685.0	42,335.6	45,094.1
% distribution (row)	7.7	66.8	0.3	25.2	100.0	
Column percentages (of total recurrent expenditure)						
Personnel [e]	22.2	100.0	85.5	18.5	73.4	68.9
Teachers		96.9		18.5	69.4[f]	
Primary		74.2		0.0	49.5	
Secondary		22.8		0.0	15.2	
Others[g]	22.2	3.1	85.5	0.0	4.0	
Transfers to PTA[h]				44.8	11.3	
Primary					5.0	
Secondary					6.3	
School Supplies	2.4				0.2	
Textbooks				3.0	0.8	
Exams				3.7	0.9	31.1
Repair/Maintenance	3.0		5.3	0.7	0.4	
Electricity	2.4				0.2	
Telecom-Postal	2.2				0.2	
Fuel Lubricants	2.5		2.5		0.2	
Socio-Adm. Equip.	45.7		0.0		3.5	
Others	19.6		6.7	29.3	8.9	
Total	100.0	100.0	100.0	100.0	100.0	100.0

a/ Estimated expenditure on central administrative units. Includes some expenditure on utilities, and repairs and maintenance at the regional level, which are included under the budgetary heads for central administration.

b/ Estimated expenditure on school teachers and regional administration. Adjustments were made to the original SIGFIP tables, in which the actual personnel expenditure (including that on teachers) in the regions was placed under the central *Direction de l'Enseignement Primaire* and *Direction de l'Enseignement Secondaire*, while the budget figures were placed under the regional administrative heads.

c/ Expenditure on *Institut National pour la Formation et la Recherche en Education*.

d/ Expenditures under *Dépenses communes, Dépenses diverses and Dépenses d'interventions publiques*.

e/ Includes personnel expenditures as well as personnel related expenditures under *Dépenses communes (primes and indemnites)*.

f/ The percentage share for all teachers exceeds the sum of shares for primary and secondary teachers because the former includes special personnel allowances under *Dépenses communes* that could not be allocated separately to primary or secondary teachers. such as *Indemnites d'Heures Supplementaires, Indemnites de Corrections des Examens Concour Tests and Prime d'Incitation Pour Zones d'Acces Difficile*.

g/ Expenditures on personnel other than teachers.

h/ Line items : *Contribution au Budget des Associations des Parents d'Elèves* and *Prise en Charge des Ecolages dans les Ecoles Primaire Publiques*.

Source: SIGFIP, *Etat d'Execution des Depenses par Ministere & Nature Economique, Gestion* 2002; and *Direction Génerale du Budget*, Ministry of Finance.

Despite the level of detail in the SIGFIP database, analysis of the MEPS budget execution data by level of education remains extremely difficult because the traditional budget does not show this classification. In particular, the budget heads for each of the *départements* do not provide the break-up of either personnel or non-personnel expenditure by level, and these had to be estimated using the distribution of permanent staff. Personnel expenditures under the *dépenses communes* cannot be broken up by level. In the above exercise, therefore, only 55 percent of the MEPS' recurrent expenditure could be directly attributed to primary education, 21 percent for secondary education and 24 percent cannot be directly allocated to either level.[35] Expenditures on primary education include teachers' salaries, transfers to PTAs in primary schools and on textbooks, while those for secondary education include teachers' salaries and transfers to PTAs in secondary schools. The unallocated share comprises the expenditures on central administration and pedagogical support, regional non-personnel spending and centrally administered expenditures. The breakup of non-personnel expenditures at the regional level is virtually impossible. At the ministry level, there are no detailed accounts of these *crédits délégués* as they are considered "spent" once the funds are transferred to the department.

Teachers' Salaries and Teacher Management

The difficulties in analyzing expenditures on teachers reflect a fundamental problem in Benin's school education system, namely the system of teacher recruitment and compensation, which directly affects teacher motivation and school quality, especially at the primary level. Further, Benin has followed a differential strategy for hiring new teachers in primary and secondary to accommodate expanding enrolments and this has directly affected equity in access and completion at both levels.

Although primary education receives a relatively high share of personnel related spending of the MEPS, as discussed earlier, the pupil-teacher ratio has been rising at the primary level and falling in secondary education (public schools only). As table 3.17 shows, the average *public* expenditure per teacher in public schools is also higher at the primary level than at the secondary level. (The total earnings of a secondary teacher are higher than of a primary teacher because the former are enhanced by student fees). This is the result of two factors, the differing composition of the teaching force and their relative salaries at the two levels. In primary education, over half the teachers are permanent teachers whose average earnings (including all allowances) are ten times that of the community teachers. The latter account for less than a quarter of total teachers. In secondary education, only one-fifth of the teachers are permanent teachers; 70 percent of the teachers are locally hired teachers, on whom the government spends less than one-tenth of the salary of the permanent teachers. Parents supplement the salaries of these staff through fees. These two factors enable the pupil-teacher ratio in secondary schools to be much lower than in primary schools without incurring high levels of public spending at the secondary level.

[35] The program budget which shows sub-sectoral allocations (used earlier in the chapter) assigns a certain share of these unallocated expenditures within the MEPS to primary, secondary and administration, respectively, but the basis is somewhat arbitrary.

Table 3.17: Average public expenditure per teacher and pupil-teacher ratio by category of teacher and level of education, 2002

	Number	% of total at each level	Average annual public expenditure per teacher US$ [a]	Pupil-teacher ratio (public schools)
Primary teachers	17,806	100	1,860 (4.9)	65
Permanent	9,993	56.1	3,011 (7.9)	117
Contractual	3,551	19.9	750 (2.0)	328
Community	4,262	23.9	300 (0.8)	273
Secondary teachers	8,693	100	1,461 (3.8) [b]	28
Permanent	1,813	20.9	5,098 (13.4)	133
Contractual	804	9.2	n.a.	301
Locally hired	6,076	69.9	501 (1.3)	40
International comparison at primary level [c]				
Francophone Africa			(6.3)	53
Anglophone Africa			(3.6)	39
Latin America			(2.3)	31
Asia			(2.5)	38
Middle East			(3.3)	26

a/ Figures in brackets indicate the average public expenditure as multiple of per capita GDP. Average salary of primary and secondary APE teachers is obtained by dividing personnel expenditure on teachers by their respective numbers. Average salary of contractual and community teachers obtained from USAID evaluation report. Average public expenditure for PTA hired secondary teachers is arrived at by dividing the total transfers to PTAs by number of such teachers.
b/ The average public expenditure per secondary teacher has been calculated assuming that all contractual teachers are paid the same as primary teachers; in fact, precise information is not available on this.
c/ For late 1990s.
Source, World Bank 2001. Education and Training in Madagascar, Volume 2, Main Report, Washington, D.C.: World Bank, table 3.13, p. 54.

Hence, while Benin's average annual public expenditure per primary teacher is significantly lower than in Francophone Africa, it has not been able to "afford" lower pupil-teacher ratios at the primary level due to the high proportion of relatively well-paid primary teachers. The effort to reduce average teacher costs by increasing the proportion of very low paid teachers has been successful and contributed to maintaining fiscal balance. But this strategy has not reduced the primary pupil-teacher ratio (in fact, in 2002/03, the pupil-teacher ratio increased) and has created a whole host of personnel management problems that threaten the stability of the primary education system.

Failure to address basic policy issues on teacher management has been responsible for the low quality in primary education and has compromised the effectiveness of an otherwise carefully crafted program of pedagogical improvement. Benin is unusual in having developed a comprehensive program of pedagogical reform in primary education, unlike many other countries that neglected such aspects while rapidly expanding primary enrolment. The program covered the introduction of carefully tested instructional and training materials in public and private schools and very intensive annual teacher training to all categories of teachers. However, the program did not address the fundamental issues of teacher recruitment and compensation and has thus led to low quality of education for the majority of students and widening disparities in learning levels between

public and private schools, since learning conditions are far superior in the latter. As a result, the effectiveness of these investments has been compromised and the future of tens of thousands of children put at risk by prolonged and widespread strikes over teachers' pay and benefits in 2001/02 and 2002/03 in all public schools (strikes occurred in earlier years as well, but were not as devastating). Both the "*Agents Permanents d'Etat*" (APE) and the *contractuels* went on strike, leaving only locally hired teachers (*communautaires*) to conduct classes. Students in the first two grades of the primary cycle, comprising almost 40 percent of students, have learnt virtually nothing during this period. Nevertheless, students are being promoted to higher classes in order to release space for new entrants.

There are four critical problems in the area of teacher management: (i) the extremely different levels of pay, quality, motivation and commitment between teachers, with an increasing reliance on very low paid and under-qualified teachers who are unable to teach the new curriculum; (ii) there is a skewed distribution of teachers of different categories across *départements* and schools leading to great unevenness in learning conditions; (iii) class-sizes in the lower primary classes are very high and directly encourage drop out, repetition and low learning levels; and (iv) the funding formula for transfers to PTAs for hiring local teachers is inequitable and accentuates inequities in teacher distribution. Each of these is discussed in turn below.

Reform of teacher recruitment and compensation at the primary level is an urgent necessity. The compensation for community teachers at the primary level is so low (80 percent of per capita income) that it can attract only candidates with minimal education and commitment to teaching, thus reducing the effectiveness of the heavy investments made in their training. The majority of contractual teachers have secondary level education but no teacher training. The compensation of contractual and community teachers is well below the norm of 3.5 times the per capita income, used in the World Bank's indicative framework for projecting the requirements for Education for All (EFA). On the other hand, the average salary of permanent teachers (approximately 8 times the per capita GDP) is not fiscally sustainable if universalized. A more rational salary structure is required, with criteria for recruitment, promotion and salary increments being linked to levels of certification and competency

There are substantial variations in the distribution of teachers across *départements* especially at the primary level, leading to impracticable pupil-teacher ratios and a high percentage of unqualified teachers in some areas. At the primary level, the pupil-teacher ratio ranges from a 'low' of 56 in Bourgou-Alibori to a high of 75 in Atacora-Donga., which is also the poorest *département* (table 3.18). Part of the reason is that Atacora-Donga has relatively few locally hired teachers, while nearly 40 percent of teachers in Borgou-Alibori are from this category. The former also has relatively few permanent teachers; 44 percent of teachers are contractual staff. There is a high concentration of permanent teachers in the relatively more prosperous *départements* of Atlantique-Littoral and Ouémé-Plateau. At the secondary level, the range in the student-teacher ratio is small, from 26 in Ouémé-Plateau to 31 in Atacora-Donga. Again, Atlantique-Littoral has a high proportion of permanent teachers; however, the composition of the teaching force in other departments is relatively uniform.

Table 3.18: Pupil-teacher ratio and composition of teaching force in public primary schools by region, Benin, 2002/03

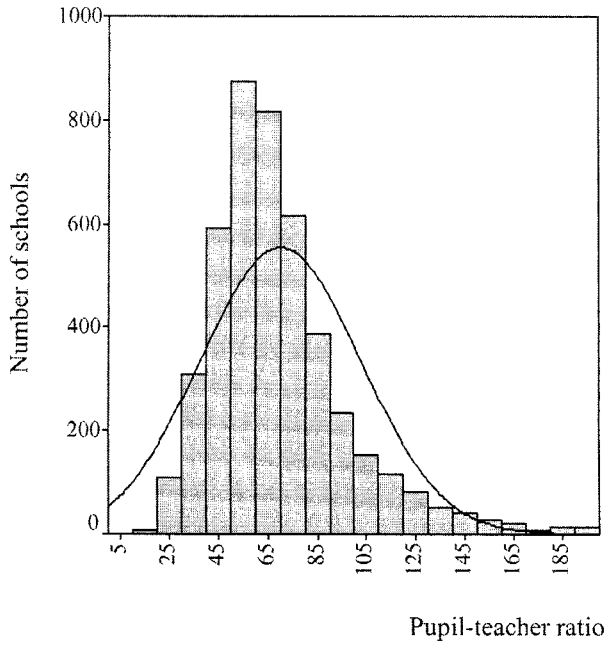
Region	Pupil-teacher ratio	Total teachers	% Permanent	% Contractual	% Locally hired
Public primary schools					
Atacora-Donga	74.5	2035	47.5	44.0	8.6
Atlantique-Littoral	66.2	3015	67.2	14.7	18.1
Borgou-Alibori	56.4	2897	41.5	18.6	39.9
Mono-Couffo	66.9	3269	46.4	19.6	34.0
Ouémé-Plateau	70.0	2976	73.6	21.0	5.3
Zou-Collines	61.8	3614	57.9	11.3	30.9
Benin	65.4	17806	56.1	19.9	23.9

Source: *Annuaires Scolaires.*

The number of primary teachers in a school bears little relation to the number of pupils in a school and there are a large number of schools having very high pupil-teacher ratios. In 2002/03, the unexplained variance in a regression of teachers on pupils in each school (1-R^2) was 30 percent. This reflects considerable inefficiency in teacher deployment and puts Benin among the six lowest out of 22 sub-Saharan countries on this indicator. This variation has reduced somewhat since 1998/99 (1- R^2 = 40 percent), but this limited improvement in teacher deployment has come about due to the greater use of community teachers. The practical implication of this is that a school with an enrolment of 200 may have between 1 to 7 teachers; on the other hand, a school with 6 teachers may have between 200 - 500 pupils.

Almost 40 percent of primary schools have an average pupil-teacher ratio of more than 70. The variation in pupil-teacher ratio at the school level is large and the distribution is skewed to the left (chart 3.2). This reflects poor teacher management, the lack of effective norms regarding acceptable pupil-teacher ratios and the lack of incentives for teachers to go to schools with the greatest needs. GOB has tried to address this issue by recruiting contractual teachers to specific schools; permanent teachers, however, continue to be transferred according to request.

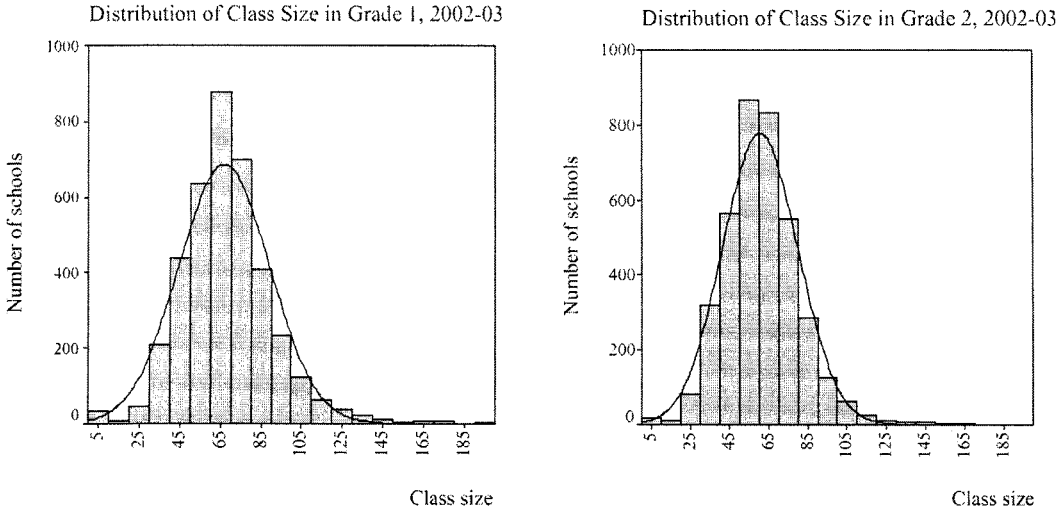
Chart 3.2: Variation in pupil-teacher ratio in primary schools, 2002-03



Teacher deployment in the lower primary classes is poorly managed leading to very large class sizes that make the pedagogical improvement program impossible to implement in most schools. About half the classes in grades 1 and 2 have more than 65 students, although all children are expected to learn all subjects in a foreign language from the first day (chart 3.3). The pedagogical reform also rests on greater interactive learning and group work which requires a change from "frontal teaching methods". The recent evaluation report notes that, as a result of large class sizes and unqualified staff, fewer than 10 percent of observed teachers used the teaching methods in which they were trained in the classroom and most children did not use their workbooks (although they had them). Hence, investments in both teacher training and pedagogical materials cannot yield expected outcomes in quality improvement unless these classroom conditions are changed.

A more fundamental policy issue concerns the appropriate approach for teaching in a language that is foreign to 90 percent of children entering grade 1. Educational research in other countries shows that mastery of foreign language skills sufficient to enable the child to learn other subjects in that language requires several years of instruction in that language, small group instruction and use of a variety of materials at school and in the home. One option is to bring students to adequate levels of literacy competency before beginning instruction in the second language. So far, such a policy has not been considered in Benin. If the present policy is continued, it is essential to provide greater teacher support through small group learning, by using teacher aides. Again, this has major implications for the teacher management strategy.

Chart 3.3: Distribution of class size in grades 1 and 2, 2002-03

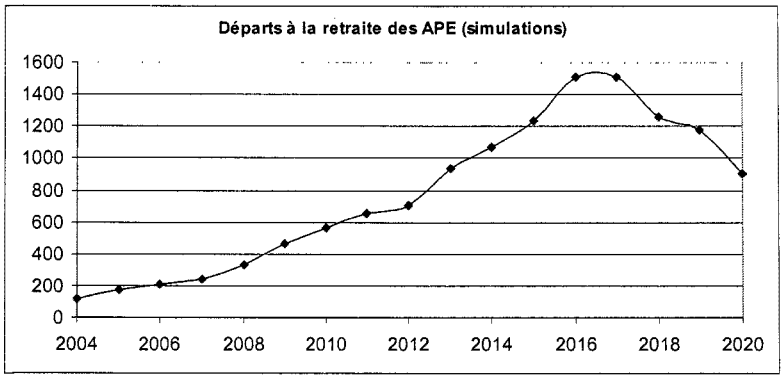


The funding formula for distribution of transfers to PTAs in primary schools is not equitable and may be reinforcing the disparities across schools. First, the formula for the transfer compensates schools for the loss of revenue due to the abolition of fees. Since richer departments charged higher fees, they are entitled to a higher transfer amount per pupil than the poorer *départements* (CFAF 3,000 per pupil versus CFAF 2,000 per pupil, respectively). Second, since the transfer is independent of the characteristics of the schools or pupils, those schools which are already well endowed with permanent or contractual teachers are able to use part or most of the transfer to fund other pedagogical materials for the school. For instance, 60 percent of public primary schools in the most favored zone have at least half of their teachers who are permanent staff; only one-quarter of schools in this zone have more than 25 percent of their teaching force as community teachers.[36] By contrast, only 24 percent of schools in the two least favored zones have a full complement of permanents staff; between 50 - 65 percent of these schools have more than one quarter of their teaching force as community teachers.

As the number of permanent teachers who are due for retirement increases, there is a danger that almost all new teacher recruits will be under-qualified unless there is an overhaul of the teacher management policies, covering both those who are paid directly by the state and those who are paid by transfers. Chart 3.4 shows that the number of permanent staff expected to retire will continue to increase for another 10 years. If these are all replaced by lower paid, under-qualified staff, the quality of the primary teaching force will fall dramatically, along with costs. This is a likely scenario as the lack of adequate pre-service training facilities means that it would be virtually impossible to replace all retiring permanent teachers with staff of similar qualifications.

[36] The GOB has identified four zones based on a composite index including indicators on whether the school is in an urban or rural location, the quality of the road to the school, distance to the local education office, distance to a health centre and availability of water and electricity.

Chart 3.4: Number of permanent primary teachers retiring- simulations, 2004-20



The funding formula for transfers to PTAs in secondary schools can affect the participation of poorer children in secondary education, since about 70 percent of teachers in public secondary schools are financed out of transfers and only 20 percent are permanent teachers. The transfer is a gap-filling strategy: it finances only part of the salary of the locally hired teachers, with parents paying the balance. It supplements household financing and enables decentralized recruitment at the school level. The transfer amount is decided on the basis of the number of additional teaching hours required for teaching all subjects. Currently, parents of enrolled secondary students are able to pay these fees because, as mentioned earlier, very few children from poor background manage to reach secondary education. The participation of poorer students in secondary education can be deterred by such cost-sharing mechanisms. If participation of these students should increase on equity grounds, targeted subsidies to poor students will be required to supplement the generalized transfers to PTAs.

Textbooks and teacher training in primary schools

Improvement in the availability of textbook and other pupil materials at the primary level has been a significant success in Benin. The norm of 1 book for two students has been achieved overall. The availability of textbooks is better in the lower primary classes than in grades 5 and 6 where the new textbooks have just begun to be introduced. These books were introduced in phases through the lower primary cycle, with the GOB picking up their financing after two years. Both public and private schools are covered. This relatively high level of provision reflects both the availability of funds under the USAID project (included in the capital budget) as well as the development of an efficient public-private partnership that has enabled books to be delivered to the remotest schools.

All categories of primary teachers, in both public and private schools, have received intensive and frequent in-service training. Since 1999, about 4,500 teachers have received almost one month of training each year. Again, these activities have been funded by the USAID project. The effectiveness of this training in changing classroom teaching is, however, limited with very few teachers using their new skills in practice. While there is probably a need to evaluate the training methods and materials (including the fact that training is uniform for all types of teachers, irrespective of education level), the key factors in reducing effectiveness are the systemic ones (personnel policies and overcrowded classrooms) mentioned earlier.

The impact of these activities on the recurrent (domestic) budget after the closure of the project needs to be estimated in order to sustain these activities in the future. The textbook requirements for successive classes are expected to be progressively funded through the domestic budget and this has been done in 2003 for grades 1 and 2. However, the burden will increase substantially by 2007 when all requirements will be domestically financed.

Currently, there exists no system of teacher preparation at the primary level. Against an annual estimated requirement of 2,000 additional teachers, the sole teacher training college has a capacity of 200 and an actual enrolment of 76. However, teachers can also obtain the same examinations and diplomas while teaching, which may explain the underutilization of capacity. The more serious problem is that this option is open only to permanent staff. The majority of teachers enter the profession completely unprepared.

Technical and Professional Education

Expenditure on technical and professional education has increased by over five times between 1998 and 2003 to nearly CFAF 7 billion. Increases in capital expenditure have driven this growth, but recurrent expenditure has also increased by about three times over this period.

Personnel expenditures account for just under half of total recurrent spending in technical and professional education. About 29 percent of total personnel expenditure comprises special allowances which do not form part of the basic salary plus allowances (table 3.19). This share is significantly higher than in primary and secondary education, where such allowances account for less than 7 percent of personnel spending.

Scholarships and bursaries account for another 10 percent of spending with 13 percent of students receiving these scholarships. The average scholarship value is modest, representing only half of annual per capita GDP. The expenditure on exams, claiming 8 percent of the total, appears high, as does spending on socio-administrative equipment (7 percent). A more detailed review of these expenditures is required.

Table 3.19: Technical and Professional – Composition of Recurrent Expenditure, Benin, 2002

Expenditure Category	Column Percentage			% of *"dépenses communes"* in each expenditure category
	Administration and Institutions[a]	*"Dépenses communes* [b]	Total	
Personnel	49.3	45.6	48.2	28.5
Educational Supplies	5.2	11.5	7.1	48.8
Exams	0.0	27.6	8.3	100.0
Bursaries/Scholarships	14.7	0.0	10.3	0.0
Training	0.0	11.4	3.4	100.0
Repair and Maintenance	1.9	0.0	1.3	0.0
Electricity	1.8	0.0	1.3	0.0
Telecom-Postal	1.7	0.0	1.2	0.0
Fuel Lubricants	1.8	0.0	1.3	0.0
Socio-Admin Equipment	9.7	0.0	6.8	0.0
Transfers[c]	3.5	0.0	2.5	0.0
Others	10.3	3.9	8.4	14.0
Total Value (million CFAF)	1,422.9	614.0	2,036.9	30.1

a/ Includes expenditure under central and regional administrative heads, salaries and allowances of personnel in institutions and transfers for institutions under *dépenses d'interventions publiques.*

b/ Includes *dépenses communes* (*primes and indemnites* for personnel), scholarships and other unallocated expenditures.

c/ *Contribution aux autres dépenses de fonctionnement du CET Ouidah, CET INA, l'INMES, l'ENIIAB, Subvention Au Fonctionnement Du Lycee Agrico De Sekou,* and *Contribution aux Depenses de fonctionnement NATITINGOU.*

Source: SIGFIP, *Etat d'Execution des Depenses par Ministere & Nature Economique, Gestion* 2002.

A more fundamental issue in technical and professional education is to consider whether public funding should be used for direct public provision. Given the already high share of private institutions at this level of education, the possibility of using public funds to support students in private institutions should be considered for both efficiency and equity reasons. Since private institutions are not willing to invest in capital-intensive training, subsidies to institutions with greater employer participation could also be considered.

Higher Education

The level of private financing is much greater in public higher education than in primary or secondary education. Cost-sharing occurs through differential fee structures for various categories of students, differentiated by academic performance. However, the total level of private financing in public institutions is not known.

Significant investment occurred in public higher education between 1999 and 2003. The share of capital expenditure was negligible in 1998 but this has increased to about 31 percent in 2003 (CFAF 5.6 billion out of a total expenditure of CFAF 18 billion on higher education). Unlike in the other sub-sectors, domestic financing has accounted for a greater share of capital investment than external financing in some years. Data for 2001 and 2002 show that two-thirds of capital expenditure was financed domestically, compared to half in primary and secondary education, and technical education; however, in 2003, external financing has considerably boosted the overall sub-sector spending.

A high level of spending on student subsidies and relatively low spending on direct personnel expenditures are significant aspects of the composition of recurrent spending in higher education. Of the total recurrent expenditure, 31 percent was spent on scholarships and transport subsidies compared to 32 percent on direct personnel expenditure. However, another 21 percent goes as transfers to institutions, part of which finance expenditures on temporary/substitute teachers. These transfers supplement the resources raised by the institutions through student fees which are retained by them; the expenditures financed by the transfers are not available with the ministry nor are they audited. Overall, expenditures on institutions, including these transfers, account for 54 percent of recurrent expenditure (table 3.20)

Table 3.20: Higher Education –Composition of Recurrent Expenditure, Benin, 2002

Expenditure Type	Level			All Levels
	Central Administration [a]	Institutions [b]	Central Common	
Total Value (million CFAF)	434.1	5,618.6	4,278.9	10,331.6
% share by level(row)	4.2	54.4	41.4	100
Column Percentage				
Personnel	11.2	53.5	6.5	32.3
Educational Supplies	0.0	0.0	0.5	0.2
Exams	0.0	0.0	1.3	0.5
Scholarships	0.0	0.0	64.2	26.6
Student Transport Subsidies	0.0	0.0	10.3	4.3
Training	0.0	0.0	7.7	3.2
Repair Maintenance	5.4	0.2	0.0	0.3
Electricity	6.0	5.6	0.0	3.3
Telecom-Postal	5.1	2.1	0.0	1.4
Fuel Lubricants	5.2	0.1	0.0	0.3
Socio-Admin Equipment	42.3	0.0	0.0	1.8
Transfers	0.0	38.2	0.0	20.8
Others	24.7	0.4	9.5	5.2

a/ Administrative units within the Ministry for Higher Education

b/ Funds for institutions, including personnel costs as well as transfers under *dépenses d'interventions publiques* for specific institutions.

Source: SIGFIP, *Etat d'Execution des Depenses par Ministere & Nature Economique, Gestion* 2002.

The absolute value of domestic scholarships is relatively low but the number of students receiving such scholarships is high leading to the disproportionate share of recurrent spending going to this item. About 44 percent of students enrolled in public institutions receive a scholarship, at an average rate of CFAF 254,000 a year or 0.9 percent of per capita GDP. The average scholarship for study abroad is much higher, CFAF 1.7 million a year, but since very few receive them, the overall burden is relatively low (4 percent of total recurrent spending). Given their high individual value and low coverage, it is necessary to examine whether the foreign scholarships are being used selectively either to encourage demand in nationally desirable courses. For domestic scholarships, the rationale for such a high proportion of students receiving them is not clear, especially as at the moment, most students are from the top 20 percent of households. Further, the method of determining eligibility does not appear efficient; neither does it promote

equity. Students are selected on the basis of their performance on entrance examinations in all courses. These students also pay lower fees, while those who are not selected pay much higher fees, in effect subsidizing the former. To the extent that performance on competitive examinations is correlated with wealth (for instance, students who studied in private secondary schools or who invested in greater tutoring may be more likely to succeed in these exams), this method is also inequitable. Moreover, scholarships are being given at the undergraduate level, rather than at the post graduate level where externalities arising from research provide greater economic justification. Finally, students in private institutions are not eligible for any scholarship.

The financial accountability of public higher education institutions is weak. Since public higher education institutions are financed through a mixture of public funding and student fees, a complete picture about the financing of higher education cannot be obtained through budget documents alone. Reports indicate that at the University of Abomey-Calavi (formerly the University of Benin) there are arrears in payment of salaries and allowances to researchers, as well as debts to suppliers running into tens of millions of CFAF.

Private Sector

In Benin, the private and public sectors in primary and secondary education offer the same curriculum and language of instruction, unlike the situation in many other developing countries where language of instruction is often the differentiating feature of private primary schools. Perhaps as result of this, the size of the private sector is relatively small at the primary level (about 6 percent of enrolment) and demand for private schools is associated with perceived better teaching quality and, more recently, fewer disruptions in the academic year. Private primary schools tend to be smaller than the public schools. The average public school is about 36 percent larger than the average private school in terms of total enrollment – 259 pupils compared to 190 (table 3.21). The pupil-teacher ratio in private schools is half that in the public schools – 34 and 65, respectively – and there is also less variation across regions and schools.

Table 3.21: Number of pupils per school and pupil-teacher ratio in public and private primary schools by region, Benin, 2002/03

	Pupils per school		Pupil-teacher ratio	
	Public	Private	Public	Private
Atacora-Donga	207.4	192.6	74.5	34.0
Atlantique-Littoral	298.9	224.4	66.2	37.5
Borgou-Alibori	214.2	197.1	56.4	30.7
Mono-Couffo	306.6	144.5	66.9	28.7
Ouémé-Plateau	275.5	173.8	70.0	32.4
Zou-Collines	255.3	207.9	61.8	33.3
Benin	258.5	190.0	65.4	33.6

Source: *Annuaires Scolaires.*

Because of these more favorable learning conditions and greater parental support, private school students fare better in French competencies than their public school counterparts. This observation is made in the recent evaluation of pedagogical reforms in primary education.

Performance was clearly related to the learning resources available to the students. Children in private schools with smaller classes fared better than those in private schools with larger classes. Parental assistance, including speaking French at home, and expectations for children's success are also related to higher student achievement. It is difficult to judge whether private schools would be more cost-effective than public schools, after controlling for these factors.

Private secondary education is also relatively small in Benin, compared to many other countries and part of the reason may be the favorable pupil-teacher ratios in public schools. Public schools tend to be much larger than private schools, the average size of the former being 7 times higher than that of private schools, with wider variations across regions (table 3.22). However, the pupil-teacher ratio in public secondary schools is not excessive and the range tends to be smaller in the public system than in the private system. The student-teacher ratio in public schools ranges from a low of 26 in Ouémé-Plateau to a high of 31 in Atacora-Donga. Pupil-teacher ratios are even lower in private secondary schools. This may reflect the uneconomic size of these schools, with the average school size being less than 100 students in most *départements*.

Table 3.22: Number of students per school by region and type of secondary school, Benin, 2002/03

Region	Public	Private
Atacora-Donga	634.5	103.8
Atlantique-Littoral	1308.1	149.0
Borgou-Alibori	742.3	96.8
Mono-Couffo	745.4	88.7
Ouémé-Plateau	708.6	85.9
Zou-Collines	686.8	100.7
Benin	798.5	121.3

Source: *Annuaires Scolaires*.

There seems little scope for making use of the unsubsidized private sector at either level to accommodate expanding enrolments. However, public subsidies to the private sector, either given to institutions or to households could reduce the cost of private schooling to households and, if such institutions operate more efficiently, they could reduce the cost to the public exchequer (relative to the cost of expanding enrolment in public schools). It is necessary to examine these options, especially at the secondary level in order to make it more accessible to poorer students. A more detailed study of the private sector at different levels of education will be required.

Medium-term Projections of Financing Requirements[37]

Allocations for primary education will have to improve substantially in order to achieve the target of universal completion of grade 6. Due to high population growth and the impact of eliminating drop out, the total enrolment is projected to rise from 1.12 million currently to 1.76 million in 2015. Recent projections done by the Bank in the context of the PRSC show that the effect of increased enrolment and reduction in pupil-teacher ratio to 40, even with a reduction in the average repetition rate to 10 percent, will require the number of teachers to double from about 19,000 to 39,700. The principal tradeoff here is in reducing the average salary cost of teachers. If the number of permanent teachers is doubled to about 16,000, the annual resource requirement rises almost four times to about CFAF 120 billion. The alternative scenario of a modest increase in permanent teachers coupled with a substantial rise in other teachers (contractual and community teachers) would raise the annual resource requirement by CFAF 95 billion, which is still over three times the current level.[38]

These projections assume that the existing artificial distinctions within the teaching force will continue and they do not take into account additional requirements for teachers that may be required in order to improve learning in the first few years of the primary cycle. Overall, the second scenario brings down the average cost per teacher to 3.5 times the per capita GDP, which is the norm used in the Education for All-Fast Track Initiative (EFA-FTI) indicative framework. However, this average is derived from teachers at widely different salary and education levels, with an increasing proportion of teachers who are under-qualified and paid substantially less than the permanent teachers. By 2015, nearly two-thirds of teachers will fall into this category according to this scenario. It is not clear that the targets for universal completion with acceptable levels of student learning can be met under these conditions. Further, the problems of teacher management would only be accentuated. As discussed earlier, the problems of learning in a foreign language may require new pedagogical strategies, including smaller classes in the early primary classes together with additional materials.

At higher levels of education, the principal trade-off is in managing the transition between the various levels of education, with the greatest impact coming from the transition between primary and lower secondary education. If the transition rate to lower secondary education rises to 100 percent, from its already high level of 80 percent, the number of students would increase by 4.6 times, from 220,000 to 1.02 million in 2015. This is due to large cohort of primary students who are assumed to have completed 6th grade with satisfactory learning levels. The requirement for additional teachers, again assuming a pupil-teacher ratio of 40:1, would be 40,000; an 8-fold increase. If enrolment growth can be contained and the transition rate reduced to 50 percent, total enrolment would double to approximately 440,000. This, together with a pupil-teacher ratio of 40:1, would lead to

[37] This section is based on a note on the strategic financing framework that was prepared by the World Bank to assist the GOB in developing an integrated medium-term sector policy.

[38] The projection methodology is the same as that used in the EFA-FTI indicative framework and assumes that non-personnel recurrent expenditures will account for 33 percent of total recurrent expenditures.

a requirement of about 15,000 teachers at this level. Both scenarios assume that the repetition rate is reduced from 22 percent to 10 percent.

Resource requirements for upper secondary education depend largely on the assumed transition between primary and lower secondary education. If there is 100 percent transition between primary and lower secondary, while the transition rate between lower secondary and upper secondary remains the same (35 percent), the number of pupils would increase by 4.4 times to 182,000; if the former is only 50 percent, the number of pupils at the upper secondary stage would be halved (91,000). If the transition rate to upper secondary is reduced to 30 percent, enrolment would be 75,000 which is still almost double the current level.

Reducing the repetition rate, managing the pupil-teacher ratio, cost-sharing of teachers' salaries in public schools and an increasing role for the private sector are important factors in containing total costs at the secondary level. Enrolment would rise even further than that projected above if repetition rates are not brought down from their present high level of over 20 percent. If current pupil-teacher ratios at the secondary level are maintained, the cost would rise further. If the state were to pay the full cost of all secondary teachers at present salary levels, the average cost per teacher would rise. Finally, the projections assume that the private share of enrolment would increase modestly to about 15 percent.

In higher education, the projected increases are modest and may understate total resource requirements if recent trends in enrolment growth were to continue. However, here the main instrument for containing public expenditures would be increased cost-sharing by households.

Policy choices will therefore have a big impact on total resource requirements for the sector. With universal completion of primary education and universal transition to lower secondary education, total public recurrent costs would rise to almost 8 percent of GDP from the present level of 3 percent. With more modest enrolment increases in post-primary education, the resource requirements would constitute 4.4 - 4.8 percent of GDP. The former scenario would be almost impossible unless domestic allocations for the sector rise to very high levels (or external aid increases manifold). Hence, while demand needs to be stimulated at the primary level, it needs to be carefully managed at the post-primary level or lower cost alternatives to formal schooling must be provided in order to reduce the pressure on public schools.

Public Expenditure Management in the Education Sector

Budget Reporting and Auditing

Data on budget execution are provided on the basis of "*titres admis en paiement*" or on "*ordonnancement*" basis and a presentation on actual payment basis is not available. In particular, a significant part of the MEPS budget is in the form of *crédits délegués* to the services at the *departément* level for non-personnel recurrent expenditures, which are treated as "paid", once the money is sent to the regional office.

Until 2003, the MEPS did not specify what proportion of the *crédits délegués* should be allocated to primary or secondary education and hence the allocation decision was taken at the *département* level. The expenditure for the two sub-sectors was estimated ex-post in the program budgets using ratios. From 2003, the MEPS specifies the amount that should be spent on primary education, but the actual expenditures are still not reflected in the SIGFIP data (they continue to be estimated using the ratios).

There are delays in sending funds to the *département* level. In most cases, the funds are not sent before April, nearly four months after the commencement of the fiscal year. This can delay the effectiveness of program implementation and also lead to under-utilization of the last tranche.

Evaluation studies indicate that materials for primary pupils (textbooks, tables/benches) and transfers to PTAs do reach even remote schools. For textbook procurement and distribution, a system has been established with donor support and works effectively. There have been delays with the distribution of workbooks in grades 1 and 2 in 2003, which may be related to the fact that these are now domestically funded. The study of utilization of HIPC funds in education shows that the amounts transferred to individual schools by the MEPS arrived at the schools and were broadly used as intended.

There is less transparency and accountability of funds transferred to universities and higher education institutions. There are often delays in payment of suppliers and payment of contractual teachers. A strengthening of the financial accountability mechanisms for these autonomous institutions is required.

External oversight mechanisms are weak and despite the existence of a large number of local user organizations, especially in school education, community participation is also weak. Parents feel their main purpose is to sign checks from the GOB's fund to pay community teachers. The participation of parents in overseeing the use of other government resources in the school or in monitoring teacher attendance is negligible.

Results-Based Budgeting

The education ministries have been preparing program budgets since 2000 but movement towards a full-fledged result-based public expenditure management system has been limited. In principle, sector ministries receive allocations based on the overall priorities accorded to the sector in the government's PRSP, which they have the authority to execute and against which they are expected to deliver results that can be monitored as shown by performance indicators. Sector ministries are expected to make intra-sectoral tradeoffs by allocating resources to the key programs. Until 2002, within the unified education ministry, the programs were: (i) primary education; (ii) secondary education; (iii) technical and professional education; (iv) higher education; and (v) general administration. After the trifurcation of the ministry, within the MEPS, there are now three programs, namely primary education, secondary education and general administration; each of the other two ministries has two programs each, namely the sub-sector and administration.

Intra-sectoral resource allocations do not seem to indicate any strategic prioritization, especially for primary education. The trifurcation of the ministry implies that the tradeoff between school education, technical and professional education, and higher education, has now to be made at the Ministry of Finance level, during the discussions on the MTEF and annual budget allocations. As shown earlier, the share of primary education has not risen over the last five years despite the obvious pressing needs for universalizing primary education and raising quality. On the contrary, the share of higher education has risen in 2003.

Flexibility in reallocating resources across programs is limited by the fact that external donors continue to provide funds for projects and that personnel costs account for a significant part of the total budget. Foreign donors in education (USAID in primary education and various regional banks in technical/professional and higher education) are not involved and not even aware of the program budget for education. The decision to fund a project in a sub-sector can increase overall resource availability in the sector, without allowing funds to be allocated to the priority sub-sectors. Within the recurrent budget, the expenditure on permanent staff, which is inflexible in the medium-term, drives the notional budgetary allocations for particular programs.

Although the program budgets provide indicative allocations for future years which reflect the commitment of the GOB and therefore in principle allow the ministries to undertake forward planning, in practice these forward estimates do not have any real value. The annual budget allocation shows considerable fluctuations from year to year as well as deviations from the indicative forward estimates provided in the MTEF, which makes realistic financial programming difficult. As an example, it is difficult to plan for teacher recruitments in line with growth in enrolment.

The program budgets are not comprehensive and do not include the full resources that are available to the ministry. For instance, the resources allocated to the MEPS should include resources for contractual teachers, which account for 20 percent of the teaching force in primary education. The resources for these teachers remain with the Ministry of Finance and are not made known to the MEPS at the beginning of the year, especially as they are probably part of the "balancing items" required to meet overall fiscal targets. It is difficult to plan for and deliver "results" when a significant part of the resources are not known and not fully controlled by the implementing agency.[39]

A significant part of resources in each of the education sub-sectors comes from households, who finance teachers' salaries and other recurrent expenditures which are not taken into account in the program budgets. Without a realistic estimate of resource mobilization from households (through fees, contributions, etc.), the total inputs available for each sub-sector and the expected outcomes cannot be gauged. At best, the sectoral ministries

[39] Reliable financial data are not available even ex-post. The breakup of the contractual staff by primary and secondary (and earlier for technical and higher education) is not available in the data provided by the Treasury. There are also large discrepancies between the number of contractual teachers as recorded by the Treasury and those classified as contractual teachers in the education statistics. For instance, in December 2002, the number of contractual teachers in primary and secondary education paid by the Treasury was listed as 2,993; the number of contractual teachers listed in the *Annuaires Scolaires* for 2002/03 in the two levels of education was about 4,600 (the data would have been collected around November 2002).

can indicate expected results in terms of publicly financed inputs (number of schools, teachers, classrooms, etc.), but overall sectoral outcomes which are currently the "results" of the program budgets will be influenced by total resource availability and management.

As a document, the program budget does not reflect analyses of key problems, solutions and the basis for increased allocations. The general analysis for primary education in the 2004 program budget of the MEPS, for instance, does not take into account the major evaluation conducted in 2003 and its recommendations on how to improve the quality of primary education; nor does it contain an assessment of the problems of program implementation in the previous year. It also does not reflect the projections of financial requirements undertaken in the context of the PRSC. The listing of objectives for 2004-2006 is brief (2 pages) and focuses on the main inputs to be provided. No justification is provided for the forward estimates for primary and secondary in the ensuing table. Budgetary allocations against the specific objectives for 2004 are provided in another table, but again there is no justification. Most of the document consists of detailed tables showing the logical framework and the distribution of proposed budget allocations for 2004. Apart from this, there are inconsistencies in the tables, with the budget allocations for 2004 in the document not matching those in the budget documents of the Ministry of Finance, and errors in the "*lignes de correspondence*" between the traditional budget and the program budget.

Performance indicators are too numerous, difficult to relate to program objectives and activities, and base year values are often erroneous. The most difficult are the ones that relate to impact, outcomes and outputs – both in terms of measurement and in terms of conceptualization. For instance, one of the outcome indicators for primary education is to raise the GER from 83 percent in 2001/02 to 86 percent in 2005/06, when in fact the GER in 2002/03 was already 93 percent. The unit cost, pupil-teacher ratio and ratio of books to students are also classified as outcome indicators, although they are better regarded as input indicators.

The most important obstacle in implementing program budgeting is the lack of an appropriate institutional framework; programs have been defined, but there are no "program managers" with the authority to make decisions and the resources at their disposal who can deliver the results. For instance, the program for "primary education" does not have a designated manager; it is not clear who has the right to make decisions regarding resource allocation and who is accountable for the expected results. At the departmental level, the allocations for primary and secondary education are not broken up in the traditional budget and hence it is not possible to know what is really allocated for primary education and what has been spent on primary education (apart from personnel costs on permanent staff, which are known). The example of the Ministry of Environment, which has successfully re-engineered itself to match programs with decision making authority, needs to be examined. However, in the case of the MEPS, which has a substantial part of its services at the department level, this would require a major organizational restructuring of responsibilities.

In higher education, the main actors are the universities and institutions of higher education with the ministry having little direct authority over them, which makes the task

of results-based budgeting more difficult. The administrative ministry has few resources and capacity to make the institutions deliver the expected results; the program budget is developed in the ministry but consultation with the institutions is limited, except in developing the annual budget request. Moreover, the institutions depend only partially on public resources, raising a considerable part of their resources from student contributions of which no accounts are kept at the ministry level. Without moving towards performance-based budgeting for the institutions, the program budget for higher education has little practical significance.

Recommendations

- **Developing a holistic teacher management policy in primary education, covering teacher preparation, employment status, compensation and professional development, is a priority since it affects the effectiveness of other investments and is crucial to improving quality and equity in primary education.** A comprehensive reform is desirable to remove the present division of the teaching force into permanent, contractual and locally hired categories, with differences in remuneration, benefits and employment status that are not based on teacher competence or the skills and professional knowledge required for the job. However, extensive stakeholder consultation and approval is required to conceptualize and implement the reform. One possibility is to try and de-link teacher management reform from the overall civil service reform, which has been stalled for years, to forestall putting millions of children at risk. The comprehensive reform package should include: (i) formulation of expected teacher competencies and knowledge to implement the teacher reform; (ii) the strategy for preparing and certifying such teachers through pre-service and in-service training, taking into account existing variations in teacher quality, and future requirements; (iii) the proposed system of compensation and promotion, based on certification and competence; and (iv) an estimate of total costs, covering existing and future teacher requirements, including possible costs of creating acceptance of proposed reforms. While this reform package is being prepared, an interim policy for the hiring community teachers could be developed. For instance, there could be either a moratorium on hiring teachers with below secondary level education; or prospective candidates may be required to fulfill certain minimum competencies before being eligible to be hired by PTAs, and additional training inputs and regular on-site support may be required for these under-qualified teachers.

- **Re-evaluate the pedagogical strategy for grades 1 and 2 in order to ensure that all children acquire literacy competency.** This may require a change of teaching methods or using smaller group instruction with teaching aides, which will have implications for personnel requirements.

- **The funding formula for transfers to primary PTAs needs to be reevaluated in order to increase per pupil transfers to poorer schools or regions.** Reforms of the transfer policy will need to complement reforms in teacher management. If transfers are not used for hiring community teachers (as was the original

intention), one component could be for school improvement and linked to improvements in enrolment, retention and completion; a second component could be linked to the child population in the area (or out-of school child population – as opposed to school enrolment) in order to stimulate demand, especially among girls, encourage community mobilization, etc. Steps to improve transparency and accountability at the school level should accompany this measure, including making public the funding formula, the total funds transferred to the school, auditing the finances of PTAs and developing key indicators for measuring school performance.

- **In order to contain overall public costs while raising the participation of poorer children in post-primary education, public spending on lower secondary and upper secondary education needs to be better targeted.** Again, a change in the formula for transfers to secondary school PTAs may be required. Use of private schools that receive part public funding tied to the participation of poorer students should also be considered.

- **In technical and professional education, the GOB should articulate objectives of the sub-sector, the role of the public and private sectors, the areas and justification for public investment/provision and the instruments for promoting private sector participation.** This should be done in the program budget for the sub-sector.

- **A more detailed review of university finances, covering both public subsidies and private contributions, should be carried out along with a review of the policy on scholarships in higher education.**

- **The share of allocations for primary education needs to increase.** These re-allocations will need to be undertaken at the Ministry of Finance level when program budgets and annual budgets of the three education Ministries are discussed, since there is little likelihood that intra-sectoral tradeoffs can be made by the ministries themselves.

- **Total allocations for the education sector will need to increase substantially over the next ten years, but tradeoffs in allocations across sub-sectors and policy choices within sub-sectors with significant impact on costs should be explicitly evaluated when preparing the program and annual budgets.** The existing financial projections should be updated continually, and include the financial and fiscal impact of proposed policy changes (e.g., on teachers and transfer policy). Such policy choices need to be discussed during the negotiations between the Ministry of Finance and the line ministries.

- **The financial programming and execution rate of capital expenditures should be improved.** This will require more detailed forward planning of the construction of schools.

- **While the movement to results-based program budgeting in the MEPS will require a change in institutional structures and mandates, a first step is to introduce line items for primary and secondary education in the traditional budget and to improve the analytic content of the program budget document.** This will be required for expenditures at the center, in the regions and in some of the *dépenses communes*, in capital and recurrent expenditures. Expenditures on contractual teachers should

be included. The use of transfers for locally hired teachers (pending the reform of teacher management) should be estimated, so that the overall impact of personnel-related expenditures on teachers can be evaluated. The analytic and presentational quality of the program budget should be improved by: (i) showing the rationale for changes in policy, if any, and expected changes in outcomes; (ii) showing the public cost of the new policies as well as where possible the additional requirements (or reductions) in household expenditures; and (iii) linking the changes in proposed expenditures to expected changes in inputs and outputs (teachers, schools, training, etc.). The program budgets should also include a review of the performance in the previous year, to evaluate proposed changes.

Chapter 4

Health

Introduction

Improving health outcomes is a cornerstone of the government's Poverty Reduction Strategy but not all the health-related MDGs are reflected in the goals set in the PRSP. The PRSP sets the target of reducing the infant mortality rate from the current level of 87 to 28 in 2015, which is consistent with the MDG objective of reducing the existing rate by two-thirds; however, no specific targets have been set for reducing under-five mortality. There is also no target set for reductions in maternal mortality, although the MDG objective is to reduce it by three-quarters. The PRSP presents targets for assisted birth, pre-natal consultations and use of contraceptives.

The national health policy has two main objectives: (i) better quality and accessibility of health services, and (ii) increased service use and community participation. The revised policy for the period 2002-2006 is similar to the one formulated in 1995 and sanctioned by a policy document emanating from the Health Round Table (*National Policies and Strategies for the Development of the Health Sector 1997-2001*). Increasing public health spending and provision of accessible public health services, through the creation of decentralized health zones, has been seen as an important way to improve health outcomes. The health sector has been considered as a "priority" ("pro-poor" sector); accordingly, the Ministry of Health has been included in the budgetary reforms and was expected to receive enhanced allocations.

The general arguments for public intervention in the health sector are well-known and apply to Benin. Externalities arising from communicable and infectious diseases constitute one important reason. Focusing on the prevention of these diseases will also help to lower the downstream costs of curative care. Public intervention is also justified on the grounds of mitigating the impact on poorer sections of the population of the economic costs (both direct treatment costs and other costs) of catastrophic illness or frequent episodes of illness. Such costs can often push poor households into extreme poverty or alternatively cause the poor not to seek health care. Similar equity-related arguments can be made for the health care needs of women, particularly in relation to maternal mortality. Redressing market failures due to asymmetric information is also important for the poor, since the poor are probably less able to choose the right treatment procedure and may not get value for money; providers, if unregulated, can either over treat or give poor care.

However, public intervention can take many forms, of which direct public provision and financing is only one. Other forms of public intervention are public financing of private health care provision, public regulation of the private sector and public intervention in factor and input markets. Some public funds go to private mission hospitals in Benin, which are expected to comply with public regulations. The national health policy

advocates partnerships with the private sector to provide health services but there is currently a regulatory void. An initial step was taken to regulate private health practice in a 1997 law which defines the qualification required for private practitioners and empowers the ministry to regulate patient charges, but this is not currently implemented, so that crucial regulatory measures such as the enforcement of quality control and the distinction between profit and non-profit providers are still lacking to date. The production of health personnel for both the public and private sectors is supplied by the government and the import of drugs and medical supplies (for the public sector) is regulated.

Further, distinctions between the public and private sector are not clear-cut in Benin as is also the case in other African and low-income countries. Publicly provided services depend not only on public finance but also on private financing, mainly though the charging of user fees which exists in Benin at all levels of the public health system. Further, individual providers in the public health system (doctors, nurses, midwives) will see patients after hours or even during the day at an official public health facility for the payment of private fees. In addition to this form of private provision by public health personnel, the latter also work in private hospitals and clinics. The more widespread are such practices, the less likely is it that greater public funding will produce the intended benefits in the public sector.

This review focuses on the trends and composition of public health expenditures alone. Despite this limitation, the analysis is useful since allocations to the public health sector have increased considerably since 1997 and further increases are proposed in the context of the PRSCs. Apart from analysis of executed expenditures for the period 1997-2002, with a more detailed analysis of 2002 data, the chapter draws upon the findings of several recent studies.[40] These include studies done by the European Union, Swiss Cooperation and USAID as well as articles published in research journals.[41]

This chapter is structured as follows: the first section presents recent trends in health outcomes and utilization of health care services; the second outlines the structure and financing of the health care system which is necessary for comprehending public resource flows; the third presents the analysis of public expenditures on health and the fourth discusses issues relating to public expenditure management. The final section presents some recommendations.

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[40] A Public Expenditure Review for the health sector was done by a Bank consultant in 2003. However, the report focused mainly on health outcome indicators and used budget (not executed) data. This chapter does not use this report except where explicitly indicated.

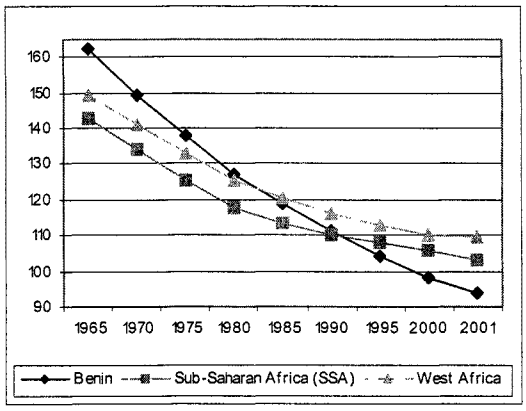
[41] These are: (i) "*Benin - Evaluation des Politiques et Stratégies Sanitaires Nationales pour la période 1997-2001*," report submitted to the European Union, December 2000; (ii) "*Rapport spécifique du Mission d'appui pour le développement du partenariat avec le secteur prive dans le secteur de la santé*," report submitted to the European Union, November 2000; (iii) Patrick Dauby 2002. "*Capitalisation des expériences et résultats du programme d'appui au développement de la santé de la Coopération Suisse géré par l'IUED et plus largement des cinq dernières années de coopération santé de l'IUED pour la Coopération Suisse au Bénin. – Partie I: Indicateurs de santé, ressources financières et humaines et systèmes de reference*," and (iv) "Mid-Term Evaluation of the Benin Integrated Family Health Program (PROSAF)," report submitted to USAID, October 2002.

Health Outcomes and Utilization of Health Care Services

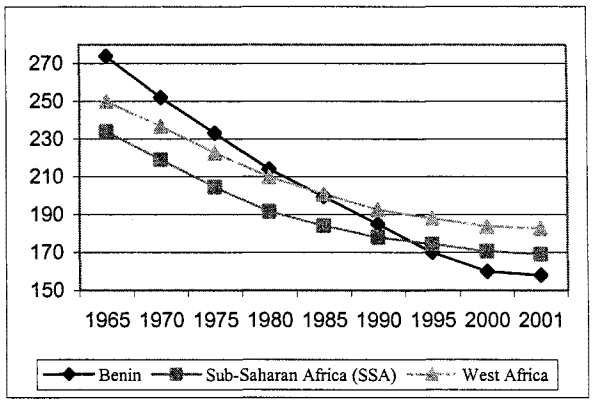
Although infant and especially child mortality remain high, they have decreased steadily over recent decades. Infant mortality was 87 per thousand in 2002; down from 110 a decade earlier, while under-five mortality was at 158 in 2001, down from 185 a decade earlier (chart 4.1 shows data up to 2001).[42] The rate of decline slowed down a little during the last decade compared to earlier decades, more so in the case of child mortality rates. However, compared to other sub-Saharan African countries which have faced a leveling-off in infant and child mortality rates over the last two decades, Benin has done well. This has made it possible for Benin to gradually shift from a laggard, even for Sub-Saharan Africa, to an above-average country in the region.

Chart 4.1: Evolution of mortality rates over time

Infant mortality



Under-five child mortality rate



Source: World Bank SIMA database.

While reducing infant mortality is an important priority, improving child survival in the post-infancy period in Benin deserves special attention as it accounts for the largest proportion of child deaths. According to an analysis of the DHS 2001 results, about 47 percent of deaths of children under the age of 5 years in Benin occurred between the ages 1-5 years, 30 percent in the post-neonatal period (age 1-12 months) and 23 percent in the neo-natal period (< 1 month after birth).[43] Countries with low under-five mortality rates have typically achieved them through very low levels of postnatal and child mortality, as there is evidence that biological factors have a relatively stronger influence on neonatal mortality whereas environmental factors are more powerful determinants of post-neonatal and child mortality. Apart from direct health interventions such as control of childhood diseases, improvements in nutrition, safe water and hygiene, are required to reduce mortality in the post-infancy period. Although biological factors tend to be more important in neo-natal mortality, appropriate health interventions, in particular timely obstetric care, will also help to improve child survival.

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[42] Chart 4.1 uses World Bank data for the last 10 years. According to the Annuaires Statistiques (table 4.1), the infant mortality rate was 105.5 per 1000 in 1990 and 99 per 1000 in 1999. The under five child mortality rate was 203.4 per 1000 in 1990 and 156 in 1999.

[43] Source: Feng Zhao and Hafizur Rahman, "Child Health and Survival in Benin – Trends and Determinants," World Bank, draft in progress.

Most health indicators have improved more rapidly in Benin than in other countries of the region over the last decade. At the beginning of the nineties, mortality rates in Benin were among the higher ones in the region; by the end of the decade only Ghana and Senegal had lower infant and child mortality rates than Benin (table 4.1). Progress has also been made in life expectancy at birth, both over time (from 47 years in 1990 to 54 years in 1999) and in comparison with countries in the region. However, this comparative improvement should not be overstated as many of the other countries displayed stagnation or even worsening of health indicators. Progress seems to have been less striking in the number of children per woman and in infant malnutrition, where Benin's performance is about average.

Table 4.1: Basic health indicators in Benin in comparison to West African countries

Country	Infant mortality (per 1,000 live births)		Child Mortality (per 1,000 live births)		Life expectancy at birth (years)		Number of children per woman		Infant Malnutrition % (Weight for Age)	
	1990	1999	1990	1999	1990	1999	1990	1999	1990	1999
Benin	**105.5**	**99**	**203.4**	**156**	**47**	**54**	**7.1**	**6.3**	**35**	**29**
Burkina Faso	105	106	219	199	46	45	6.8	6.4	46	-
Mali	108	123	249	237	47	54	6.9	6.7	41	40
Guinea	122	115	220	181	46	47	5.7	5.3	24	-
Cote d'Ivoire	88	102	138	171	55	47	5.6	4.9	24	24
Ghana	71	63	110	101	60	61	5.0	5.0	27	25
Mauritania	105	120	151	183	54	54	5.5	5.3	23	23
Niger	126	162	303	275	46	49	7.4	6.6	49	50
Senegal	81	68	140	118	48	53	6.1	5.4	22	22

Source : Gatien Ekanmian 2003. *Revue des depenses publiques dans le secteur sante,* April;.original sources are (for other countries) UNICEF, "*La situation des enfants dans le monde 2001*", and for Benin, "*Annuaire statistique du Bénin 1999 et 2000*".

Maternal mortality is estimated to be high but there are no reliable data for recent years. The rate reported by national authorities is about 300 per 100,000 live births in 2002, but this may exclude cases that are not reported or misclassified. Adjusting for these, the maternal mortality rate (MMR) is estimated to be in the range of 850.[44] Research studies indicate that 63 percent of maternal deaths occur within 24 hours of delivery and 80 percent within one week, suggesting that they arise from late referral and poor emergency obstetric services.

There are very large disparities in key health indicators between the poorest and the wealthiest households. For instance, as table 4.2 shows, infant mortality and under-five mortality rates for the poorest 20 percent of the households (111.5 and 198.2, respectively) are more than double that of the wealthiest 20 percent of the households (50.0 and 93.1, respectively). Similar differences exist for malnutrition and stunting, and

[44] World Health Organization and UNICEF.

the number of births per woman in the poorest quintile is more than double that of those in the wealthiest quintile. Prevalence of common childhood health problems like fever and diarrhea also varies considerably across wealth groups. What is more, health indicators are similar for the bottom three quintiles; the large gap is between the top two quintiles and the bottom three quintiles.

Disparities in health outcomes worsened between 1996 and 2001, as a result of more rapid progress among households in the top quintile(s). Among the richest households, the infant mortality rate declined by 13 points and the under-five mortality rate by 17 points; for the poorest quintile the decline was only 8 and 10 points, respectively.

Since mortality rates for the richer households are still high, an overall reduction can be achieved if these rates lowered dramatically while mortality rates for the poor continue to be high. An exclusive focus on the national indicators can be misleading if improving the health outcomes of the poor is an important objective.

Table 4.2 : Basic Health Indicators by poverty level, 1996 and 2001

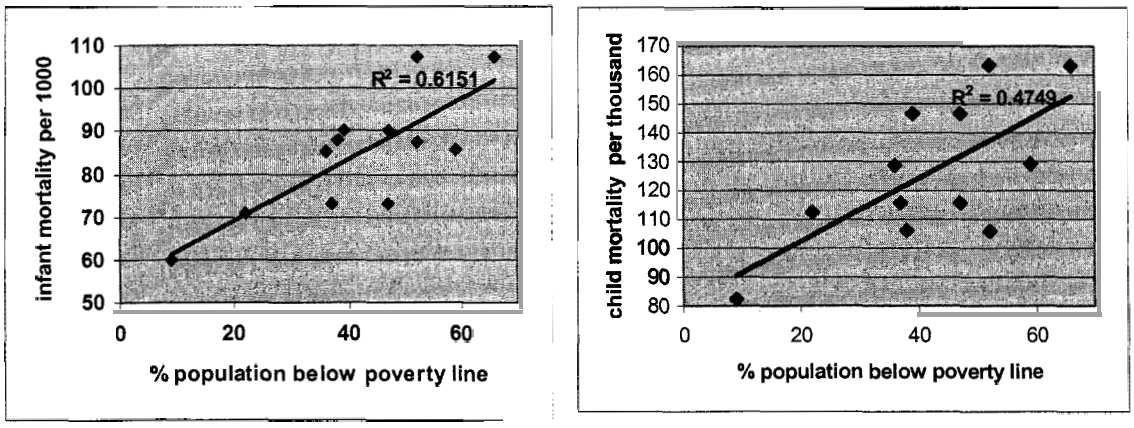
Quintiles	Year	Lowest	Second	Middle	Fourth	Highest	Average
Infant mortality (< 1 year) per 1000 live births	2001	111.5	108.2	106.3	78.1	50.0	94.8
	1996	119.4	111.1	105.8	103.8	63.3	103.5
Under-five mortality rate per 1000 live births	2001	198.2	176.1	181.1	132.2	93.1	162.7
	1996	208.3	201.7	196.7	178.4	110.1	183.9
Births per woman age 15-49	2001	7.2	6.6	6.5	5.0	3.5	5.6
	1996	7.3	6.9	6.8	5.4	3.8	6.0
Moderate and severe underweight[a]	2001	29.0	30.3	22.8	19.7	10.2	22.9
	1996	44.4	35.7	27.0	23.3	18.8	29.2
Moderate and severe stunting[b]	2001	37.4	36.9	30.1	29.0	18.2	30.4
	1996	27.0	30.0	24.2	24.2	16.8	25.0
Prevalence of fever children under 5 last 2 weeks	2001	45.4	43.7	44.3	39.5	29.6	41.2
	1996	55.4	59.0	56.6	51.6	43.5	54.0
Prevalence of diarrhea children under 5 last 2 weeks	2001	15.2	15.3	13.1	12.6	9.7	13.4
	1996	28.4	30.4	25.5	24.8	18.4	26.1

a/ Percent of children under 5 whose weight for age is below –2 standard deviations of the median reference standards for their age.
b/ Percent of children under 5 whose height for age is below –2 standard deviations of the median reference standards for their age.
Source: Gwatkin, *et al.* 2003." Socio-Economic differences to Health, Nutrition and Population," Washington, D.C.: World Bank.

Disparities between rural and urban areas and across *départements* exist but are not as large as the disparities between the poor and rich. The risk for a child to not survive until its fifth birthday is much higher in rural areas (175 per 1,000 versus 134 per 1,000 in urban areas), but the disparity is much less than that for the poorest and richest households. The *département* with the lowest infant mortality rate (60) is Littoral (comprising basically of Cotonou) and the ones with the highest infant mortality rates (107) are Atacora and Donga, which also have the highest poverty levels. Leaving these two extremes aside, the infant mortality rates in the other *departments* vary between 70 and 90. Differences among regions in life expectancy are marginal. In order to achieve greater equity in health outcomes, a greater focus on the poor, rather than on geographic regions will be important.

Differences in infant and child mortality rates across *départements* are strongly correlated with the proportion of poor in the *département.* The higher the poverty ratio, the higher is the mortality rate (chart 4.2). Differences in poverty among the regions can predict 60 percent of the difference in infant mortality and almost 50 percent of the difference in child mortality.[45]

Chart 4.2: Correlation between poverty and infant/child mortality for regions



Source: *Annuaire des statistiques sanitaires Bénin*, 2002 for mortality, and World Bank Poverty Assessment for poverty level.

Five health problems account for about 80 percent of the deaths among children under-five years of age. These are malaria, anemia, diarrhea, acute respiratory infection (ARI) and malnutrition (table 4.3). Malaria directly accounts for the largest proportion (one-third) of all child deaths; in addition, deaths attributed to anemia can also be caused by repeated bouts of malaria. Malaria is clearly the largest killer. It is important to indicate also that the preventive side can and should play a major role in this (ensuring children sleep under impregnated bed nets, draining standing water ponds typically known for hotbeds for malaria mosquitoes). This is a challenge that goes beyond the individual interventions of the Ministry of Health, but instead requires a multi-sectoral approach. The same goes for instance for diarrhea, which is related to the access and use of safe water and to sanitary conditions.

[45] For morbidity, maternal mortality and overall mortality, the correlation is much lower, with respectively 21 percent, 11 percent, and 10 percent.

Table 4.3: Incidence and fatality of health problems with highest impact on children 0 - 5 years

	Number of cases	Incidence per 1,000	Deaths	% of all deaths age 0-5	Fatality rate (per 1,000)[a]
Malaria	356,208	303	853	32	2.39
Anemia[b]	55,853	47.5	463	17	8.29
Diarrhea	72,271	61.5	219	8	3.03
ARI[c]	201,871	172	293	11	0.58
Malnutrition	9,127	8	293	11	32.1

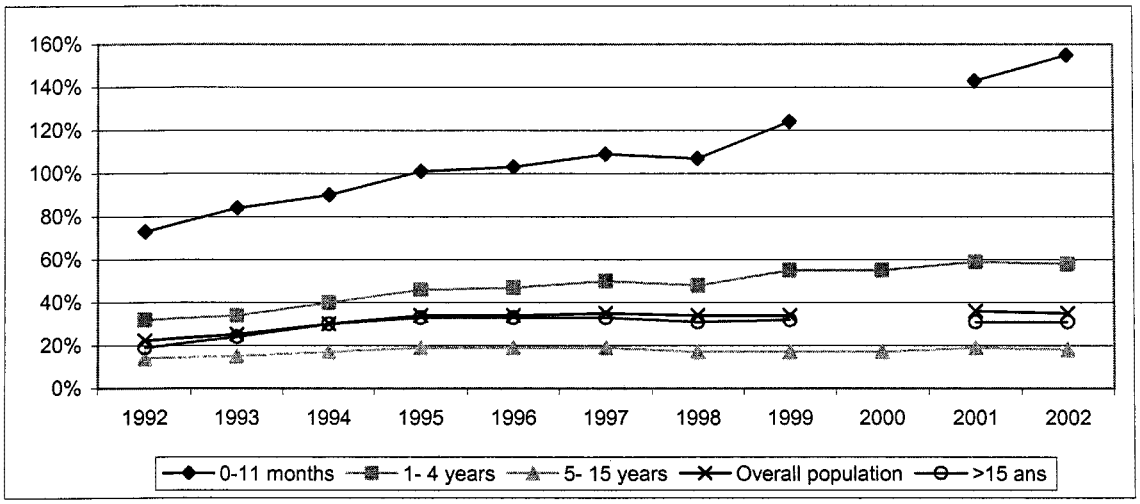
a/ Calculated as the number of deaths divided by the number of cases.
b/ Anemia is a lack of red blood cells. This is a condition typically linked to suffering from malaria, malnutrition and diarrhea. It is estimated that more than half of these deaths are in fact also a result of malaria.
c/ Acute Respiratory Infection.
Source: SNIGS/DPP/MSP, 2002.

The utilization rate of health services increased from 22 percent in 1992 to 34 percent in 1995 and has apparently stagnated thereafter; however, there is a marked increase in utilization rates for infants and young children. [46] Utilization of health services serves as one proxy for monitoring improvements in health outcomes. The overall utilization rate may be understated since only a very small part of private health service providers furnish these data. According to the *Annuaire Statistique* 2001, in certain regions incorporation of the full data from the private sector would perhaps double the overall utilization rate.[47] For infants (0 - 11 months), the tendency has been positive throughout the period (from 73 percent in 1992 to 155 percent in 2002), and the same is true to a lesser extent for young children age 1 - 4 years (from 32 percent in 1992 to 58 percent in 2002). The age group of children 5-15 year olds is lagging far behind, and has barely grown since 1992, reaching on 31 percent in 2002, still well below the overall rate. Chart 4.3 below presents the rate of utilization of health services by different age groups in the population.

[46] Total number of visits per year divided by the corresponding population group.

[47] This is most likely for Littoral (Cotonou) and to a lesser extent for other regions with significant urban areas where a lot of private providers are found.

Chart 4.3: Evolution of health service utilization rates over time[a]

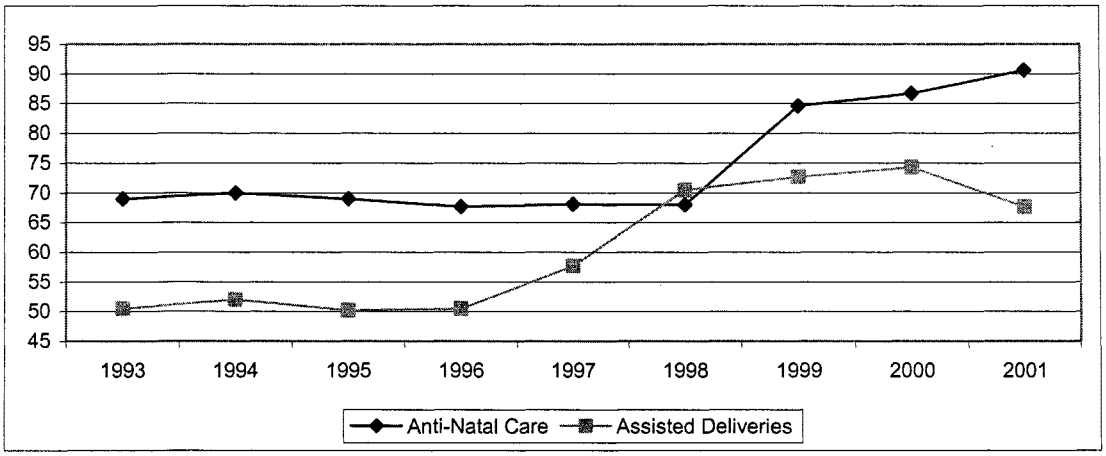


a/ The percentage indicates the number of new consultations per year divided by the population of the corresponding age group. In 2001, for instance, for children age 1-4 the number of visits was 60 percent of the total number of children in this age group.
Source: *Annuaires Statistiques* 1993-2002.

The percentage of deliveries assisted by a skilled birth attendant, which is a means of measuring progress in reducing maternal mortality rates, is now 70. Compared to many other countries in the region, Benin's performance is relatively good.[48] The percentage of assisted deliveries and especially that of antenatal care (ANC) have increased substantially since 1997/98, after a period of stagnation (chart 4.4). However, the level of postnatal care is still relatively low at about 40 percent, despite a gradual positive tendency throughout the nineties. Given the high level of maternal mortality in the post-delivery period, utilization of postnatal services needs to improve.

[48] The percentage of assisted deliveries for other countries in the region was as follows: Burkina Faso 27 percent, Cameroon 56 percent, Ivory Coast 47 percent, Ghana 44 percent, Guinea 35 percent, Mali 24 percent, Niger 16 percent, Nigeria 42 percent, Senegal 51 percent, Togo 51 percent. These data refer to the period 1996-2001.

Chart 4.4: Evolution over time of the percentage of pregnant women having at least one Antinatal Care (ANC) visit, and of deliveries assisted by a health care professional



Source: Gatien Ekanmian 2003. "*Revue des depenses publiques dans le secteur sante,*" .

Considerable gaps exist between rich and poor households in the utilization of even preventive measures such as immunization, ANC and assisted delivery. In 2001, only half of the children from the poorest quintile received the full basic package of vaccinations, while nearly three-quarters of the children from the wealthiest quintile did so (table 4.4). Almost 15 percent of children from the poorest quintile did not receive any of the basic vaccines; the proportion of such children among the two wealthiest quintiles was negligible. There are big differences in the percentage of deliveries assisted by a health care professional, with only half of the poorest women having an assisted delivery versus practically all of the wealthiest women. However, the gap is lower for antenatal care with three-quarters of the poorest women having at least one antenatal care visit compared with almost 100 percent of women of the wealthiest quintile. Regarding the medical treatment of childhood illnesses (fever, ARI and diarrhea), the remarkable feature is the high proportion of wealthier households who also do *not* treat these illnesses. While more of them treat fever and ARI, there is practically no difference between rich and poor households in the treatment of diarrhea, where reportedly three-quarters of the cases are not treated.

However, gaps between rich and poor – especially for preventive measures – declined between 1996 and 2001, as utilization rates among the poor have increased while they were already high among the rich. In the case of antenatal visits and assisted deliveries, almost all women from rich households had access to these even in 1996 (table 4.4). Progress among poor women in assisted deliveries has been slower than for antenatal visits. The situation regarding vaccinations (full basic coverage) is puzzling as the biggest increase in utilization is for the poorest quintile, followed by the fourth quintile, with virtually no improvement for the others. In the case of the medical treatment of diarrhea, there seems to have been a decline in the percentage of cases treated among the richer households, while this percentage has stagnated for all other households.

The widening gap in health indicators between the rich and the poor, despite an apparently narrowing gap in utilization rates of health care services, suggest that improved utilization

alone may not lead to substantial improvements in health outcomes of the poor. This hypothesis needs to be further explored. Apart from greater utilization of health care, improvements in nutrition, sanitation, hygiene and living conditions as well as awareness of health issues (related to, for instance, mother's education) also contribute to improved health outcomes. These factors are strongly correlated with household wealth and may be responsible for improving the health status of richer households, despite a modest increase or stagnation in utilization rates.[49]

Table 4.4: Utilization of health services by wealth quintiles over time

Quintiles	Year	Lowest	Second	Middle	Fourth	Highest	Average
Immunization – full basic coverage[a]	2001	49.2	53.4	57.1	64.9	72.9	59.0
	1996	37.8	53.4	62.7	59.2	73.6	55.6
Immunization – no basic coverage[b]	2001	15.0	11.5	4.7	1.7	2.5	7.3
	1996	27.8	16.9	6.7	6.3	4.3	13.6
At least 1 ANC visit	2001	73.0	82.7	90.1	95.6	99.5	87.4
	1996	59.0	74.1	87.9	93.9	98.6	80.5
Delivery at health facility	2001	55.2	65.6	80.8	90.7	98.2	76.0
	1996	34.1	53.4	66.9	87.4	96.3	63.9
Medical treatment of fever	2001	24.2	29.8	31.4	37.7	43.2	31.8
	1996	9.6	12.0	11.0	11.6	24.7	12.6
Medical treatment of ARI	2001	26.3	33.1	35.5	36.1	49.3	35.1
	1996	23.8	27.3	28.4	31.4	n.a.	31.7
Medical treatment of diarrhea	2001	23.1	21.1	25.8	24.7	23.7	23.5
	1996	24.4	20.3	23.0	23.2	42.0	24.6

n.a. : not available.
a/ Percent of children age 12-23 months who have received BCG, measles, and DPT vaccination.
b/ Percent of children age 12-23 months who have not had any BCG, measles, or DPT vaccination.
Source: Gwatkin, *et al.* 2003. Socio-Economic Differences in Health, Nutrition and Population, Volume 1" Washington D.C.: World Bank. Based on analysis of DHS 1996 and 2001.

Across *départements*, there are substantial differences in the use of antenatal care services and in the percentage of deliveries at a health care facility, but less so in immunization coverage and general utilization indicators. Three regions – Atlantique-Littoral, Ouémé-Plateaux and Zou-Collines – have a high level of utilization of antenatal services and assisted deliveries (table 4.5). For other utilization indicators, such as utilization rates by different age groups, the differences are not large, except for the relatively high rates in Littoral (not shown in table).

[49] There are also differences in health care utilization rates by ethnic groups. The World Bank Poverty Assessment notes that women of Yoa Lokpa and Otamari ethnicity are 30 percent less likely to use pre-natal services that women of other ethnicities.

Table 4.5: Utilization of health services by region

	Atacora-Donga	Atlantique-Litoral	Borgou-Alibori	Mono-Couffo	Ouémé - Plateaux	Zou-Collines
Immunization – full basic coverage	54.2	57.7	48.2	53.4	67.7	68.4
At least 1 ANC visit	72.8	97.9	75.3	84.8	96.8	92.2
Delivery at health care facility	55.2	93.1	56	59.5	93.1	87.7

Source: World Bank calculations, based upon DHS 2001.

Structure and financing of the health care system

The public health system in Benin is financed by domestic tax revenues, donor funds and user charges; the relative importance of each of these sources varies for different levels of the health services and for different components of expenditures. These varying methods of financing have an effect on administration and public expenditure management in the health sector. Tax revenues pay for direct personnel costs, some non-personnel recurrent expenditures and, to a lesser extent, capital expenditure and public health programs. Donors have contributed mainly to investments and to non-personnel costs of public health programs, and non-personnel recurrent expenditures at the service delivery point are financed by cost recovery. Although most user charges are financed by households, the government also contributes to their financing for its own permanent employees, for whom it pays 80 percent of the cost of medical services. An understanding of the structure of health services and their administration is required in order to comprehend financial flows through the system.

The public health system in Benin has a pyramid structure, divided into three levels administratively and in the provision of health services. These are, the central or national level, the intermediate or departmental level, and the peripheral level. Table 4.6 provides an overview of the administrative and medical institutions active at the different levels.

The health services consist of the National University Hospital (*Centre National Hospitalier et Universitaire* – CNHU-Cotonou) at the top of the pyramid and five second level referral hospitals (*Centre Hospital Départementale*) one for each of the *département*, excluding Atlantique-Littorale. At the peripheral level, the pyramid is subdivided into 34 health zones (*Zone Sanitaire*), the most decentralized operational entities of the health system. Each zone comprises a certain number of public facilities of first contact (starting from the village level to the communal level) and private medical facilities, supported by a zonal hospital of first reference (which may be public or private non-profit). This zonal hospital (*hopital de zone* – HZ) serves a population of 100,000 to 200,000 people. The referral hospital in each zone plans, supervises, trains and provides supplies to health facilities within the zone.

Private health care exists at all levels of the health pyramid and is widespread in primary health care, particularly in providing ambulatory services. The majority of such provides are individual practitioners; at higher levels, there are NGOs as well as 'associative' structures, consisting of more than 100 NGOs, active typically in the health, hygiene, nutrition and other areas.

There are also a large number of traditional healers, especially in rural areas, who subscribe to other therapeutic systems. In fact, many studies indicate that they are a major source of accessible care to the rural population. In Benin, practitioners of these therapeutic systems have not received formal training, but some collaboration has begun in the programs against malaria and HIV/AIDS as well as the expanded program of immunizations.

The referral system is intended to enable people to have easy and affordable access to health care and to contain costs, but as it is not followed in many cases, both the public and private costs of treatment can be higher than intended. The official referral route is from the lowest level health care facilities to the national hospital, but cross-referrals between the public and private sectors are possible at different levels. For instance, it is possible to be referred to a public zonal hospital by a private medical office. In many cases, the official route of the referral system is not followed. According to informal estimates, up to 50 percent of patients go directly to a level beyond the lowest one, with 25 percent going directly to a zonal hospital, 15 percent directly to the second referral hospital, and about 10 percent directly to the highest level, the national hospital. There are also referrals to levels beyond the immediate higher level (see Annex 4.1- Flow of patients through the health system). This means that more costly public services at the higher level are used more than required due to the ineffective functioning of the lower levels of the referral system; private costs may also be higher due to higher transportation and boarding costs.

The organization of health administration is similarly structured at three levels. At the central level, the Ministry of Health has the responsibility for implementing the health policy laid down by the government. Accordingly, it initiates health programs, prepares the budget and coordinates and controls the execution of the health projects and programs. At the intermediate level, there are currently six Regional Public Health Administrations (*Direction Départementale de la Santé Publique* - DDSP); one per '*département*' according to the old administrative division.[50] These are in charge of the execution of the health policy, the planning and coordination of all the activities of the health services in the region, and of ensuring the epidemiologic surveillance in the region.

At the peripheral level, administration of health services is shared with the community, although the performance of this mechanism of co-management varies greatly. In principle, for health centers at the commune and sub-commune level, community participation is institutionalized through the COGEC, which consists of elected representatives of the commune. At the zonal level, there exists the *Comité de Gestion Sous-Prefectoral* (Sub-Prefecture Management Committee, hereafter cited as COGES) which consists of a group of representatives from each COGEC in the sub-prefecture. The COGES for each zone approves the budgets for all the centers in its jurisdiction together with the lead doctor and his team at the zonal hospital. At the health center level, each COGEC is expected to participate with the staff of the center to prepare budget estimates that are to be reviewed and approved by the COGES. The committees are expected to monitor the use of all

[50] Since there are now 12 administrative regions, each of these is now in charge of two administrative regions.

funds, including the funds from the ministry (for non-personnel recurrent expenditures) as well as the funds from cost-recovery.

Essential drugs to the public health system are provided by the *Centrale d'Achat des Médicaments Essentiels* (CAME). Generic drugs are imported and sold to individual public health facilities at a relatively low cost. The health zones aggregate the demands of the peripheral centers and purchase directly from the CAME. The private sector is not directly supplied through the CAME. The CAME is a privately managed organization under the MSP, which is considered well-managed and partly financed by donors. In 2001, its purchases of medicines exceeded CFAF 2.6 billion and its sales CFAF 3.5 billion.

The flow of resources through the public health system is complex. Within recurrent expenditures, all personnel (permanent staff) expenditures of the hospitals and lower level centers are managed by the MSP, while expenditures of contractual staff are managed by the Ministry of Finance. Non-personnel expenditures of the National University Hospital (CNHU) are met through a transfer from the MSP budget; a breakdown of this transfer is not readily available and hence is not transparent. There are also transfers to private hospitals which act as referral centers. Public health facilities below the national level hospital receive grants for some non-recurrent expenditures (*crédits délégués*). However, the *crédits délégués* which are destined for the zonal hospital and below, and which in theory form part of the budgets of the COGES and COGEC, are managed by the health administration of the region (DDSP). Since 2001, transfers under the HIPC debt relief have also been channeled to the COGECs directly from the MSP and form part of their budgets. In addition, the COGECs receive assistance from the MSP to purchase free drugs for the poor. Proceeds from cost-recovery charges are maintained at each facility (from the national hospital right down to the lowest level village facility), which uses them to finance drug purchases from the CAME, consumables and minor equipment. Capital expenditures are managed by the MSP; equipment for each of these facilities is centrally procured and sent to the committees. The MSP or donors also supply materials and equipment for specific health programs to individual centers.

Table 4.6: National System of Health in Benin, 2001

Level	Administrative entities	Service Providers		Health Services provided
		Public	Private	
Central or National level	Ministry of Public Health (MSP)	- National and academic hospital center (*Centre National Hospitalier et Universitaire* - CNHU) - National center for Pneumo-Phtisiology - National psychiatric center		Medicine, Pediatrics, Surgery, Gyneco-Obstetrics, Radiology, Laboratory, ORL Ophthalmology, Other Specialties
Intermediary (department) level	*Regional* Public Health Administration (DDSP)	Departmental hospital center (*Centre Hospitalier Départemental* - CHD)	Specialized private clinics[a]	Same as national level excepting some specialities
Peripheral: Upper level – Health Zone	Sub-prefecture health committee at the commune (sub-prefecture level; COGES/COGEC at the health center level	- Zone Hospital (HZ) number: 13 are fully functional against a total of 34 - Communal Health Facility (*Centre de Santé de Commune* - CSC[b]); number: 81 - Health Center of the sub commune/arrondissement (*Centre de Santé d'Arrondissement* - CSA[c]); number: 578	Non-profit private hospitals (AMCES) - For profit private clinics[a] - Private medical offices	Medicine, emergency surgery, Gyneco-obstetrics, Radiology, Laboratory, Pharmacy, Dispensary, Maternity Fewer than 100 beds 4-bed dispensary; 12-bed maternity unit. Typically staffed by nurse, midwife and nurses' aide
Peripheral: Lower level - village		Village health units (*Unité Villageoise de Santé* - UVS);	- Private doctors, nurses, and midwives, laboratory services[a]	Childbirth assistance, pharmaceutical depot. Staffed by birth attendant and first aid health worker

a/ Except for the non-profit private hospitals, the private health care sector is largely focused on a few urban areas (mainly Cotonou and Porto-Novo).
b/ Previously these were called *Centre de santé de sous-préfecture* (CSSP) or *Centre de Santé de la Circonscription Urbaine* (CSCU).
c/ Previously called *Complexe Communal de Santé* (CCS).
Source: DPP/SSDRO/SNIGS.

Public expenditure on health

Aggregate Expenditures

Between 1997 and 2001, public health expenditure more than doubled in nominal terms, although there has been a decline in 2002 and 2003.[51] The annual average real growth was 15 percent between 1997 and 2002 (table 4.7). Sectoral expenditure as a share of total government expenditure rose from 7.6 percent in 1997 to 11.5 percent in 2000, falling back to 9.2 percent in 2002 and 7.6 percent in 2003. As a share of GDP, public expenditures rose from 1.2 percent in 1997 to 2 percent in 2001 before declining to 1.7 percent in 2002. According to WHO's estimates, government expenditures on health represented under half of total health spending in 2001, although the share has risen since 1997. Total health spending represented about 4.4 percent of GDP.

Table 4.7: Evolution of health expenditure over time

	1997	1998	1999	2000	2001	2002	2003
Public Expenditures (Executed Budget)							
Total health expenditure (nominal, million CFAF)	15,395	19,326	25,673	28,829	35,200	31,112	25,864
Recurrent	67%	65%	52%	49%	52%	62%	65%
Personnel	24%	26%	20%	22%	18%	18%	20%
Non-Personnel	43%	39%	32%	27%	34%	44%	45%
Capital (PIP)	33%	35%	48%	51%	48%	38%	35%
Domestic	4%	6%	8%	7%	18%	22%	27%
Foreign	29%	28%	40%	44%	30%	16%	7%
Total health expenditure (real terms, 1997 CFAF)	15,395	18,477	24,079	26,193	31,007	26,765	
Real annual growth		20%	30%	9%	18%	-14%	
Health as % tot government exp	7.6%	9.9%	11.5%	11.4%	10.4%	9.2%	7.6%
Public health exp. as % GDP	1.2%	1.4%	1.7%	1.8%	2.0%	1.7%	1.3%
Memo items							
Public expenditure as % of total expenditure on health	34%	37%	39%	43%	47%		
Total expenditure on health as % of GDP	3.7%	3.8%	3.9%	4.2%	4.4%		

Sources: (a) Public expenditure data from *Direction Générale du Budget*; (b) memo items from WHO 2003. World Health Report 2003, Geneva: World Health Organization, Annex Table 5. 3; population, GDP deflator, and exchange rate from WB SIMA database.

The health sector has been highly dependent on foreign financing, especially for PIP expenditures, but this trend has reversed since 2001. Until 2000, the share of foreign funds in capital expenditures was close to 90 percent; from 2002 onwards, domestic financing has exceeded foreign expenditures. In 1998 and 1999, PIP spending increase was driven by an increase in foreign expenditure; but this fell back to about 1997 levels in 2002 and 2003. This has been only partially offset by an increase in domestic PIP spending since 2001. The drastic reduction in 2002 in foreign PIP spending is the combined result of a much lower execution rate (61 percent) than was the case in the years just prior to 2002 when the execution rate was very high (close to 90 percent), and of the fact that the budgeted amount in 2002 was one-third lower than that in 2001.

[51] Data for 2003 must be treated as provisional and may not be complete.

Recurrent spending accounts for the largest share of public expenditure, although it reduced from two-thirds of the total in 1997 to only slightly more than half in 1999-2001, after which it increased again substantially. Personnel expenditures have represented between one-quarter and one-fifth of total spending. In nominal terms, the level of personnel expenditures increased substantially in 1998 and has fluctuated thereafter, but in 2002 it was only somewhat higher than the level attained in 1998. By contrast, non-personnel recurrent expenditures have more than doubled in absolute terms.

Expenditure per person

Total public expenditure per capita has grown at over 10 percent per year since 1997 and now stands at just under US$7 per year. Per person spending peaked in 2001 with an 80 percent increase in real terms compared to 1997. In dollar terms, health expenditure per person increased from US$4.6 to US$6.8 (with a peak of US$7.5 in 2001). Public recurrent expenditure per capita was just over US$4 in 2002.

Benin's expenditure on health was significantly lower in relation to other sub-Saharan African countries and especially countries in the region. The "health effort" of the country, as measured by the ratio of total health expenditure to GDP, was significantly lower for Benin when compared to other sub-Saharan African and other low-income countries in the period 1997-2000 (table 4.8). However, the public expenditure "effort" in Benin was at about the median level for the countries in the region. Hence, it is the relatively lower private "effort" that results in the comparatively lower health expenditure to GDP ratio. As noted in table 4.7, Benin's spending levels have increased in recent years (comparative data are not available for other countries).

Table 4.8: Comparison of health expenditure indicators for Benin against other countries in the region

	Health expenditure			Total health exp. per capita 1997-2000[b] (US$)	Public health exp. per capita 1997-2000[b] (US$)
	Public + private as % of GDP[a] 1997-2000[b]	Public exp. as % of GDP 1997-2000[b]	Private as share of total 1997-2000[b]		
SSA	6.0	2.5	58	29	12
Low-income	4.3	1.2	73	21	6
Benin[c]	3.2	1.6	50	11	6
Burkina Faso	4.2	3.0	29	8	6
Cameroon	4.3	1.1	75	24	6
Ivory Coast	2.7	1.0	63	16	6
Ghana	4.2	2.2	46	11	6
Guinea	3.4	1.9	43	13	7
Mali	4.9	2.2	54	10	5
Mauritania	4.3	3.4	21	14	11
Niger	3.9	1.8	55	5	2
Nigeria	2.2	0.5	79	8	2
Senegal	4.6	2.6	43	22	13
Togo	2.8	1.5	46	8	4

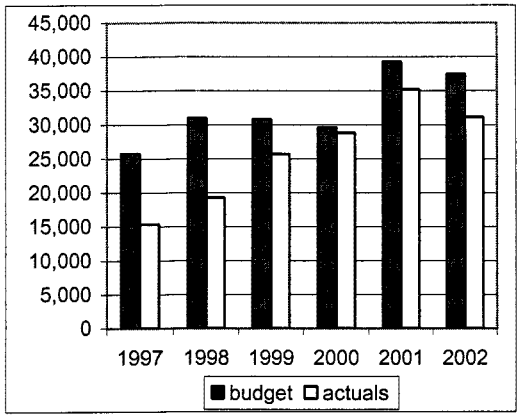
a/ This represents total health expenditure; i.e., public expenditure and an estimation of private expenditure.
b/ Data are from only the most recent year available, falling in the indicated time frame.
c/ Data for Benin are not comparable to those shown in table 4.7 because of different sources.
Source: World Bank 2003. World Development Indicators, 2003, Washington D.C.: World Bank.

Budget execution rate

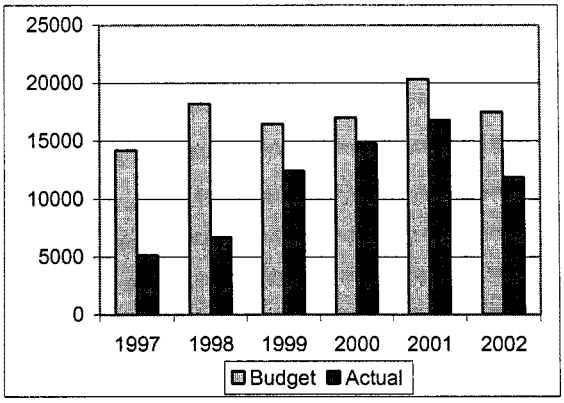
A significant improvement in the budget execution rate occurred between 1997 and 2002. In 1997 and 1998 only 60 percent of the budget was executed, compared to 90 percent in 2000 and 2001 and 83 percent in 2002 (chart 4.5). Improvement in the execution rate of the PIP expenditures has been the main determining factor, which in turn has been related to better budget forecasts. The execution rate of the recurrent budget was almost always above 90 percent. The execution rate of the investment budget, on the other hand, was merely 35 percent in 1997 and 1998; this has risen to 75 percent or more in the next three years. In 2002, there was a sharp decline in the execution rate of PIP spending despite the fact that the budget for PIP in 2002 was actually lower than in 2001. As noted earlier, PIP expenditures in 2002 were mainly domestically financed and this reduction in the execution rate occurred due to cutbacks in spending imposed to maintain fiscal balance.

Chart 4.5: Budgeted and executed expenditure in the health sector

Recurrent + investment (PIP) spending



Investment (PIP) spending



Source: *Direction Générale du Budget.*

Analysis of recurrent expenditures

A detailed analysis of recurrent expenditures is possible only for the last three years and is complicated by the fact that total expenditure as recorded by the DGB is not the same as that captured by the SIGFIP. The share of "unallocated" recurrent expenditures (actual) has declined from 20 percent in 2001 to 12 percent in 2002; in 2003, expenditures in the SIGFIP actually exceeded those presented by the DGB, highlighting the problems in obtaining accurate data (table 4.9). Further, only part of the recurrent expenditures can be allocated to different levels of the health pyramid since there are many 'special budget lines' which are either spent directly by the MSP or are transferred to the peripheral centers.

The share of expenditures directly attributable to the *"directions départementales"* varied between 39 and 53 percent, while the 'special budget lines', comprising special MSP programs and transfers to COGECs, have absorbed a rising share of total recurrent spending (40 percent in 2003).[52] The share of recurrent spending on the central level varied between 16 and 25 percent (table 4.9 and chart 4.6). These fluctuations in the central versus *départemental* shares are not easily explained (excluding the 'special budget lines' and the 'unallocated' amount, the center: *département* proportion has varied from 46:54 to 26:74). In absolute terms, while central level personnel expenditure reduced somewhat from CFAF 1 billion to CFAF 900 million from 2001 to 2003, regional level personnel expenditure increased from CFAF 2.7 billion in 2001 to CFAF 4.3 billion in 2002, before declining slightly to CFAF 4.1 billion in 2003. Both central and regional level non-personnel expenditure decreased between 2001 and 2002, but by 2003 they had both increased by about CFAF 500 million from their 2001 level. The central level non-personnel expenditure includes the transfer to the CNHU, utilities and special studies (for instance, for fixing health tariffs) and strengthening community participation;[53] the latter

[52] The 'special budget lines' are *"appui au secteur santé"*, *"assistance sanitaire"*, *"dépenses communes"*, *"subventions aux actions"*, *"transfert* COGEC/COGES". In 2001 there was nothing registered yet for *"transfert* COGEC/COGES", although expenditures may have been incurred for this.

[53] These are grouped under the budget head of *"autres prestations de services"*.

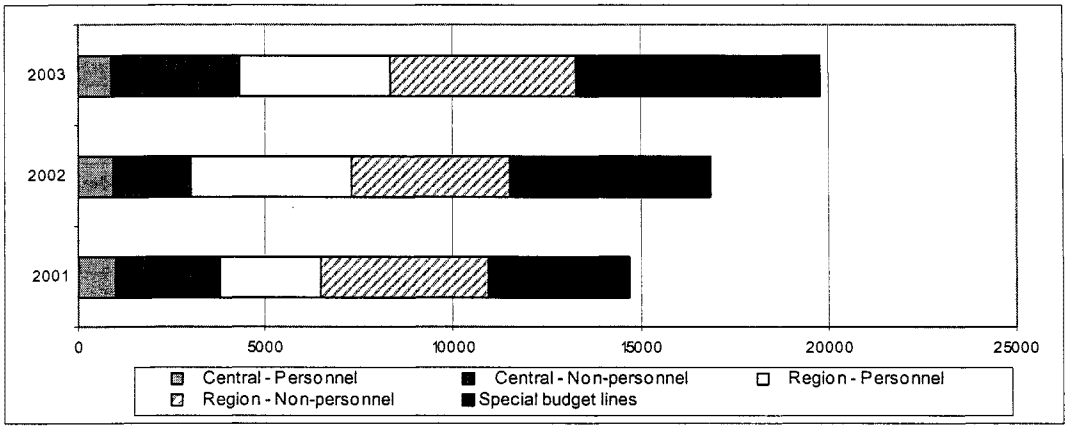
absorbed nearly 1 percent of total recurrent expenditure in 2002. The non-personnel expenditures of the *départements* include expenditures for the regional administrative offices, consumables for the lower level health facilities which are procured regionally, as well as expenditures for maintenance of peripheral health centers. In 2002, maintenance absorbed almost 9 percent of total recurrent expenditure; the selection of which health center receives funds for maintenance is done at the MSP level.

Table 4.9: Composition of recurrent expenditures

	2001		2002		2003	
	Budget	Actual	Budget	Actual	budget	Actual
Central Level	21%	21%	15%	16%	19%	25%
Personnel	5%	5%	3%	5%	4%	5%
Non-personnel	17%	15%	13%	11%	15%	20%
Départements	41%	39%	38%	44%	39%	53%
Personnel	18%	15%	17%	22%	17%	24%
Non-personnel	23%	24%	21%	22%	22%	29%
Special budget lines	27%	20%	28%	28%	34%	39%
Unallocated	10%	20%	19%	12%	9%	-18%
Total	100%	100%	100%	100%	100%	100%

Note: In 2001 personnel expenditure within the *départemenets* was not directly available and therefore was imputed by taking the difference between the total personnel spending from the document '*Budget Programme* 2004-2006' and the personnel spending at the central level. For 2002 and 2003 the actual expenditure is taken from *engagement* instead of from *mandats ordonnance + orders paiement*. - The line 'unallocated' stands for the difference between the recurrent expenditure as recorded by *Direction General du Budget* and the recurrent expenditure as recorded in the SIGFIP data.
Source: *Etat d'exécution des dépenses par ministère & nature économique*, 2001-2003.

Chart 4.6: Composition of recurrent expenditures in million CFAF, 2001-2003



Note: The total here excludes here the 'unallocated'.
Source: *Etat d'exécution des dépenses par ministère & nature économique* from 2001-2003.

The existing budget presentation does not show very clearly the total budgetary expenditure on personnel in the public health system. In 2002, as shown in table 4.9, direct personnel expenditure (both Central and *département* levels) accounted for just 27 percent of total recurrent expenditures, including the unallocated amounts. However, some personnel expenditures are not included in this, such as the salaries of staff hired directly by the CNHU which are paid out of the total transfer to the CNHU. In 2002, the total transfer to CNHU amounted to 3 percent of recurrent spending. Further, there are contractual staff whose emoluments appear in the budget of the Ministry of Finance, although much less significant than in the education sector. Finally, many lower level staff have been locally hired by the peripheral health centers using the "*transferts* COGEC". The share of personnel expenditures had declined substantially from 70 percent in the early nineties to about 40 percent in 1999-2000.[54] Although table 4.9 seems to show a further decline, it is not clear whether the share of personnel expenditures has really declined after taking into account all the other personnel-related expenditures listed above.

The largest increase in recurrent spending has been in the special programs and transfers for which the absolute amount rose from CFAF 3.7 billion to CFAF 6.5 billion between 2001 and 2003. This consists of a variety of discretionary expenditures, some of which are under the control of the Ministry of Finance, and some of which are difficult to justify on grounds of health policy. The transfers to the COGECs/COGES represented 8.6 percent of total recurrent expenditure in 2002, leading to a very considerable enhancement of the budgets of community organizations (table 4.10).[55] Nearly all of this was spent on lower level para-medical staff; only about five percent was used for administrative staff. The *subventions aux actions*, representing 8.1 percent of recurrent expenditures in 2002, are used for purchases of medical-technical equipment for the newly built or rehabilitated *formations sanitaires*. Sometimes, it is also used to equip zonal hospitals or departmental hospitals with specific technical equipment. The decision about allocation of funds depends on the needs stated by the regions and checked against data collected by the central level during supervision missions. The decisions are made at the central level by the *Direction des Infrastructures, des Equipements, et de la Maintenance*. It is not clear why this is included in the recurrent budget and the allocations are not very transparent.

***Appui au secteur santé* is a provision for unanticipated natural calamities that may pose specific health risks (such as floods), or for outbreak of epidemics and accounted for almost 7 percent of recurrent spending in 2002.** Although formally within the MSP budget, its execution is controlled by the *Direction de l'éxecution du budget* at the Ministry of Finance. In 2002, out of a total of CFAF 1.2 billion for this program, CFAF 941 million were spent on additional vaccination purchases (outside the expanded program for immunization), CFAF 225 million for four ambulances, CFAF 100 million for special allowances for personnel to carry out the vaccinations, trips, etc. These details are not available in the statement on executed budget produced by the SIGFIP.

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[54] Data for 1990s are from the report submitted to the European Union.

[55] In 2003 (not 2002) the following amounts in CFAF were allocated to the different regions (staff paid shown in brackets) 393 million Atacora (staff 541), 256 million Atlantique (staff 366), 415 million Borgou (staff 537), 343 million Mono (staff 467), 407 million Ouémé (staff 547), 372 million Zou (staff 504).

Table 4.10: Expenditure under special programs and transfers, 2002

	Amount (in CFAF)	As a proportion of total recurrent expenditure
Transfers COGEC	1,550,000,000	8.6%
Subventions aux actions (contribution to public institutions)	1,465,746,008	8.1%
Assistance to the health sector (*Appui au secteur santé*)	1,225,446,336	6.8%
Sanitary assistance (*Assistance sanitaire*)	866,296,468	4.8%
Common Expenses (*Dépenses communes*)	120,674,437	0.7%
Socio-Administrative equipment (*Equipement socio-administratif*) (BESA)	134,264,708	0.7%
Total	5,362,427,957	29.7%

Source: SIGFIP, *Etat d'exécution des dépenses par ministère & nature économique*, 2002.

***'Assistance sanitaire'* is formally a budget line to assist poor people, but covers a variety of expenditures which are only marginally linked to the poverty reduction objective; in 2002, it represented nearly 5 percent of recurrent expenditures.** It covers three areas: (i) *purchase of medicine, to be provided free at hospitals or health centers to people who cannot afford medicines*. This is an additional transfer to the COGEC, with the local committee deciding who has access to the free medicines. The requests are put in by the regional administration for all their health centers; the decision is taken by the MSP and allocations are made directly to the health centers; (ii) *evacuation abroad for treatment that is not locally available*;[56] and (iii) *assistance to patients requiring very expensive haemodialysis treatment at CNHU*. For 2002, the spending on the three items comprising this budget line was as follows: (i) 655 million; (ii) 84 million; and (iii) 127 million, respectively. In 2003, it was: (i) 461 million; (ii) 212 million; (iii) 285 million, respectively – in other words, over half of this budget line was used for non-poverty related activities. It is clear that a substantial part of the *assistance sanitaire* is used for activities that are not related to improving health outcomes of the population generally and there is considerable arbitrariness in its use. Furthermore, it is generally accepted that the transfer under item (i) to the COGECs is not used for the poor, and they merely improve the overall budget availability at the peripheral health centers.

Although it is not possible to derive the distribution of total public spending by administrative region, the distribution of funds allocated to each *direction départementale* is unbalanced (table 4.11). Total recurrent expenditures cannot be broken down by region because the distribution of the expenditures on the special programs is not available. Per capita recurrent expenditure (excluding these budget lines) varies by 30 percent across the regions (Borgou-Alibori - lowest, 19 percent below national average - and Atlantique-Littoral - highest, 12 percent above national average). The differences are even larger for per capita personnel expenditure, with Mono-Couffo at the lowest level, 21 percent below national average, and Atlantique-Littoral at the highest, with 22 percent above the

[56] In principle, all Beninese are eligible for this and the decision is made by the *Direction de Protection Social* which establishes the degree of indigence by the doctor treating the patient, and by the *Conseil de Sante* of the *Direction de Protection Sanitaire*. Obviously, there is considerable discretion in using this amount.

national average.[57] There has not been much change since 1999 in per person spending by region.[58]

Table 4.11: Recurrent public spending by region as a share of total, and per person , 2002

	Percentage of recurrent spending to region[a]	Population	Recurrent spending per person	Personnel spending per person
Atacora-Donga	15%	899,479	1,371	670
Atlantique-Littoral	24%	1,466,783	1,401	748
Borgou-Alibori	15%	1,245,264	1,016	525
Mono-Couffo	12%	884,623	1,140	486
Ouémé-Plateaux	18%	1,137,888	1,363	597
Zou-Collines	16%	1,135,877	1,211	598
Benin		6,769,914	1,254	612

a/ These percentages are based upon the total recurrent spending that was clearly allocated to the regions in 2002 according to the *etat d'exécution*, and which amounted to CFAF 8,487 million in 2002.
Source: *Etat d'execution des depenses par ministere & nature economique*; and for population, the 2002 population census.

The distribution of public personnel spending across regions does not counteract the imbalances in the availability of health personnel in the private sector and there are large differences in the availability of total health personnel across regions (table 4.12). Over four-fifths of doctors in the private sector are located in Atlantique-Littoral, but so are one-third of doctors in the public sector.[59] The distribution of other personnel is also imbalanced but not to the same extent. As a result, while overall health personnel availability has improved over time and is better than WHO's norms (a doctor for every 10,000 people, and a nurse and a midwife for 5,000 people), the availability across regions varies dramatically. In five regions, there is one doctor for 20,000 people or more and in Donga there is one doctor for more than 50,000 people, while in Littoral there is one doctor for 1,300 people. The doctor-population ratio is clearly much worse in the poorer regions, in both public and private sectors.

[57] The region Atlantique-Littoral also includes Cotonou; therefore some of the central level expenditure also benefits this region, especially the CNHU subvention for instance. Thus, public expenditure per person for the region in this case would still be higher.

[58] See EU report.

[59] It is not clear whether the doctors in the private sector work are exclusively there or are those who also work in the public sector. Since it is illegal for the latter to do so, there may not be double-counting.

Table 4.12 : Distribution of health personnel at the end of 2001

	Number of doctors		Population / Doctors	Number of nurses		Population / nurses	Number of midwives		Women of childbearing age/ midwives
	Public	Private		Public	Private		Public	Private	
Couffo	7	7	37,790	78	25	5,136	17	1	7,037
Borgou	19	21	16,340	178	124	2,164	45	9	2,601
Plateau	10	10	19,795	71	24	7,759	26	11	2,562
Atlantique	18	79	7,022	91	178	2,532	78	92	927
Littoral	124	390	1,297	399	252	1,024	191	161	541
Alibori	14	1	32,777	118	21	3,537	16	5	5136
Donga	5	1	54,322	54	4	5,619	9	0	8,034
Hollines	13	8	21,005	107	63	2,595	28	11	2,649
Atacora	14	2	31,066	111	4	4,322	18	2	5,561
Ouémé	77	32	6,762	249	87	2,194	105	39	1,244
Mono	25	2	11,711	120	13	2,377	38	3	1,740
Zou	21	23	14,050	137	62	3,106	45	27	2,049
Benin	**347**	**576**	**6,883**	**1713**	**857**	**2472**	**616**	**361**	**1,539**

Source: *Annuaire Statistiques Sanitaires* 2001.

Amelioration in the maldistribution of human resources will require a change in the incentive framework if the poorer regions are to be adequately served. Not surprisingly, the availability of midwives and doctors in a region is strongly correlated with infant mortality and less, but still significantly, correlated with child mortality. Though this does not prove causation, it is difficult to envisage a substantial improvement in health outcomes in the poor regions without increased availability of personnel. Monetary incentives will require offering competitive wages and benefit packages, especially to those who move to backward regions. However, non-monetary incentives can also be considered (including opportunities for promotion, professional development, further training) in order to improve motivation.

Distribution of non-personnel public expenditures in health zones

Although the *credits délégués'* for each of the regions are intended to finance consumables of different health centers, from the *Centre Hospitalier Départemental* (CHD) down to the level of the CSC (*Centre de Santé de Commune*), a very small share actually reaches the peripheral health centers. The absolute amount of these *credits délégués* has increased substantially in recent years. The allocation is made by the MSP to individual centers and to the regional administration per semester according to the following categories: gas and consumables, office supplies, maintenance, and petrol and lubricant.[60] The funds go from the MSP to the *directions départementales* who authorize release to the center. Detailed data from 2002 have been analyzed for Atlantique-Littoral and Atacora-Donga; table 4.13 provides data for the former. In Atlantique-Littoral, the highest level health centers are allocated 27 percent of the total *credits délégués*; all the peripheral level health centers

[60] The latter under the form of petrol tickets from SONACOP.

(including the zonal hospital) together are allocated only 11 percent.[61] The zonal hospital received only 1 percent of the total. In Atacora-Donga, the highest level health center (CHD Atacora) was allocated 14 percent while all the peripheral level health centers (including the zonal hospitals) were allocated 35 percent of the total credit.

Almost 57 percent of the credit in Atlantique-Littoral and 38 percent in Atacora-Donga remained unallocated to any particular health facility and was used by the regional administration for 'drugs procurement' and 'rehabilitation work/infrastructure construction'. In absolute terms, these represented CFAF 66 million and CFAF 472 million, respectively, in the former and CFAF 49 million and CFAF 186 million, in the latter. Clearly, in both regions, a substantial portion of the "*credit délégués*" is in fact foreseen for investment type spending. Moreover, the significant amounts allocated for purchase of drugs at the regional level constitute a second source for medicines ostensibly targeted at the health centers in need, in addition to the central allocations made under the budget line of *assistance sanitaire* discussed earlier.

Table 4.13: Distribution of '*credits délégués*' by destination and category of expenditure, Atlantique/Littoral, 2002

Atlantique-Littoral	*achat de gaz et de consommables medicaux*	*alimentation des malades*	Drugs procurement	*frais bureau et de fonctionnement*	*frais carburants et lubrifiants*	*travaux d'entretien et de maintenance*	Rehabilitation work/ Infrastructure construction	*autres services*	*depenses diverses de fonctionnement*	**Total**
DDSP Atlantique	0%	0%	0%	23%	11%	25%	0%	21%	100%	**5%**
Hospital Quidah	11%	27%	0%	12%	8%	26%	0%	10%	0%	**8%**
Centers : psychiatric	9%	40%	0%	14%	9%	8%	0%	10%	0%	**9%**
Maternity Lagune	37%	30%	0%	15%	4%	6%	0%	17%	0%	**10%**
HZ Quidah	5%	3%	0%	1%	2%	1%	0%	3%	0%	**1%**
CSCU/CSSP	12%	0%	0%	15%	21%	11%	0%	39%	0%	**4%**
CSS/Dispensary	26%	0%	0%	20%	45%	24%	0%	0%	0%	**6%**
Unallocated	0%	0%	100%	0%	0%	0%	100%	0%	0%	**57%**
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	**100%**

Source: MSP, *Fiches de delégation de credits – gestion* 2002.

[61] The higher level centers are Ouidah Hospital, Psychiatric centers, and Maternity Lagune; the peripheral centers are the HZ Ouidah, the CSC and CSA.

The fact that most of the *credits délégués'* do not reach the peripheral health centers is confirmed by a recent tracking study.[62] Financial statements of the CSCs and CSAs (*Centre de Santé d'Arrondissement*) in Borgou-Alibori and in Zou-Collines were analyzed and the *credits délégués* allotted and actually received were compared. There are large variations between centers in how much is received and whether funds are sent directly to the center or materials are procured at the regional headquarters. In Zou-Collines, only 12 percent of the allocated credits reached the lowest level health centers (CSAs) and 39 percent reached the next higher level (CSCs). The impact of this shortfall on the finances of the center is large. If all the allocated credits had reached the health centers, this would have constituted 25 percent of the recurrent expenditure paid for by the community in the case of CSAs and 14 percent in the case of CSCs. The *crédits délegués* that actually arrived constituted only 3 percent of the recurrent expenditure paid for by the community in the case of CSAs and 5 percent in the case of CSCs. Among the reasons for the shortfall were that allocated credits arrived for only one of the two semesters and none of the amounts for gas and consumables reached the health centers (all went to the hospitals). In Borgou-Alibori, 32 percent of the allocated credits reached the CSAs, and 40 percent reached the CSCs. In this region, the DDSP decided what to buy with the allocated credits and also procured the items. However, the price paid was at least double the market price, and for some medical supplies even up to five times higher. Often, items procured were also not the ones that were considered priority needs by the health centers. Clearly, there is no justification for regional procurement on the grounds of economies of scale for these items; on the contrary, it adds to the inefficiency in resource use and to less public resources arriving at the frontline service delivery point.

Management and accountability of allocated credits is poor. The release of these credits from the central level to the regional administration occurs very late.[63] From there on, the administration of the credits is handled at the level of the DDSP and thus the transfer to individual health centers differs across regions and zones. It would be essential to monitor the use of the *credits délégués* systematically at the central level in order to improve the effectiveness of public spending.

Recurrent expenditures of peripheral health centers

The peripheral health centers depend on public resources as well as user charges to finance their recurrent expenditures, but the share of the former seems relatively small. It is difficult to piece together the total public resources that arrive at a center through various means: salaries of permanent and contractual staff; the *credits délégues*; the special budget lines (for transfers to COGECs for the purchase of equipment and for purchasing medicines for the poor). The study done by the Swiss Cooperation found, for instance, in the case of health centers in Zou-Collines that public expenditure (salaries and other funds that actually arrive) constituted only 22 percent of the total recurrent expenditure (financed by all sources) at the lowest health facilities, the CSAs. This proportion was 31 percent for the communal level centers. Most of the expenditure at the centers of first contact for the population is apparently financed by households.

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[62] Swiss Cooperation, 2002.

[63] For instance, the whole credit for 'office supplies' from 2001 was only made available in 2002 and even then only the credits from one of the two semesters were provided.

The amount of resources spent at the peripheral health centers (from all sources) is small compared to public spending at other levels of the health system. Even after including expenditure financed by user charges, the absolute levels of expenditures at the peripheral centers is relatively small. In 2002, the expenditures financed by user charges of all such centers (i.e., excluding the tertiary and secondary referral hospitals) were CFAF 3.5 billion.[64] If it is assumed that public resources at the peripheral health center level account for 30 percent of expenditure from all sources (as shown in the above-mentioned study), the estimated total recurrent spending – financed by both public revenues and user charges - at the peripheral center level would be CFAF 5 billion. This compares with a total public recurrent expenditure of CFAF 19 billion; i.e., total recurrent spending (public plus private) at the peripheral centers constituted about one-quarter of public recurrent expenditures on health in that year.

The bulk of the revenue from user charges is generated through the sale of drugs which can create perverse incentives for over-prescription and contribute to increasing the cost of healthcare. In 2002, the average share of drug sales was 70 percent for the country as a whole, with a low of 59 percent in Mono to a high of 81 percent in Atacora. The second most important source of revenue generation is 'Surgery, Laboratory and Radiology' – 8 percent at the national level. However, there is a wide range among the regions, with 13.5 percent in Collines versus only versus only 2.7 percent in Atacora and Atlantique. Consultations and delivery attendance each account for 4-5 percent, and hospitalizations for less than 3 percent. In Ouémé and especially in Mono, a relatively large source of revenue is the items 'Other services' and 'Other revenue, financial contributions'.[65]

On average, close to 40 percent of the expenditure at the peripheral health center (financed by user charges) goes on drugs and another 20 percent goes to personnel expenditure. [66] 'Maintenance and other services' represent a little over 5 percent, investment spending is 4.2 percent, and 'other recurrent expenditure'[67] accounts for a little over 30 percent.[68] Poorer regions, such as Atacora, spend significantly higher on drugs (60 percent) compared to Atlantique (30 percent). The latter spends higher shares on investment spending compared to the national average.

Corruption is reported to exist in the COGECs especially in the purchase and sale of drugs and is one of the significant problems in the public health sector. The price of drugs often

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[64] From *Annuaire Statistiques* 2002. In fact, it is not clear whether this figure includes some receipts from the government (e.g., *crédits délégués*) and expenditures which are financed out of these receipts; if so, the estimated total expenditure at the peripheral health centre level would be even lower.

[65] Under "*Autres*" are captured "*Carnets et cartes*" 2.8 percent; 'SMI' 0.8 percent; 'Other services' 1.1 percent; 'Other revenue, financial contributions' 5.0 percent.

[66] This is personnel directly employed by the health center out of its user charges, and excludes the permanent and contractual staff hired by the government or other locally hired staff hired using the 'Transfer COGEC'. They typically include administrative staff, other support staff like guards for instance, and lower level medical staff.

[67] Covers 'Small materials and consumables' 5 percent; 'energy, water and fuel' 2.3 percent; 'office supplies, maintenance products' 3.8 percent; 'transport' 4.1 percent; 'other expenditure' 16.6 percent.

[68] According to aforementioned study by the Swiss Cooperation, the 'investment spending' seems to be more fictitious than real, as the money is not often kept in a separate account foreseen for investment spending. Also, the item 'other expenditure' includes a participation of about 10 percent by lower level structures in the recurrent costs of higher level structures, and money goes from CCSs to CSSPs; and from CSSPs to DSSPs.

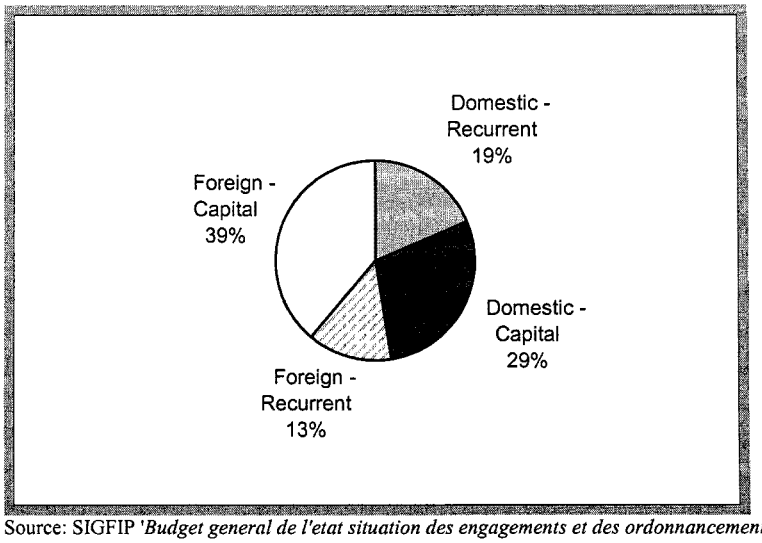
varies from center to center. The long porous border with Nigeria permits substitution of imported low-priced and low quality drugs for the higher quality drugs supplied by CAME; some of the latter are sold at a higher price either to the patient by the health provider in a private capacity, or to private pharmacies or they are exported. Corruption is often compounded by poor skills in drug inventory management which leads to medicines not being in stock. Apart from raising the cost of health services for the poor, these practices undermine the effectiveness of public spending by reducing utilization of public services. The COGECs tend to hoard funds, sometimes not releasing them even for the purchase of minor equipments such as thermometers. This also reduces the effectiveness of public resources which depend on complementary community financing being available. Some centers record very low utilization rates (for example, less than 10 visits a day) and it is not clear whether this reflects low worker productivity, lack of demand or deliberate under-accounting of receipts. There are also some cases of direct misappropriation of funds by both health personnel and members of the COGECs.

PIP expenditure and public health programs

As in other sectors, PIP expenditures are classified as capital expenditures, but include a substantial share of recurrent spending. In 2002, the foreign share of PIP expenditure was only slightly more than the domestic share (52 percent versus 48 percent – chart 4.7). However, although both had a substantial part that was recurrent instead of capital spending, the proportion of the former was much higher in the domestic PIP spending. About 40 percent of domestic PIP spending can be considered recurrent, while about 25 percent of the foreign PIP spending falls into this category. The latter is similar to the share obtained in an earlier study, which shows that in 1999 investment spending (infrastructure, materials and equipment) represented 82 percent of the total foreign PIP spending, while 18 percent went to recurrent spending (3 percent drugs and consumables, 1 percent personnel, 14 percent other).[69]

[69] Report submitted to the European Union.

Chart 4.7: PIP spending, proportion by origin and type, 2002



Source: SIGFIP '*Budget general de l'etat situation des engagements et des ordonnancements* - Benin'

What is not clear is whether these are recurrent expenditures associated with project implementation (and hence should count as part of the capital costs of the project) or whether they are true recurrent expenditures associated with operations and maintenance of health services. Recurrent expenditures associated with the public health programs (see next paragraph) fall into the former category. Some of the true recurrent expenditures will commence before project implementation is completed and their level needs to be accurately estimated in order to assess the potential impact on the domestic recurrent budget. Under-provision for incremental recurrent expenditures in projections of future budgetary requirements can affect the efficiency of health services. A more serious problem and one that undermines the overall efficiency of recurrent expenditures is when recurrent expenditures for existing health services are paid out of the so-called "investment" budget, for instance after the completion of a project, or in order to hire additional staff. The high level of recurrent expenditures in the domestic PIP suggests that this may be occurring. These problems need to be addressed, especially as more donors shift to general budget support and a greater share of the investment budget is domestically financed.

Expenditure on major public health programs

Five major public health programs, focusing on the important sources of mortality and morbidity in Benin, account for about 30 percent of total PIP expenditures and 15 percent of total health expenditures. The five programs are malaria, HIV-AIDS, tuberculosis, family health and vaccinations. There was a slight increase between 2002 and 2004 (projected), but the projected spending for 2005-2006 as a percentage of PIP is substantially lower (table 4.14). The share of spending on malaria and family health is projected to decline, with an equivalent increase in the HIV and tuberculosis programs. The total amount of spending planned between 2004-2006 on these five programs is also only half of the PIP spending on construction and equipment (when breaking down PIP

expenditure by nature). In 2002, the amount spent on supplying equipment to hospitals and health centers under the recurrent budget *(subventions aux actions)* exceeded the spending on any of these five programs. In 2003, the expenditure on providing dialysis for selected patients at the CNHU represented half the expenditure on the malaria program (CFAF 285 million and CFAF 928 million, respectively). Per capita expenditure on the above mentioned programs in 2002 was very low.[70] Both in absolute terms and as shares of the overall budget, these expenditures do not seem to reflect a high priority.

Current and future patterns of spending on these important public health programs seem to be driven by the availability of donor funds, rather than national health priorities. The share of domestic PIP funding for these five programs is expected to be almost halved by 2006. Although malaria is one of the most important causes of morbidity and mortality, especially among children (both directly and indirectly, through anemia), it received about 2-3 percent of foreign PIP expenditure in 2002 and 2003, and is projected to rise to about 7 percent in 2004 and 2005. The share of the malaria program in domestic funds, however, is projected to decline from 18 percent in 2002 to 7 percent in 2006. Expenditure on family health has been almost entirely foreign funded, and although this is expected to decline, there is no concomitant increase in domestic funding. On the other hand, the share of HIV will almost double, driven by both higher domestic and foreign allocations. These existing and projected budgetary allocations do not seem to be aligned with existing health problems, namely the high prevalence of malaria, low use of contraception, high maternal mortality rates and relatively low HIV prevalence rates. The share of the immunization program remains roughly the same because of continued foreign funding.

It is also noteworthy that some of the main causes of child mortality and morbidity are not being addressed. These include ARI and malnutrition. Further, problems such as diarrhea would also benefit from a multi-sectoral approach combining provision of safe drinking water, and health and hygiene education.

Table 4.14: Expenditure on vertical public health programs (% of total PIP expenditure)

	2002			*2003*			*2004[a]*			*2005*			*2006*		
	Dom	For	Tot	Dom	For	Tot	Dom	For	Tot	Dom	For	Tot	Dom	For	Tot
Malaria	17.9	2.3	10.5	9.6	3.4	6.4	9.6	9.4	9.5	7.9	8.6	8.2	7.2	3.6	6.0
HIV	10.8	0.7	6.0	14.3	1.8	7.9	10.0	13.0	11.4	8.2	10.8	9.2	7.5	18.5	11.2
TBC	0.8	0.5	0.6	1.4	0.5	0.9	1.1	3.0	1.9	0.0	3.1	1.2	1.4	3.4	2.1
Family health	0.8	17.2	8.6	1.3	22.6	12.2	1.0	10.3	5.3	1.4	10.9	5.0	1.1	11.8	4.7
Vaccination	1.2	9.1	4.9	1.3	8.8	5.2	0.9	10.9	5.5	1.0	11.4	4.9	1.0	12.4	4.9
All 5 programs	31.3	29.8	30.6	27.9	37.1	32.6	22.5	46.5	33.6	18.6	44.8	28.5	18.2	49.7	29.0

Note: Dom = domestic, For = foreign.
a/ Until 2003 is based on actual expenditures, from 2004 based on budgeted figures.
Source: PIP data from Ministry of Planning .

[70] These were as follows in CFAF (US$ in parentheses): malaria - 228 (0.33), HIV - 131 (0.19), TBC - 14 (0.02), family health- 195 (0.28), and vaccination - 108 (0.15).

Utilization of public hospitals and health centers

The utilization rates of different categories of hospitals vary enormously by level and region. These rates influence hospital unit costs and provide an indication of overall hospital efficiency, for both of which Benin lacks information. Even the data on utilization rate are not comprehensive or reliable, but some tentative conclusions can be drawn.

The bed utilization rate in all the second level referral hospitals (CHD) does not exceed 50 percent in any region, with an average of 33 percent for all regions, reflecting weaknesses in the referral system at the base. In Atacora, the bed occupancy rate was just 15 percent (table 4.15). Obstetric complications and childhood diseases (especially anemia) are the principal causes for referral and the low occupancy rates in the CHD highlight the problems in correctly diagnosing these problems at lower levels and in patients accessing the next higher level. By contrast, the occupancy rate at the CNHU (tertiary level) was 74 percent in the latter. The average duration of stay at CNHU was almost 10 days, while it was less than 5 days for all CHDs. The high utilization rate of the CNHU could also be due to the fact that there is no secondary level hospital in Atlantique-Littoral. Bed utilization at the CNHU varies by the type of speciality, ranging from 131 percent in Neonatology and 83 percent in Surgery, to 51 percent in Cardiology and 49 percent in Ophthalmology.

Table 4.15: Key indicators related to use of CNHU and CHD hospitals, 2002

	Number of beds	Number of days of hospitalization	Bed utilization rate (in %)
CHD Atacora	119	6,645	15
CHD Borgou	134	23,032	47
CHD Mono	100	16,714	46
CHD Ouémé	392	53,688	38
CHD Zou	405	39,602	27
Total CHD	**1,150**	**139,681**	**33**
CNHU[a]	591	158,973	74

a/ As there is no CHD for Atlantique-Littoral, CNHU serves both as a CHD for this region (second level references), as well as the third level reference for the patients from CHD hospitals throughout the country.
Source: *Annuaire Statistiques* 2002.

Utilization of in-patient care at the public peripheral centers is also very low; partial data show that the utilization rate in private confessional hospitals is much better than the public zonal hospitals and CSCs. Most of the public zonal hospitals and the CSCs have a bed occupancy rate which is below 30 percent. In 2002, one zonal hospital in Atacora had a bed occupancy rate of 12 percent, while the rate for one CSC was 7 percent. By contrast, the bed occupancy rate in the private hospitals ranged from 50 to 90 percent. Although these data are for only 26 centers, they are suggestive of serious inefficiencies that should be further analyzed. It is not clear, for instance, whether the public and private centers are comparable in terms of case mix: for instance, the average length of stay was 2-5 days in the public centers and 3 - 10 days in private institutions.

Apart from income and education (which influences the decision to seek health care), price, opportunity cost and quality of care are important determinants of the choice of health provider. Evidence from various research studies suggest that all these three factors are important in seeking care at a private health facility or a traditional healer rather than a public health facility. Although the price of drugs and services are supposedly fixed in public health facility, they often vary from center to center; further, patients are often forced to purchase drugs at higher than the official prices. Over-prescription of drugs and medical examinations in public centers (mentioned earlier as a source for increasing revenues) also raise costs to the consumer. The effective price in a public health facility can therefore be comparable to that in a private (confessional) facility.

High costs of treatment deter poor households from seeking health care. The World Bank Poverty Assessment states that in 1999, the private costs of treating an episode of ill health ranged from about CFAF 550 to CFAF 1,500 (equivalent to US$1 - 3) per outpatient visit in ten health centers studied, including the cost of medicines prescribed. This was roughly 10 percent of the annual non-food spending in rural areas. During the same year, health expenditures by the poor were estimated at about CFAF 2,000 per adult equivalent per year in rural areas.[71] Thus, even excluding the costs of antenatal visits and birth attendance, rural households can only afford one or two visits per year for an average household size of 5.2 persons, which means virtual exclusion from modern health care. The survey also shows that spending on health is especially low among the urban poor, even lower than among the rural poor (about CFAF 500 per adult equivalent per year), since the former have to spend more on rent and other items.

The mode of payment, which is particularly important for high cost treatments such as hospitalizations, is another important factor influencing the decision to seek treatment and the choice of provider. In public health facilities, substantial deposits have to be made before treatment begins; sometimes, the deposit exceeds the eventual total cost of treatment. By contrast, both the private confessional centers and the traditional healers offer flexible forms of payment (installment or in-kind) that poorer people find more adapted to their income stream. This is especially important for hospitalizations. A recent study found that total costs in of a delivery in public hospitals ranged from an average of US$15 for a spontaneous delivery to US$256 for a 'near-miss' obstetric complication.[72] Although these include travel costs and non-medical costs of staying at the hospital, most of the expenditure was for drugs, professional services and surgical intervention; charges paid to the hospital represented about 65 percent of medical costs. The flat charge for a spontaneous delivery was US$3 at the CHD and US$6 at the national hospital; but the hospital charges for a C-section or other operation varied widely (from US$20 - 42 at the CHD and US$43 - 129 at the CNHU). Total expenditure on a spontaneous delivery amounted to about 2 percent of annual household cash expenditure; but a severe obstetric complication could cost as much as 34 percent of household expenditures. Flexible

[71] As defined in monetary terms by the 1999-2000 *Enquête sur les Conditions de Vie Rurale* (ECVR, Survey on Rural Living Conditions) and *Enquête Légère auprès des Ménages* (Rapid Household Survey).

[72] Borghi *et al.* 2003. "Costs of Near-miss Obstetric Complications for Women and Their Families in Benin and Ghana." Health Policy Planning 18(4):383-390. The national hospital and one secondary referral hospital in Porto-Novo were surveyed.

payment options offered by private hospitals mitigate the impact of potentially catastrophic expenditures, which the public sector does not do.

The poor quality of care in Benin's public health facilities is well-documented and contributes to low utilization, despite the expansion of infrastructure. Quality of care covers various dimensions, including the availability of competent staff; the motivation of the staff and the availability of essential drugs, equipment and supplies; as well as the delays in patient flow. Another recent cross-country study on safe motherhood that included five hospitals in Benin found that competency levels (as measured by a test covering six subject areas) were low and there was little difference in competency by professional level.[73] While these results were similar for those of other countries, Benin scored especially low on "patient rapport", specifically among the professional staff. Labor monitoring was inadequate in most observed cases and few staff washed their hands before assisting at delivery. Finally, delays after arrival at the hospital were long, with waiting time being especially long at the regional referral hospital (the CHD), where patients had to wait almost an hour before they were evaluated; by contrast, at the national hospital, the waiting time was just 16 minutes. Delays also occurred during diagnosis for obstetric complications.

Financial requirements for reaching the MDGs in health

Reaching the health Millennium Development Goals remains a major challenge for Benin.[74] There are four MDG targets related to health that can be measured relatively accurately for Benin: immunization against measles, neonatal care by skilled personnel, fever from malaria and modern contraceptive use. For the first three indicators, the current levels are adequate, but progress is slow because of the difficulties of reaching the uncovered population. Modern contraceptive use is progressing rapidly, but because it is starting from a low base, the goal is unlikely to be attained by 2015. A more detailed assessment of projected progress by region and quintile showed that many of the poor regions (Atacora, Couffo) will be far away from the targets. In particular, a significant proportion of the poor would not have basic coverage: even by 2015, only 60 percent of the poorest quintile would have immunization against measles or births attended by a skilled personnel. These estimates are based on projections of past trends, using linear and non-linear methods.

The contribution of the health sector to reaching the MDGs can, however, be significant if available funding is strategically oriented; that is, targeted towards removing the supply and demand bottlenecks hampering the utilization of high impact services. Annex 4.2 presents estimates of the financial requirements for providing and enhancing the demand for key services using a financial simulation model.

The results of the simulation exercise show that estimated total expenditures on health would have to double and public expenditures would have to triple by 2015, in constant 2004 US dollars) compared to the base year of 2004 (chart A4.1 in Annex 4.2). The

[73] Sourou Gbangbade, *et al.* 2003. "Safe Motherhood Studies – Results from Benin," Quality Assurance Project. The project covered Benin, Ecuador, Jamaica and Rwanda.

[74] World Bank 2003. "Benin: Poverty Assessment," Washington, D.C., September.

incremental cost of implementing the five steps of health services strengthening in Benin is estimated to be about US$19 per capita per year in 2015 and US$12 per capita per year over the period 2005-2015.[75] This would be equivalent to doubling the estimated total expenditures and tripling the public expenditures on health of Benin in 2004. Doubling expenditures on health -thereby also strengthening the demand for both community and facility based services- would lead Benin to reaching the MDGs, including providing treatment (HAART) to AIDS patients under the hypothesis of a stabilization of the HIV prevalence at the current level. The MDGs objectives for child mortality, malaria and HIV could, however, be potentially reached at a lower level of expenditures (reaching US$6.92 per capita per year in 2015 and representing US$3.68 per capita per year between e 2005 and 2015) through the implementation of the steps 1 to 3 only (see below). This would require to an increase in constant terms in respectively the total expenditures on health and the public expenditures on health in constant term by about 40 percent and 90 percent, respectively. Uncertainties remain, however, as to the potential impact of services on maternal mortality.

Public Expenditure Management

The health sector program budget is structured into five programs but the objectives of some of these programs do not appear well-defined and the grouping of traditional budget lines within these programs is not logical. The rationale for programs 4 and 5 (public health programs with clearly identified objectives) is easy to understand. For other programs, the logic is less clear. For instance, program 1 (restructuring of the base of the pyramid and strengthening of health services) absorbs two-thirds of all construction activities (table 4.16). Program 2 (financing, mobilization and improvement of resource management) takes up almost 90 percent of all personnel spending and most of the "*budget de fonctionnement*". Program 3 (disease prevention and control and improvement in the quality of care) includes the recurrent expenditure of the CNHU but not of the CHD, which is probably included under "*Autres charges de fonctionnement*" within program 2. On the other hand, at least some of the construction related activities for the CHD are grouped under program 3 (not program 1).

[75] In 2004 US$

Table 4.16: Structure of the Program Budget for health 2004-06

	Infrastructure (construction and equipment)	Personnel	Goods and services	*Subventions d'exploitation*
axe 1 Restructuring of the base of the health pyramid and strengthening of health services	67.4%	7.1%	18.1%	25.2%
axe 2 Financing, mobilization and improvement of resource management	2.9%	87.4%	40.2%	30.2%
axe 3 Disease prevention and control and improvement in the quality of care	24.4%	4.4%	15.5%	44.6%
axe 4 Prevention and control of priority diseases, including malaria, STI/AIDS and tuberculosis	4.0%	1.1%	21.8%	0.0%
axe 5 Promotion of family health	1.2%	0.0%	4.4%	0.0%
Column Total	100.0%	100.0%	100.0%	100.0%
Percentage of final total	20.1 %	21.1%	39.5%	19.3%

Note: In axe 3 the "Goods and Services" column also includes CFAF 960 million for "transferts & etudes".
Source: *Budget Programme* 2004-2006.

Strengthening the financial management skills and accountability of hospitals and health centers is essential for improving the effectiveness of public spending. All health centers in Benin manage funds from a variety of sources but accounts are still kept in a haphazard fashion and the accounts are not regularly audited. Despite the availability of financial and other data for each center, these data are not utilized for improving the quality of health services, health worker productivity or the financial viability of the centers. The accountability of the COGEC/COGES to the wider community is limited; in many cases, elections are not held regularly and cases of financial irregularity are not brought to account.

Management capacity in the health sector is weak from the national level down to the center, resulting both from the inadequacy of staff (numbers and skills) and the powers and responsibilities of different units. At the ministry level, there is insufficient capacity to plan, implement and monitor programs – staff are lacking and their quality is poor. Although the health services are formally decentralized to the zonal level, the distribution of personnel and budgets do not match this; most of the budget is managed either at the center or by the regional administrative units, which is now in charge of two *départements* each. The structure and composition of the regional administrative unit corresponds to the central level and is not organized to support the decentralization of the health services. At the health center, basic skills are lacking, for instance in accounting or in inventory management (for drugs) – these tasks are often done by an unskilled health worker. The COGES/COGEC lack competent or paid staff or monitor finances.

An important issue in enhancing the effectiveness of public spending is to redesign the human resources policy. The extraordinary imbalances across regions in doctors and other staff mean that targeting additional non-personnel resources to particular *départements* would not be sufficient to improve outcomes. In the context of the PRSC, the government is developing a human resource policy with particular focus on rural areas. The most important aspect of this would be developing an appropriate incentive framework. The ability of public health professionals to provide services in a private capacity, which significantly enhances their earnings, is much greater in urban areas and in the richer regions.

The government is also considering using performance-based contracts in selected zones as a basis for resource transfers, but their effectiveness will depend on the ability to monitor performance accurately. The current statistical system is not very reliable with respect to outcomes, and the DHS data are available with considerable time lag. Although the MSP has set up a monitoring and evaluation cell, its implementation has been rather slow, again due to lack of capacity. It will be necessary to focus on a few key management indicators at each level of the health service, to develop specific procedures for data collection and use of the information for decision-making; health managers at different levels also need to be trained in their use.

Recommendations

The composition of health expenditures needs to change and be directed more towards combating the principal causes of mortality and morbidity by strengthening both the vertical programs and the health system at the base of the pyramid. Reducing the disease burden from malaria, diarrhea, anemia, tuberculosis, and infant and maternal mortality are the major health priorities. Public expenditure policy should focus on: (i) enhancing allocations for the vertical public health programs for the principal diseases, especially malaria; (ii) developing multi-sectoral programs (covering health education, nutrition and sanitation); (iii) increased and transparent allocations to the peripheral level centers (from the zonal hospital level down); (iv) ensuring appropriate allocations for the treatment of childhood illnesses, antenatal and postnatal care and emergency obstetric services; and (v) investment in disease surveillance systems, and monitoring and evaluation in order to respond to outbreaks of epidemics and enhance resource availability in particular zones.

Strengthening the referral system, especially at the CHD level and specifically the services for obstetric complications and anemia among children, is a priority to reduce maternal and neonatal mortality. This should include targeted training of health personnel at the center of first contact to identify high risk patients, creating systems to enable such patients to be transferred quickly to the referral center and reducing delays in admitting and treating patients at the referral center. The interpersonal skills of public health staff, and their treatment of women in particular, needs to be enhanced. Attention should focus on improving the links between the CSA/CSCs and the CHD (second level referral hospital), which should serve the majority of patients and is currently severely under-utilized.

Reforming the human resource policy in the health sector is necessary to ensure an effective use of public resources, especially at the peripheral level; the compensation, career growth, professional development and distribution of the health workforce needs to be addressed. Even with improved allocations, the quality of health services at the peripheral and CHD level will not improve unless imbalances in the distribution of personnel are redressed. Changes are required in the incentive framework, covering both current compensation and other incentives (such as eligibility for postgraduate training, promotions after minimum years of rural service). In order to develop a workable incentive framework, it is necessary to have a better understanding of the links of public health professionals and the private sector (both formal and informal) which determines the total compensation of public health professionals in urban and semi-urban areas. Service norms at the various health centers and training needs should be tailored to the reality of human resource availability.

Subsidies need to be better targeted to specific services and groups of people through reductions in user charges and innovations in payment options. This should be coupled with efforts to reduce the total cost of treatment by encouraging rational drug use and appropriate treatment protocols. Again, services related to childhood diseases and maternal mortality, for which utilization rates are high should be the first priority. Apart from the user charges, the total cost of a treatment should be estimated and its affordability assessed in relation to the household budget. Actions should focus on: (i) lowering user charges at peripheral/referral centers for certain services; and (ii) change drug prescribing practices and/or the treatment protocol that contributes to raising total costs (public and private). Piloting of flexible payment options in the public health system and insurance systems should be considered. An analysis of the pricing structure in public and private facilities is required to develop practical proposals for differential pricing and modes of payment.

Increasing demand for public health services by strengthening the outreach services of health centers for preventive care and health information is required. Health and hygiene education as well as awareness campaigns have received insufficient attention in Benin and should constitute part of the mandate of the health center; these activities need to be funded and monitored for their impact.

There needs to be greater transparency and accountability of public funds destined for the peripheral health centers. Informing the community about the resources allocated to each center and better accounting of how these resources are spent will help. As an example, the amounts of *credits délégués* that are foreseen for each center could be publicized and they should be released as soon as the budget is passed. Communities should also be informed about the types of services provided (including outreach), service norms, the standards of quality.

A better understanding of the dynamics and behavior of the COGES and COGECs is necessary to improve their capacity for managing health service delivery. Although formally public health facilities, in fact the peripheral health centers can be considered as publicly subsidized entities operating on quasi-market principles. However, despite enhanced receipts from the community (and increasingly from the government) and in

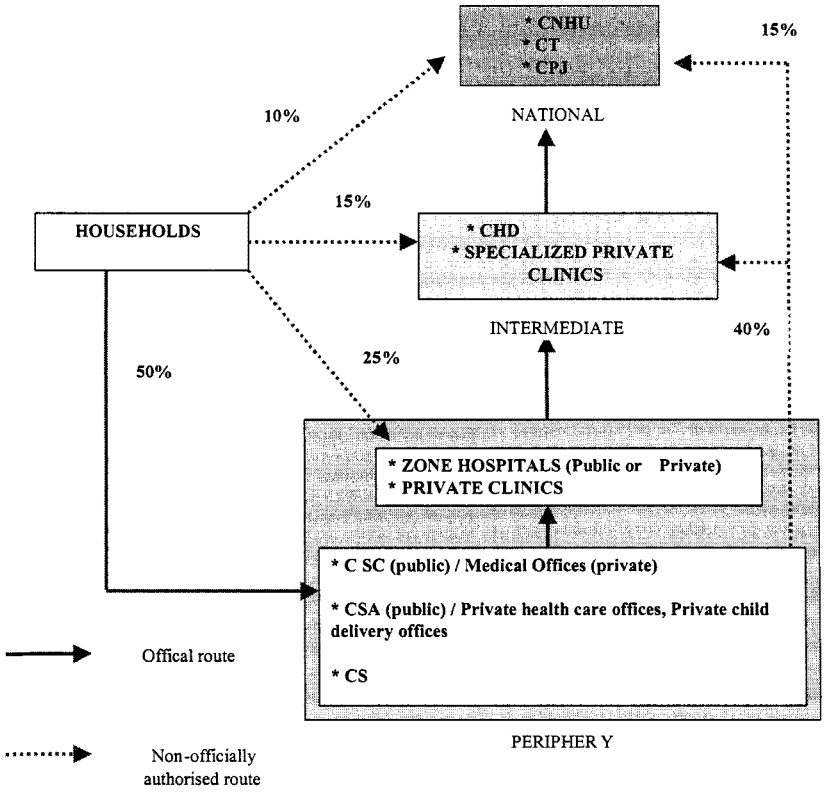
some cases, accumulating large amounts of funds, they have neither expanded health services nor significantly improved quality. The institutional framework of these community institutions needs to be better understood in order to develop plans for: (i) training in resource management skills; (ii) analyzing and using data for decision-making; and (iii) accounting.

The use of private service providers, who appear to have higher utilization rates and lower unit costs, under service contracts, should be piloted and the experience carefully evaluated. Although this option has the possibility of reducing costs, the demands placed on health managers to develop and monitor contract should not be underestimated. Specific skills are required to set and monitor prices and output targets. Comparator public health facilities operating with similar levels of resources should be selected for the evaluation.

The structure of the program budget will need to be revised. One possibility is to reorganize programs according to the type of service (hospital services at different levels, peripheral centers, public health program). All costs (recurrent and capital) associated with each program should be allocated to the service. This will introduce greater transparency in the use of many of the catch-all 'special budget lines' and also show how much is going to different levels of the health system. Specific output performance indicators could be developed for these services. The program budget should also assess the performance of the hospitals and centers receiving public funds.

Annex 4.1

Flow of patients through the health system



Reaching the Millennium Development Goals: cost and potential impact of strategies to strengthen health services in Benin.

Reaching the health Millennium Development Goals remains a major challenge for Benin. The contribution of the health sector to the MDGs can, however, be significant if available funding is strategically oriented; that is, targeted towards removing the supply and demand bottlenecks hampering the utilization of high impact services such as Insecticide Treated Nets, family planning, vitamin A supplementation or more systematic treatment of respiratory infections among children etc. How large can this contribution be, what would be the cost of upgrading health services and what would be the impact on the MDGs?

This section aims at answering these three questions by estimating the potential cost and impact of increasing health service's effective coverage with effective promotive, preventive and curative health interventions. Specifically,

- How much extra money would be needed to increase the health coverage from the current level to the 2015 MDG horizon, taking into account the specific geographic, human and institutional context of Benin?
- What results, in terms of coverage could be achieved by spending more but also spending better on key high impact interventions (e.g immunization, hand-washing, assisted delivery, vitamin A supplementation, emergency obstetrical care etc..)? [76]
- What impact on the Millennium Development Goals could be expected following such an increase in coverage with high impact interventions in the light of the most recent evidence collected from both international and Benin studies?

Reaching the MDGs in Benin implies not only a dramatic expansion of the production of key services, but also the implementation of mechanisms to ensure adequate demand for and use of those services by those who need them, particularly the rural populations, the poor and among them women and children. On the basis of the *Plan National de Développement Sanitaire* and the MTEF 2005-2007, five steps of health service expansion can be considered. These steps of health services development and upgrading are used as the basis for the costing of the potential health services contribution to the MDGs. Each step permits the progressive upgradation of services, strengthening both supply and demand for high impact services.[77] The incremental costs and expected impact of implementing various strategies were estimated with the help of a simulation tool.[78]

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[76] Provided attention is given to setting the right incentives for people and institutions-private and public- to fund and implement activities that will lead to increase in supply and demand for high impact interventions.

[77] Methodological details are presented in the working draft «*Objectifs du Millénaire pour le Développement: Evaluation de la contribution du secteur Santé au Bénin*» (World Bank, AFTHD) .

[78] Soucat A, Van Lerberghe W, Diop F., Nguyen SN and Knippenberg R., Marginal budgeting for bottlenecks: a new costing and resource allocation practice to buy health results. "Using health sector budget expansion to progress towards the Millennium Development Goals in Sub-Saharan Africa". Policy and Sector Analysis Support Team, Africa Region Human Development (AFTHD), The World Bank.

These estimates relied mainly on the information contained in chapter 4 of this report as well as health surveys.[79]

The results of the simulation exercise show that estimated total expenditures on health would have to double and public expenditures would have to triple by 2015, in constant 2004 US$) compared to the base year of 2004 (chart A4.1). The incremental cost of implementing the five steps of health services strengthening in Benin is estimated to be about US$19 per capita per year in 2015 and US$12 per capita per year over the period 2005-2015.[80] Doubling expenditures on health -thereby also strengthening the demand for both community and facility based services- would lead Benin to reaching the MDGs, including providing treatment (HAART) to AIDS patients under the hypothesis of a stabilization of the HIV prevalence at the current level. The MDGs objectives for child mortality, malaria and HIV could, however, be potentially reached at a lower level of expenditures (reaching US$6.92 per capita per year in 2015 and representing US$3.68 per capita per year between 2005 and 2015) through the implementation of the steps 1 to 3 only (see below). This would require an increase in constant terms in total expenditures and public expenditures on health by about 40 percent and 90 percent, respectively. Uncertainties remain, however, as to the potential impact of services on maternal mortality.

The five steps in health service expansion are discussed in greater detail below.

Step one, *strengthening outreach activities* would cost an average of US$1.03 per capita per year reaching US$1.50 per capita in 2015. This strategy would reduce child mortality by about 16 percent by 2015, thanks largely to improved coverage of children with immunization, and vitamin A supplementation, but due to improved use of contraception, antenatal care and prevention of mother to child transmission of HIV. Incremental costs include key inputs to improve availability and quality of services (vehicles, vaccines, cold chain, micronutrients, contraceptives, etc.) as well as IEC and targeted demand side payments.[81]

Step two, *information and social mobilization for behavior change* is the main strategy for child health focusing on the improvement of household and community practices, information and communication, as well as mothers' education. This will be done mainly through the implementation of the community-based agents program combined with social marketing and information campaigns. Improving household practices would have a potential major impact on child mortality reducing it by 42 percent by 2015. The strategy would cost an incremental US$1.89 per capita per year between 2005 et 2015, peaking at US$2.53 in 2015. Major costs would include compensations for community-based agents, commodities, IEC, supervision and monitoring as well as targeted subsidies to the demand side.

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[79] Demographic and Health Survey, Benin, 2002, Macro-International

[80] In 2004 US$

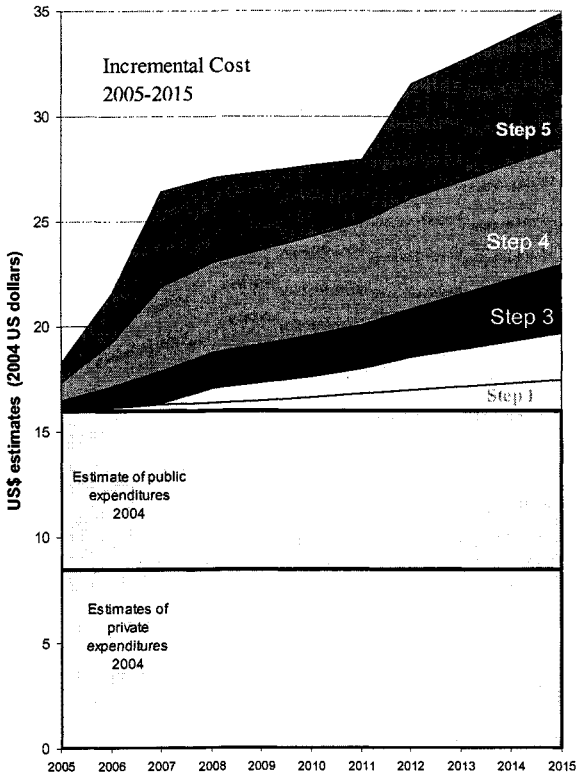
[81] Including, for example, free distribution of bed nets to mothers completing three or more antenatal visits

Step three, ***expansion and improvement of primary clinical services*** **and support to increased utilization of these services calls for an average increase of health expenditures by US$ 2.14 per capita per year reaching US$3.14 in 2015.** This would lead to a reduction of child mortality by 41 percent and a reduction of maternal mortality by 25 percent. The approach will contribute to improving the medical management of malaria and tuberculosis cases as well as the prevention and treatment of opportunistic infections, but also the implementation of Basic Emergency Obstetrical care (BEOC). The inputs costed as part of this step include rehabilitation of health centers, improvement of quality of care and cost of commodities. Incentives for health staff to work in rural areas is also a key feature of this strategy along with the implementation of "poverty funds" and/or transfers to micro-insurance schemes for the payment of care for the poor people.

Step four ***expansion and improvement of Emergency Obstetrical Care and increase of utilization of referral services*** **mainly aims at reducing maternal mortality.** The cost is estimated to be about US$4.71 per capita per year for a reduction in maternal mortality of about 54 percent and of child mortality of about 43 percent. This step would increase the access of pregnant women to referral centers, and Comprehensive Emergency Obstetrical Care (CEOC). The cost would include production, retention and implementation of incentives, performance-based bonuses, hardship allowances for midwives and doctors, transportation systems as well as subsidies to Poverty Funds and micro-insurance schemes.

Step five, ***expansion and improvement of chronic illness/disease treatment and reference level*** **calls for an annual increase of US$6.38 in per capita health budget over the 2005-2015 period.** This stage, which has as objective the improvement and revitalization of second level reference treatment would allow better support for chronic illness/disease, especially in serious cases of tuberculosis, malaria and treatment of AIDS patients including the ARV (HAART) costs, and improvement in laboratory and second reference capacity.

Chart A4.1: Financial requirements to optimize the contribution of health services to the health MDGS



	STEPS	Reduction of under five mortality (1)	Reduction of maternal mortality (1)	Nutrition, HIV and malaria
	Step 1: Strengthening outreach activities	16%	4%	Nutrition, HIV and malaria
	Step 2: Information and social mobilization for behavior change	58%	5%	IPT VCT PMTCT Vitam A, FFA
	Step 3: Expansion and improvement of primary clinical services	72%	25%	Condoms BCC Bed nets Malaria home trt Breastfeeding Complementary feeding
	Step 4: Expansion and improvement of Emergency Obstetrical Care and increase of utilization of referral services	78%	54%	Malaria tt OI prevention and tt
	Step 5: Expansion and improvement of chronic illness/disease treatment and reference level	79%	75% (2)	Reference treatment Complicated malaria
In 2004 US dollars		(1) Cumulative (2) Uncertainties in evidence based medicine		

Chapter 5

Rural Water Supply and Sanitation

Introduction

Access to potable water constitutes one of the main priorities of the Government of Benin in its strategy for poverty reduction. The objective of the Government, consistent with achieving the MDGs is to halve by 2015 the share of the population which currently has no access to potable water. This constitutes a major challenge for Benin and substantial financial resources will have to be allocated to the priority sectors.

Although drinking water and sanitation facilities are private goods, positive externalities on health outcomes associated with consuming safe water and improved sanitation provide a strong rationale for public intervention. There can also be negative externalities with respect to environmental degradation, through pollution or excessive depletion of groundwater resources, although these do not appear important in Benin at this time. Access to potable water and sanitation facilities together with improved hygiene behavior and practices can reduce infant mortality and general morbidity by reducing the impact of water borne diseases. These are clearly important for Benin. They also strongly influence the living conditions of girls and women and can positively influence girls' enrolment in primary education by removing one of the important constraints on the use of their time. Drinking water and sanitation can thus influence the achievement of other MDGs as well.

In terms of quantity, there is no global risk of shortage of water in Benin even in the longer term perspective, as demand is negligible compared to the available resources, but there are problems in the distribution of water in time and space and in emerging environmental problems. In an average year, it is estimated that the volume of available surface water totals approximately 13 billion m^3 and that the recharge of the aquifers amounts to approximately 1.8 billion m^3. Currently, only an insignificant part of the water resources (about 1 percent) is utilized. The available water resources are sufficient to meet current and future needs, even after including the demands of other sectors (industry, agriculture).[82] Geographical regions vary, however, in their access to groundwater and surface water. For example, the coastal sedimentary basin covering 10 percent of the land surface of the country contains 32 percent of the potentially available ground water resources. The annual recharge varies in accordance with annual variations in precipitation and other climatic conditions which can result in a general decline in aquifers after consecutive years of below-average rainfall. Surface water levels in rivers and streams also vary from one year to another. Average water levels have decreased over the last 20 years and seasonal variations in water yields are primarily associated with the annual rainfall cycle. In the future, Benin might be exposed to water quality problems

[82] For further details, please refer to the study *Etude de la Stratégie Nationale de Gestion des Ressources en Eau au Bénin*, Rapports R1-R7, SOGREAH-SCET Tunisia, 1997.

in certain densely populated regions, especially in large and small towns, as a result of the increasing contamination of water resources.

There are several potential service types for the provision of water and sanitation, ranging from private facilities, neighborhood facilities to serve groups of households and trunk facilities serving towns. In the rural context, the first two are the most important. Public intervention is needed to assist the expression of demand through neighborhood associations that can make the provision of neighborhood facilities economically viable. This can, however, be combined with facilities for individual households that could, in principle, be provided through the market mechanism.

In 1992, Benin adopted a new strategy for the provision of water and sanitation facilities in rural areas (*PADEAR - Programme d'Appui au Développement de l'Eau et de l'Assainissement en milieu Rural* based on a demand-responsive approach. Substantial investments in potable water supply in Benin started in the 1980's and have been pursued during the past two decades. The efforts to improve private and public sanitation have been more modest and started much later. The demand-responsive approach adopted in the PADEAR ensures that communities are involved in the selection of appropriate technology and in the operation and maintenance of the facilities. The role of the NGOs and the private sector in the provision of works and services is another important aspect of the strategy.

Despite a long period of public investment in this sector, there has been no review of sectoral expenditures. This first review of public expenditures on Benin's water sector examines the trends and composition of public spending and suggests ways to improve efficiency, equity and poverty targeting. It also presents options and mechanisms to complement public funding, which may be insufficient to attain the MDG in this sector.

Delimitation between Rural/Semi-Urban Areas and Urban Areas

Definition of the Rural and Semi-urban Areas

According to the last census (2002), 6 million Beninois out of a total population of 6.8 million live in a rural or semi-urban environment. This segment constitutes the target population for the Water Directorate (*Direction de l'Hydraulique* - DH) which is responsible, on behalf of the Government, for water supply in rural and semi-urban areas (table 5.1). The remaining part of the population is served by the SONEB (*Société Nationale des Eaux du Bénin*), which is responsible for water supply in urban areas. According to this classification based on the last census, 82 percent of the population in Benin live in settlements of less than 10,000 inhabitants. This corresponds to a population of 5.63 million inhabitants, to which one should add a group of 22 secondary towns of more than 10,000 inhabitants each, with a total population of 360,000 inhabitants who are not served by SONEB.

Table 5.1: The DH Intervention Zone

Type of habitat	Population (2002)	Number of towns/villages	% of total population in Benin
Settlements of 10,000 to 45,000 inhabitants	0.36 million	22	5
Settlements of 2,000 to10,000 inhabitants	2.91 millions	888	42
Settlements of > 2.000 inhabitants	2.72 millions	2,621	40
Total	5.99 millions		87

Source: *Cellule de la Banque de Données de la DH, 2003.*

Estimates of the population covered by potable water supplies have undergone downward revision after the 2002 census, which showed that the rural population had grown much faster than earlier projected. Hence, the revised indicators presented here are not consistent with data used until now, which were both based on the projection of population using the 1992 census. The figures used henceforth in the sector and in the present analysis are those of the 2002 census as published by the INSAE (*Institut National de la Statistique et de l'Analyse Économique*); population figures for earlier years have been adjusted accordingly.

Norms and Terminology utilized in the Sector

The norm currently used in Benin is one water supply point for 250 inhabitants on the basis of access to 20 litres/day/inhabitant at a distance not exceeding 500 meters from the water point to the place of consumption. The norms applied in the planning of sector activities and especially those utilized to define access to potable water have, however, been subject to modifications during the period being reviewed. Up to the year 2000, the norm applied was 500 inhabitants per water point (*équivalent en point d'eau*, hereafter cited as EPE), but in order to enhance service levels, this norm was changed to 250 inhabitants per water point. In the present analysis, estimates of coverage rates for the period 1997 to 2002 are calculated on the basis of the new norm in order to make comparisons possible from one year to another.

In terms of service level, one borehole equipped with a hand pump or a modern well corresponds to one water point (EPE), whereas a *Poste d'Eau Autonome* (PEA) is equivalent to 4 EPE. A public stand post in a rural piped water supply scheme (*Adduction d'Eau Potable* - AEV) corresponds to 2 EPE. The equipment rate expresses the population covered by the existing number of water facilities provided (irrespective of their functionality) calculated according to the above norms. The coverage rate expresses the proportion of the population covered by functional facilities.

Sector Strategy and Institutional Framework

National Strategy for Water Supply and Sanitation

The demand-responsive approach adopted in the national strategy (PADEAR) is based on four operational principles. These are: (i) decentralization of the decision making process to the communities; (ii) financial contribution from communities to the initial capital investment and full contribution from communities in cost recovery (operation, maintenance and replacement of equipment); (iii) reduction of construction and maintenance costs; and (iv) private sector involvement in construction, operation and

maintenance with emphasis on promoting the development of national and local enterprises. Two other principles, although not explicitly mentioned in the strategy document, also constitute cornerstones of the national strategy: (i) systematic provision of hygiene education in all rural water supply programs/projects; and (ii) the deconcentration of the DH and its evolution as a facilitative and regulatory body in the sector.

Almost all partners in the development of the sector have adopted the national strategy. Although there are differences in the importance given to sanitation and social mobilization, the strategy is, in general terms, respected by all partners. However, the emergence of new actors within the framework of decentralization is likely to constitute a major challenge for the DH to ensure that these principles of the national strategy are respected.

One of the main benefits of the strategy has been the recognition by the communities themselves of the economic value of water and of the acceptance of cost recovery (to cover both operation and maintenance) by the users themselves. Other benefits of the strategy include: (i) the reduction in the number of different types of pumps utilized in Benin. In 1992, it was agreed that only four different VLOM (Village Level Operation and Maintenance) hand pumps would be installed in order to reduce the problems associated with supply of spare parts in a fragmented market;[83] (ii) the emergence of private businesses and NGOs specialized in sector activities (drilling and construction firms, consultancy firms, village mechanics, NGOs, etc.) and the gradual withdrawal of the public sector in the implementation of sector activities; (iii) the inclusion of gender aspects in rural water supply projects and programs; (iv) the systematic inclusion of health education in all water supply projects and the emergence of collaboration between the DH and the regional representations of the Ministry of Health (*Services de l'Hygiène et de l'Assainissement de Base* - SHAB); and (v) deconcentration of some activities of the DH to its regional representations, the *Services Départementaux de l'Hydraulique* (SDH).

Despite the encouraging results achieved during the last 10 years, the PADEAR strategy needs to be reviewed in order to enhance sector performance and to identify and correct its current weaknesses. The critical issues that need to be addressed include:[84] (i) the current absence of criteria to target pockets of poverty and the poorer segments of the population; (ii) the slowness in the processing of community applications and the time required for the contracting of works and services (in certain cases the process from the submission of a community application to completion of works may take up to two years); (iii) the capacity of several actors remains low, in particular that of the private national sector despite the consistent support given to this sector over the last 10 years; (iv) the decline in the commitment by communities over time to secure daily operation and maintenance of the facilities, which affects the effectiveness of investments; and (v) deficiencies in the performance of the private network for the supply and distribution of spare parts. In

[83] These included Vergnet, India Mark II, UPM and Afridev. The first batch of hand pumps comprised Vergnet for depths above 40 meters and Afridev for depths of less than 40 meters. A new batch of pumps (the contract entered into force in late 2003) comprises India Mark III pumps and Vergnet pumps.

[84] For further details, please see "*Stratégie nationale de l'approvisionnement en eau potable et de l'assainissement en milieu rural du Bénin*," draft 3, December 2003.

addition, there has been inadequate sector monitoring by the DH after investments have been completed.

A specific institutional issue is that while potable water and sanitation are closely interlinked in the achievement of the health objectives of water supply projects, sanitation and hygiene education are the responsibility of the *Direction de l'Hygiène et de l'Assainissement de Base* (DHAB) of the Ministry of Health. This department cooperates with the DH of the Ministry for Mines on the implementation of these aspects in the rural water supply projects.

Although there is a national policy on sanitation, adopted in 1995, and efforts have been made to integrate hygiene education promotion of household latrines in rural water supply projects, the results on the ground have been poor. The sanitation strategy is based on five main principles: (i) the creation of sustainable and efficient institutional structures for the management of the services; (ii) the promotion of sanitation programs designed on the basis of the needs expressed by the rural communities; (iii) full community funding of the initial investment of the facilities and of the subsequent operation and maintenance; (iv) the development of the capacity of local entrepreneurs and artisans to provide operation and maintenance services; and (v) the promotion of technologies adapted to the managerial and financial capabilities of the State, the municipalities and the communities.

A new national sanitation programme (*Programme National d'Hygiène et de l'Assainissement de Base* - PNHAB) was adopted in September 2003 and constitutes the framework within which future government interventions are to be planned and implemented. The program comprises three sub-programs as follows: (i) promotion of hygiene and sanitation in rural areas; (ii).promotion of hygiene and sanitation in urban and semi-urban areas; and (iii) institutional support to the DHAB and its regional structures.

The Legal Framework of the Sector

Water resources are the patrimony of the State. This is stipulated in the Constitution, the framework law on Environment and the Water Law dating from 21 September 1987. The State guarantees the protection of the resource, and the municipalities, created in 2003, now have a co-responsibility in this respect. It is anticipated in the Water Law that all water withdrawals will be subject to approval but in reality this only applies for water for industrial use (permits are issued by the DH which has the mandate for the management of water resources).

The official texts specify that the extraction mechanism and distribution system belong to the State, but is placed at the disposal of the communities.[85] The borehole remains the property of the State. Communities are responsible for operation, maintenance, repairs and replacement of all equipment except the borehole. With decentralization, the question of property rights and the sharing of responsibilities for water facilities have arisen but no clear answers have yet emerged.

[85] Presidential Decree 96317 of August 2, 1999.

Main Actors

There are six main actors in rural water supply and sanitation. These are: the rural water directorate in the Ministry for Mines; the directorate for sanitation and hygiene in the Ministry of Health; the rural communities; the municipalities (communes); the private sector and donors.

The Ministry for Mines, Energy and Water, through the *Direction Hydraulique* (DH), is responsible for water supply in rural and semi-urban areas (i.e., those not covered by SONEB). According to the Decree 96-615 of December 31, 1996, the DH has the following areas of responsibility: draft and suggest regulations and norms pertaining to the management of water resources and their mobilization on the one hand, and to monitor and control their application on the other; manage and oversee public sector investment in the water sector; ensure the coordination and harmonization of public sector activities in the water sector; coordinate actions pertaining to the different uses of water and promote integrated water resources management; ensure the functionality of an information system and the management of a data base on water resources and water facilities; provide support to the municipalities and other actors in the water sector; and monitor and evaluate sector activities.

In addition to the Director's Secretariat, the DH at the central level comprises three departments, viz., the Department of Water Resources, the Department of Potable Water Supply and the Department of Administration and Finance. The DH at the central level also comprises two recently-created cross-cutting units: The Unit for Strategic Development and the Internal Audit Unit. The DH has 11 regional representations (*Services Départementaux de l'Hydraulique - SDH*), equivalent to one per region except for the Littoral Region which only comprises the town of Cotonou. The DH, along with other technical directorates of the ministry, is supported by the *Direction de la Programmation et de la Prospective* (DPP), the *Direction de l'Administ*ration (DA) and the *Direction de l'Inspection et de la Vérification Interne* (DIVI) of the ministry. The DA relates to the DH on all matters regarding the recurrent budget, and the DPP on issues related to the investment budget and the monitoring of the *Budget Programme (BP)* of the DH. The DIVI is responsible for internal audits within the ministry and thus reports primarily on the efficiency of expenditures and their compliance with government procedures.

In the management of the budget, the Ministry of Mines relates to two central ministries: the Ministry of Planning (MCPPD) and the Ministry of Finance. Despite the fact that Benin embarked on the reform of public expenditures in 1999, the institutional duplicity in the management of the budgetary process remains a reality: programming and monitoring of investment expenditures is the responsibility of the MCPPD that coordinates the PIP process, whereas the Ministry of Finance is in charge of budgetary allocations pertaining to recurrent expenditures.

The *Direction de l'Hygiène et de l'Assainissement de Base* (DHAB) is responsible for the implementation of the national policy on hygiene and sanitation. The DHAB is represented in the six (former) regions by the *Services Infrastructure, Équipement, Maintenance,*

Hygiène et Assainissement de Base (SIEMHAB). These regional structures are supervised and controlled by the regional public health directorate and the DHAB. The regional structures comprise, amongst other staff categories, hygiene officers that operate in the communities and in health centers.

The rural communities are closely involved in the implementation of the rural water supply programs and the management of water facilities. They are consulted on the technology(ies) to use and are assisted in the establishment of management structures. However, they are not usually involved in the selection of contractors and service providers for the construction of water facilities. Operation and maintenance is the sole responsibility of the beneficiaries through Water Point Management Committees for boreholes equipped with a hand pump and/or modern wells and through the Association of Water Users in the case of piped water supply systems. In general, the Association of Water Users delegates the operation and maintenance of the piped scheme to an individual remunerated on the basis of the volume of water sold. The public stand posts are likewise often managed by vendors. These staff members refer to a steering committee composed of persons elected or nominated by community members.

According to the legal texts on decentralization, water supply and sanitation is henceforth the responsibility of municipalities[86] that were installed in March 2003.[87] However, it is specifically mentioned that municipalities in planning and implementing water supply and sanitation activities must respect national strategies. The municipalities are now fully responsible for planning of water and sanitation related activities based on Municipality Development Plans, for contracting of service providers and contractors, and for monitoring the operation and maintenance of the facilities.[88] The municipalities are expected to establish their own technical services, or request assistance from the technical services of the Government and/or the private sector. Municipalities are also allowed to delegate their overall responsibility to, for instance, the regional representations of the DH.

The involvement of the national private sector (contractors, consultancy firms, NGOs) constitutes a prominent element of the national strategy. Around 20 national consultancy firms currently operate in the field of water supply and sanitation.[89] There are also a large number of individual consultants working more or less permanently in the sector. Due to the instability of the sector market, firms experience, however, serious problems in retaining qualified staff and in providing the necessary capital investment for the development of their businesses (vehicles, technical equipment, computers, etc.).

Although the total number of firms suggests an apparent overcapacity in borehole drilling and construction of well, many firms do not have the necessary equipment and human resources to successfully carry out the work. This is noted in a report written during the

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[86] These are the same as communes.

[87] *Loi N°97-029 du 15 Janvier 1999 portant organisation des communes en République du Bénin,* section 3 on environment and hygiene.

[88] It is anticipated in accordance with the national procurement law (para.11) that regional tender boards will be established.

[89] DANIDA 2003. "*Document de Programme – PADSEA 2,*" draft version, February.

preparation of the Danish support to the private sector operating in the water sector, which also notes that many bidders for these types of contracts are firms only intervening periodically in the water market.[90] Bidders often offer extremely low prices leading to poor quality of work, substantial delays and even breach of contract due to the inability of the contractors to satisfactorily complete the work. Compared to other countries in the sub-region, there are a large number of national NGOs in Benin. The main problems encountered with national NGOs are their limited number of permanent staff and the fact that the temporary staff recruited for specific assignments are often not adequately qualified for the task. Nevertheless, notable progress in NGO performance has been observed since the introduction of the PADEAR strategy.

A framework for dialogue between the Ministry of Mines and its national and international partners was established in 2002 through the annual sector review, in which the Ministry of Finance and the Ministry of Public Health also participate. An excellent collaboration has developed between the main donors of the sector during the last few years through the joint funding of technical support missions, regular exchange of views, harmonization of technical and institutional support programmes and of the support to the preparation and monitoring of the DH's program budget.[91] The main donors contributing to the development of the sector are currently Denmark, Germany, Belgium, the World Bank and the Netherlands (Annex 5.1). The *Agence Française de Développement* (AFD) is in the process of preparing a new phase of support to the sector and the African Development Bank is envisaging the preparation of a programme in 2005.

Budgetary Reforms

Recent budgetary reforms confer total responsibility to sector ministries like the Ministry of Mines for the intra-ministerial distribution of the budget based on the overall allocation approved by the Ministry of Finance. Budgetary allocations are known for a three-year period under the Medium-Term Expenditure Framework (MTEF). The MTEF is used by the Ministry of Mines as a tool for dialogue with its development partners thereby reinforcing a programmatic approach based on known sector budget allocations.

In 2002, the Government of Benin included the water sector in the budget reform process. The Ministry of Mines drafted the program budget for the period 2002-2004. The program budget of the ministry comprises four programs: three programs based on the missions assigned to the ministry through the Decree 96-615 of December 31, 1996 (Mines, Energy and Water) and one program regarding the Central Administration. Allocations are based on objectives, results and indicators, thus making it possible to assess the impact and the efficiency of the program.

The program budget has made the unification of the budget possible through the coordination of recurrent expenditures and investment expenditures (domestic and external funding). This has improved transparency as recurrent budgets are no longer to be

[90] Component Description: DANIDA 2003. "*Appui au secteur privé intervenant dans le cadre du PADEAR*," February.

[91] Noteworthy in this respect is the harmonization of the logical frameworks of the GTZ and DANIDA assistance to the institutional development of the DH.

established as counterpart funding for a specific project but are integrated in the rolling recurrent budgets of the implementing structure.

The 2002 review of the budget reform in the Ministry of Mines revealed that the innovations introduced with the budgetary reform process still need improvement. The following recommendations were made: (i) the sector strategy should be adapted to the Poverty Reduction Strategy Document; (ii) priority activities in terms of impact on poverty reduction should be identified within the available financial resources; (iii) the calculation of unit costs of the activities of the programs should be improved based on reference costs; (iv) the suggested expenditures should be categorized by nature of the expenditures in respect of the Government's budgetary and accounting nomenclature; and (v) new activities should be better justified.

Despite the improvements achieved by the reform, the national tendering procedures, the cyclic execution of the national budget and the expenditure cycle deserve particular attention in order to improve the execution of the DH's program budget.

Water and Sanitation Coverage in Benin

Access to Potable Water

Out of a total rural and semi-urban population totaling 6 million people, approximately 2.6 million inhabitants had in principle access to a potable water point in 2002, yielding a national equipment rate of 44 percent (table 5.2). These figures represent the coverage provided by total investments made in the sector.

Approximately 20 percent of the facilities are non functional. The number of functional facilities amounted to 8,451 water points in December 2002, thus the coverage rate is 35 percent, providing potable water to 2.1 million inhabitants. The causes of the non-functionality are not yet precisely known. The reasons most commonly mentioned for the non-functionality of the water schemes are dry wells/boreholes, the difficulties in finding spare parts (especially for the Afridev pumps), and the lack of commitment and/or absence of organizational capacity within the communities to mobilize funds for the repair of the broken-down facilities.

It is estimated that more than 90 percent of all potable water supply investments in Benin have been implemented through the DH. This estimate has been derived by using the census of water points carried out in 2002 and the number of water points created by the DH. Approximately 1,000 water points have been created by NGOs, Ministry of Agriculture, religious organizations, and individuals. It has not been possible to calculate the total value of these investments.

Table 5.2: Equipment Rate by region, December 2002

Region	Population 2002	Borehole with Hand Pump	Modern Well	Rural piped Scheme (AEV)	Public Stand Post	Rural piped Scheme (PEA)	Total number of water points end of 2002	Equipment rate 2002 in %
Alibori	513,682	474	602	4	24	0	1,124	55
Atacora	541,261	916	366	5	21	0	1,324	61
Atlantique	794,682	267	401	30	210	30	1,208	38
Borgou	711,105	613	719	6	32	0	1,396	49
Collines	523,161	915	211	19	140	1	1,410	67
Couffo	514,253	474	115	25	179	2	955	46
Donga	345,698	193	369	7	39	0	640	46
Mono	351,389	218	92	10	111	0	532	38
Ouémé	713,212	394	35	13	87	0	603	21
Plateau	402,400	322	2	16	127	6	602	37
Zou	585,726	562	51	9	47	2	715	31
Total	**5,996,569**	**5,348**	**2,963**	**144**	**1,017**	**41**	**10,509**	**44**

Access to Household Sanitation

In rural areas, only 14.7 percent (2001) of households have installations at their disposal allowing for the hygienic evacuation of excreta (table 5.3). In urban areas, the corresponding rate is approximately 63 percent. According to the DHS 2001, hand washing after defecation and before meals is not yet a common habit of the population in rural and semi-urban areas. Only an estimated 4 percent of the households have adopted this practice and 96 percent of all households do not have soap for hand washing. It is therefore not surprising that the prevalence of diarrhea remain high. The distribution of household latrines in Benin is as follows:

Table 5.3: Coverage Rate for Household Latrines in Benin

	1996	2001
Atacora	13.20%	9.3%
Atlantique	46.60%	58.5%
Borgou	18.10%	21.7%
Mono	19.40%	27%
Ouémé	31.10%	40.3
Zou	19.40%	22.6%
Rural areas	**7.90%**	**14.7%**
Urban areas	**57%**	**62.8%**
Bénin	**26.8%**	**33%**

Source: *Demographic and Health Survey, 1996 and 2001.*

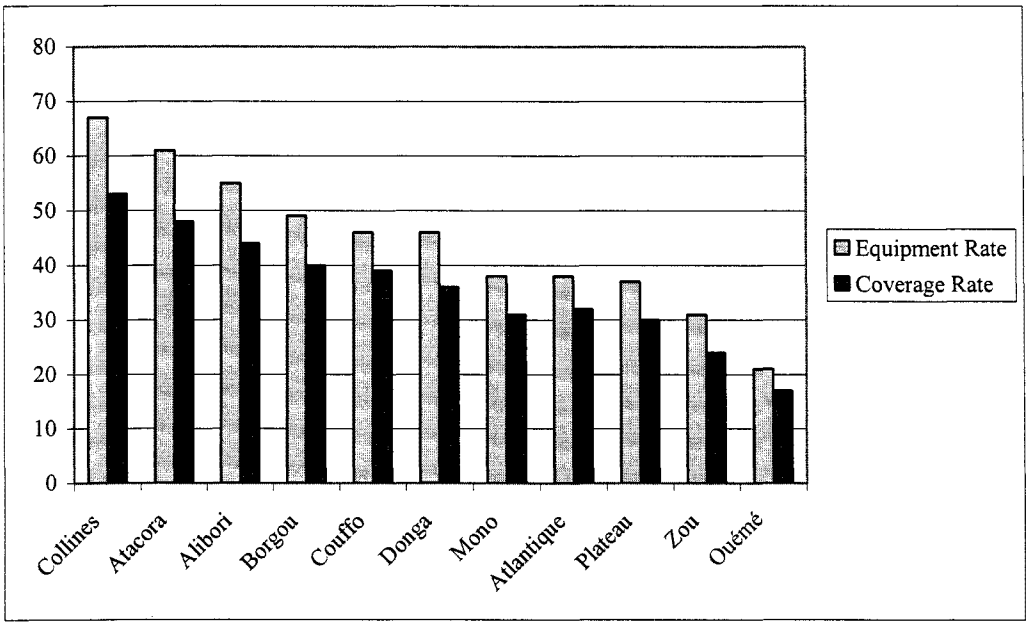
Distribution of Water Facilities in the Regions

There are significant differences in the water supply coverage rate between regions and no measures have been taken in the sector planning of investments to remedy these disparities. Both supply and demand factors have contributed to these differences. On the supply

side, the extent and nature of service provision depends on variations in hydrogeological conditions (accessibility to ground water resources) and donor investment programs, which are often exogenously determined. On the demand side, the density or dispersion of the habitat and the relative value placed by households on a potable water supply or sanitation facility influences the effective demand of the community for a new water facility. The existence of alternative unsafe but low cost water supply sources (surface water) which is a substitute for higher cost "safe water" also influences the demand for the latter.

Regions with a high coverage rate also have a relatively higher rate of nonfunctional facilities compared to regions which are less well served (chart 5.1). One possible explanation of this phenomenon is that the facilities in the relatively well equipped regions are older. The frequency of breakdowns increases with age, while repair costs are higher and access to spare parts to older types of pumps is generally more difficult. The demoralization of communities facing more and more frequent breakdowns, the difficulties of mobilizing funds for expensive repairs and the lack of regular monitoring and technical support from the DH are other factors which contribute to this trend.

Chart 5.1: Equipment and Coverage rates by department, 2002



An analysis of the planned investment expenditures (2004-2006)[92] reveals that the regional disparities will remain more or less the same over the coming years. A more equitable distribution of investments does not apparently constitute a criterion in the planning of sector activities. No measures have yet been taken by the DH either to influence the plans of the donor funded programs or to address this discrepancy through domestically funded

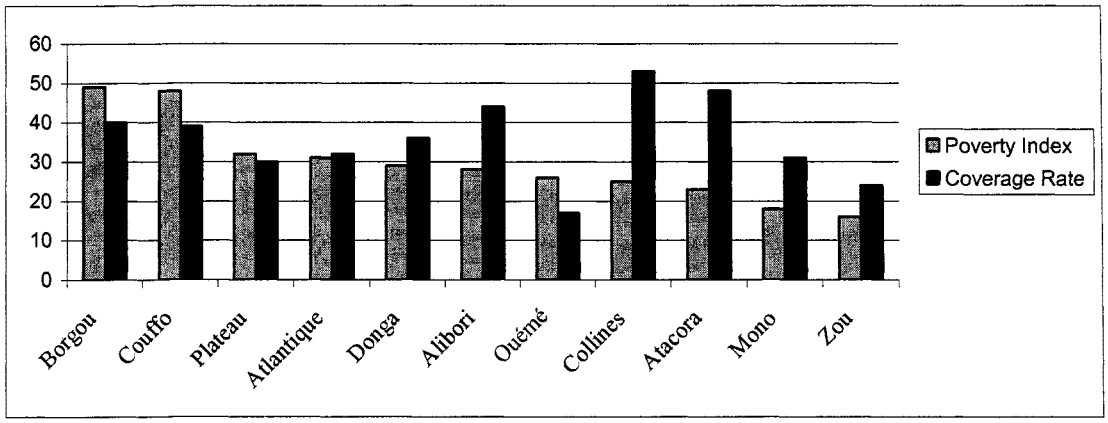
[92] *Budget Programme 2004-2006 de la DH. Version provisoire en date du 7 octobre* 2003.

projects. However, without ensuring greater geographical equity in water supply coverage, Benin cannot hope to achieve the MDG.

The Poverty Dimension in the Water and Sanitation Sector

There is no correlation between potable water coverage and the poverty level of the *département.* Some of the poorest regions, such as Collines and Atacora, have the highest coverage levels, whereas some regions that are less poor, like Couffo and Plateau, have relatively low coverage (chart 5.2). As pointed out earlier, demand is influenced by the availability of alternative water sources and the relatively poorer regions of Benin do not have such sources; the relatively better off regions, by contrast, have access to surface water supply. Since many consumers lack information on the benefits of safe drinking water, the existing demand-responsive approach leads to underinvestment in potable water.

Chart 5.2: Poverty Ranking and Potable Water Coverage Rates in the 11 regions



Further, the relatively small contributions to the initial investment do not constitute an impediment to investment even in poor communities. This is one of the conclusions of a study on socioeconomic problems and poverty carried out in 2003 in the rural water supply sector.[93] Out of the 30 percent of communities which did not manage to finalize their application for support to a water supply facility, only one-third indicated that lack of funds was the main reason. The study further concludes that "these communities face serious problems in mobilizing their financial contribution but if the commitment to obtain a facility is strong and if the community is given sufficient time for fund mobilization, then many of them will nevertheless succeed".[94]

Nevertheless, there are many poor households within serviced communities which are totally or partially excluded from access to potable water from installed facilities due to their inability to pay for recurrent costs. The study did not quantify their proportion in the communities. Solidarity mechanisms exist in some communities, however, to ensure that poorer segments of the population have access to potable water.

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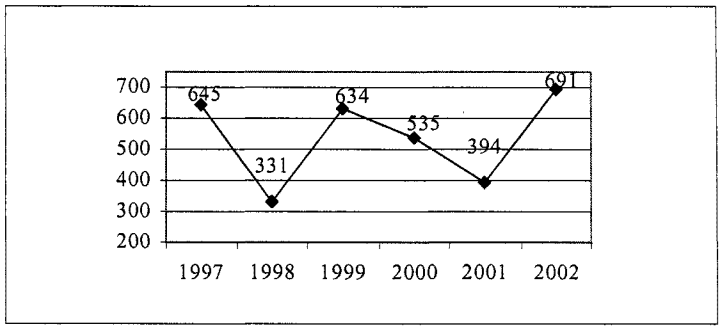
[93] *Etude documentaire des problèmes socio-économiques et de la pauvreté dans le cadre de la stratégie nationale Béninoise de développement du secteur de l'hydraulique rurale.* Helvetas Benin/Scanagri, final report, January 2003.
[94] *Ibid.*, pg. 83.

The sector has not yet developed specific strategies to better target activities to poor communities or households. The latter could be achieved, for example, by adapting the size of the initial financial contribution depending on the poverty level of the community or by providing additional subsidies to communities living in hydrogeologically difficult zones in which large investments are required. These issues are currently under consideration as part of the process of revising the national strategy for rural water supply.

Evolution in the supply of potable water (1997-2002)

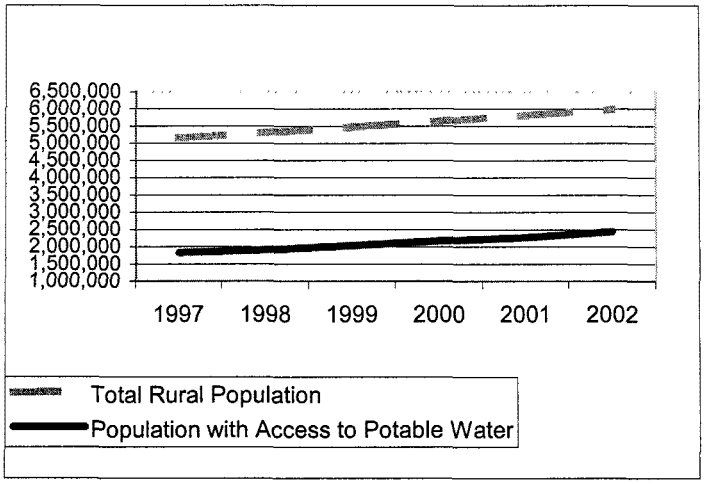
The DH has implemented a total of 3,109 water points during the period 1997-2002 (an average of 518 water points per year including the rehabilitation of water facilities). The equipment rate for rural and semi-urban water supply has increased from 33 percent to 44 percent and the coverage rate from 27 percent to 35 percent based on the new national norm (250 inhabitants per water point). During the period under review, a total of 777,250 people gained access to potable water (130,000 inhabitants per year). The yearly distribution of the water points implemented by the DH exclusively over the period 1997-2002 is shown in the following graph (chart 5.3).

Chart 5.3: Water Points implemented by the DH (1997-2002)



Despite these additional investments, the absolute number of rural people without access to potable water increased slightly during the period from 1997 to 2002 due to rapid demographic growth (chart 5.4). In 2002, there are still 3.9 million persons without access to a functional potable water point. Through the DH's investments, 777,250 inhabitants have been served between 1997 and 2002, but the rural population has increased by approximately 800,000 persons in the course of the same period.

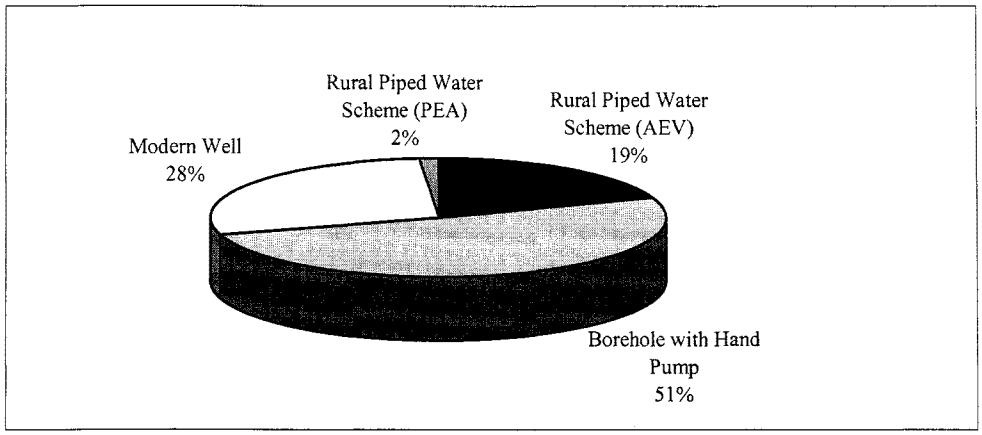
Chart 5.4: Evolution in the Access to Potable Water in Rural Areas



Distribution of Facilities according to Technology

The larger settlements appear relatively under-served compared to the smaller settlements. Only 20 percent of the 10,509 water points are facilities (piped schemes) which are more apt to serve communities of more than 2,000 inhabitants, although such settlements accounts for more than half of the rural population. Almost 80 percent of all existing water facilities are boreholes equipped with a hand pump or modern wells; i.e., facilities implemented in communities with a maximum of 1,500 inhabitants (chart 5.5).There are several explanations for this situation: (i) the ambiguity in the definition of rural and urban water supply respectively; i.e., the unclear delineation of responsibilities between the DH and SONEB, which has *de facto* limited investments in semi-urban communities; (ii) the higher initial investment costs for piped schemes (approximately US$150 per capita against US$50 per capita for a borehole with a hand pump or a modern well); and (iii) the relatively higher level of complexity in the operation, maintenance and management of piped water supply systems (testified by the gamut of problems encountered by many communities currently served by this type of facility). On the assumption that appropriate ways of managing the piped schemes are in place, more attention should be given to satisfying demand in the small towns, the more so as there are greater negative externalities associated with infectious water-borne diseases in communities with higher population densities.

Chart 5.5: Distribution of facilities according to technology (% of total water points)



Evolution of rural sanitation facilities (1997-2002)

The extremely low rate of construction of improved household latrines reflects the low priority accorded by both the population and by the government to latrine construction (table 5.4). According to information given by the DHAB, 258 (subsidized) demonstration latrines were constructed, and 417 household latrines were constructed by local masons on request from the population in 2002. Cost is likely to strongly influence demand, since the relative burden on an individual household is higher for a sanitation facility than for a neighborhood water facility. The coverage of institutional latrines (VIP latrines - Ventilated Improved Pit Latrines) is also low; in primary schools, for instance, only 27 percent of all pupils have access to a latrine (calculation on the basis of 30 pupils per latrine).[95]

Table 5.4: Construction of VIP and subsidized Household Latrines (1997-2002)

Region	VIP Latrines						Subsidized Household Latrines (Demonstration Latrines)					
	1997	1998	1999	2000	2001	2002	1997	1998	1999	2000	2001	2002
Atlantique-Littorale	23	16	50	72	20	28		143	144	286	44	
Borgou-Alibori			6	27	86	60		180	180	180	70	
Atacora-Donga			5		3	6		76	77	77		
Mono-Couffo		41	8		66	31		123	124	123		202
Ouémé-Plateau		11	12		42	2		93	94	93	20	
Zou-Collines	8	31	49	209	25	61		40	40	40	20	56
Total	**31**	**99**	**130**	**308**	**242**	**188**		**655**	**659**	**799**	**154**	**258**
Of which National Budget/PIP								419	659	656		56

Source: DHAB/ MSP, estimates: 1997, 1998, and 2000; and constructed: 1999, 2001, 2002.

[95] DEP/MEPS: *Rapport rentrée 2002-2003.*

Analysis of public expenditures in the water sector (1997-2002)

Government-Community Financial Partnership

The Government finances virtually all sector investments. The financial contribution to initial investment costs made by the beneficiaries represents approximately 5 percent of the total cost of construction. The level of contribution in the water sector is relatively modest in comparison with other sectors. The user contribution to the construction of secondary roads, for instance, amounts to CFAF 0.9 million per kilometer, equivalent to 10 percent of the total investment cost. The principle of a financial contribution to the initial investment in a new water supply facility is applied in accordance with the scales presented in table 5.5.

Table 5.5: Community Contribution per Type of Facility (2003)

Facility	Construction Costs (CFAF)	Community Contribution (CFAF)
Borehole with hand pump	5 million	250,000 of which 200,000 for construction
Modern Well	8 -10 million	270,000 of which 250,000 for construction
Rural Piped Scheme (AEV)	40 – 60 million	5 % of total construction costs
Rural Piped Scheme (PEA)	30 – 40 million	5 % of total construction costs
Modern Well – rehabilitation	1.5 – 3 million	200,000 of which 180,000 for construction
Borehole with hand pump – rehabilitation	2 million	200,000 of which 150,000 for construction

Public Funding of the Rural Water Supply Sector

A comprehensive analysis of past public expenditure trends in the rural water sector is difficult because of the multiplicity of data sources and the incompleteness and unreliability of data on executed expenditures (table 5.6). Although some investments are carried out by other ministries (Agriculture, Planning), financial data are not available for them; as the number of water points created by them are few, this will not have a major impact on overall trends. More importantly, for the years between 1997-2001, data on recurrent budget execution with the Ministry of Finance are available only for the Ministry of Mines as a whole and not for the DH in particular. The *comptes administratifs* provide these data but they have numerous inconsistencies; nevertheless, in the absence of any other data source, they have been used for the earlier years, while the SIGFIP data have been used for 2001 and 2002. For capital expenditures, the main data source is the PIP, which have been supplemented by the project execution and monitoring reports available with the DH.

Table 5.6: DH Executed Budget according to Funding Source (million CFAF)

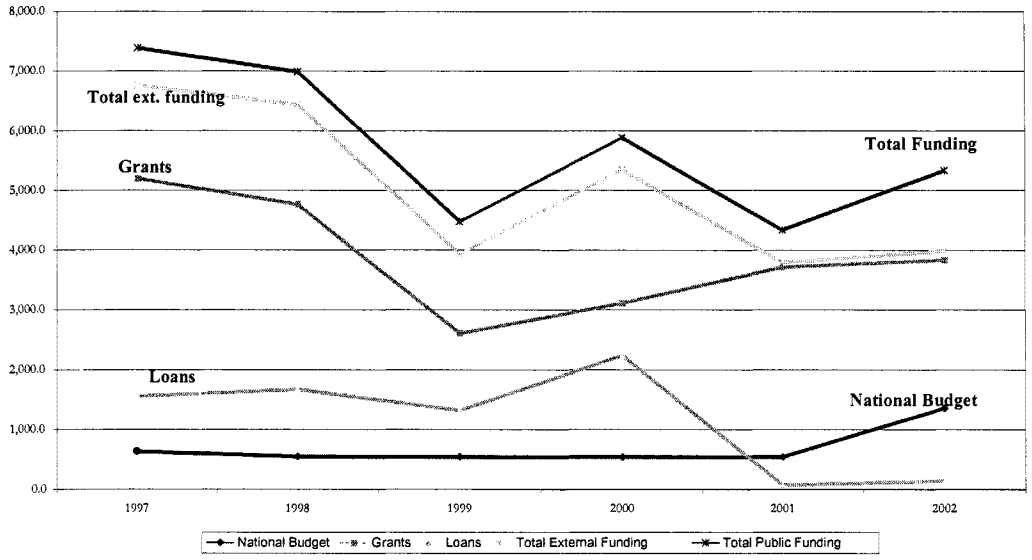
	1997	1998	1999	2000	2001	2002
Domestically Financed Expenditures	631.5	548.5	543.3	537.7	544.1	1,353.7
Externally Financed Expenditures	6,761.0	6,439.3	3,933.1	5,346.0	3,788.2	3,981.9
Grants	5,200.3	4,767.4	2,613.1	3,109.3	3,715.0	3,838.0
Loans	1,560.7	1,671.9	1,319.9	2,236.7	73.2	143.8
Total Expenditures	7,392.5	6,987.8	4,476.3	5,883.7	4,332.2	5,335.5
Total Expenditures in million of US$	12.3	11.6	7.5	9.8	7.2	8.9

Source: Budgetary Documents – PIP, *comptes administratifs*; and SIGFIP.

The rural water supply sector is still heavily dependent on external funding and more specifically on donor grants, although the share of domestic financing has increased substantially in 2002. For the period 1997-2001, external resources represented on average of 8 times the Government allocations to the sector and 87 percent of the total funding. The loans constitute a little less than 20 percent of the total funding (compared to 68 percent for grants). In 2002, the share of domestic financing increased to 25 percent.

There has been substantial annual variation in sector expenditure during the period, but the overall trend has been of declining expenditures in nominal terms (chart 5.6). From approximately 7 billion in 1997 and 1998, the public funding of the sector had decreased by 60 percent in 2001 compared to the 1997 level. The funding level in 2002 was CFAF 5.3 billion. Despite the increases in 2000 (5.9 billion) compared to 1999 (4.5 billion) and in 2002 (5.3 billion) compared to 2001 (4.3 billion), the level in 2002 still more than 25 percent lower than in 1997.

Chart 5.6: Executed Budget 1997-2002 (current million of CFAF)



Three distinct periods appear in the analysis of sector funding between 1997 and 2002, driven largely by the availability of external financing. The first period (1997-1999) shows a clear decrease in sector funding due in large part to the completion of several large water projects implemented within the context of the International Drinking Water Supply and Sanitation Decade (1980-1990). Most projects were funded by the major donors in that era (AFD, Japan, Kuwaiti Fund, OPEP) and were executed to a performance level of more than 75 percent. The second period from 2000 to 2001 is characterized by a substantial reduction of sector funding through loans and the concomitant increase in the relative importance of grant funding which coincided with the start of PADEAR projects. The Danish and German funded PADEAR projects substituted the previous loan-based projects, however without reaching the sector funding of the 1997 and 1998 levels. The third period starting in 2002 marks a substantial increase in domestic funding of sector activities. The public budgetary allocations to the DH have increased from CFAF 544 million in 2001 to more than 1,300 million in 2002; i.e., 3 times more than the previous allocations. This period coincides with the implementation by DH of the *Budget Programme* with support from the Ministry of Finance within the framework of the World Bank supported budget reform process in Benin. The increase in domestic financing is directly linked to the inclusion of the water sector in the budgetary reforms.

Expenditures on the water sector represent a small part of total government spending. Domestically financed sectoral expenditures represent less than 1 percent of domestically financed expenditures; the share of total government spending varied between 1.2 percent and 3.5 percent.

Composition of Public Expenditures in the Sector

Over the period 1997 to 2002, recurrent expenditures comprised just 4 percent of total expenditures. Until 2001, the share of recurrent expenditures was below 3 percent (table 5.7). About one-quarter of domestic expenditures has been on recurrent costs, and this share rose to 40 percent in 2002. The share of recurrent expenditures may be understated as the expenditures classified as capital expenditures (PIP) include substantial costs for salaries and maintenance as discussed later.

Table 5.7: Composition of Executed Expenditures 1997-2002 (current million CFAF)

	1997	1998	1999	2000	2001	2002
As % of Total Expenditures						
Recurrent	1.9%	1.8%	2.9%	2.5%	4.0%	10.5%
Capital	98.1%	98.2%	97.1%	97.5%	96.0%	89.5%
As % of Domestically Financed Expenditures						
Recurrent	22.5%	23.5%	24.2%	27.6%	32.1%	41.3%
Capital	77.5%	76.5%	75.8%	72.4%	67.9%	58.7%
As % of Recurrent Expenditures						
Personnel Expenditures	98.3%	98.0%	99.1%	93.9%	94.0%	29.3%
Other recurrent Expenditures	1.8%	2.0%	1.0%	6.1%	6.0%	3.7%
Transfer Expenditures	0.0%	0.0%	0.0%	0.0%	0.0%	67.0%

Source: Budgetary Documents – *PIP et SIGFIP.*

Staff related expenditure (i.e. salaries, employer retirement contributions, per diems and family allocations) constitutes a substantial part of the total recurrent expenditure. On average 97 percent was spent on salaries for the whole period. In fiscal year 2000, this imbalance started to be addressed through the allocation of CFAF 1 million to each regional SDH. This has increased the level of other recurrent expenditures from 1.3 million to CFAF 9 million in 2000. From 2002, an amount of CFAF 380 million for transfer expenditure was included in the budget. Thus, a significant change has occurred in the composition of expenditure funded through domestic resources.

Domestic resources for capital expenditure are intended for both domestic projects as well as counterpart funding for externally financed projects. Out of 14 projects identified in the current review, 12 were co-funded using external and domestic resources (counterpart funding) but counterpart funding constituted less than 10 percent of total project costs and hence absorbed a relatively small share of domestic capital expenditure. Most of the domestic funds were spent on two projects.

All projects and programs are classified as capital expenditure in the government budget but they contain a significant share of recurrent expenditures. This classification is misleading because it does not show the incremental recurrent expenditures which will have to be absorbed by the recurrent budget at the end of the project period. Out of seven projects being executed in 2001, recurrent expenditure represented 90 to 100 percent of total project cost in four projects. Among these four projects, three included salary expenses varying from 8 percent to 38 percent of the total recurrent expenditure; in one project, expenditure on salaries amounted to more than half of the total recurrent expenditure. In the three other projects, the proportion of recurrent expenditure varied from 18 percent to 44 percent and salary expenditure varied from 22 percent to 33 percent. Similarly in 2002, in seven out of eleven projects, recurrent expenditures constituted between 63 percent and 100 percent of the total project costs, and salaries constituted between 33 percent and 44 percent of total recurrent costs. Such high levels of

recurrent expenditure suggest that project funds are being used to finance normal recurrent expenditures of existing activities.

The lack of transparency in the classification of recurrent expenditures can hide inefficiencies in public spending that are hard to detect and also underestimate the future public recurrent costs of existing projects. Since all operations and maintenance activities are to be financed by the communities, this high level of recurrent expenditure within projects does not seem justified. In principle, the SIGFIP detailed tables on budget execution should provide a complete picture, but these data do not as yet include the PIP projects, which absorb most of the expenditure in the water sector. Further, even if all recurrent expenditures in the PIP were captured, a detailed analysis would be required to assess the nature of the various components of these recurrent costs.

Expenditures at the Regional Level - *Services Départementaux de l'Hydraulique* (SDH)

Expenditure at the regional level covers non-personnel recurrent expenditure and all regional offices receive the same budgetary allocation irrespective of the level of investment level in each region. Since these resources finance the technical support and oversight activities of the regional services, this distribution of allocations is not linked to the expected level of activities. The budgetary allocations to the regions amounted to CFAF 1.01 million per SDH in 2001 and CFAF 891,000 in 2002, a decrease of 13 percent. However, up to 1999, no specific budget lines were allocated to the regional offices. Since 2000 the regional SDHs have adopted separate budgetary chapters in the same way as the DH and it is now possible to identify the allocations to the SDHs.

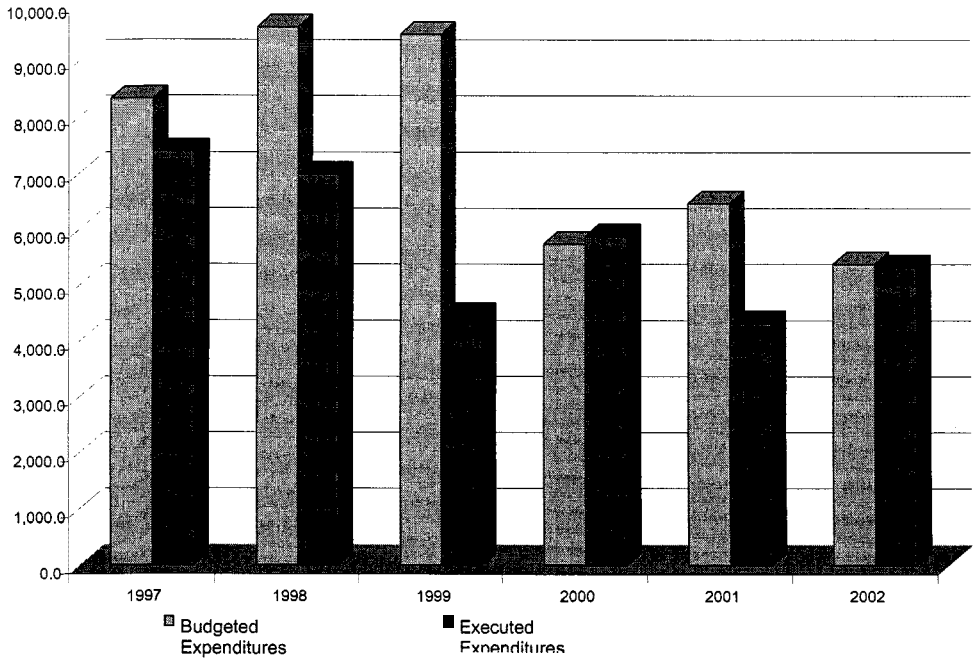
Analysis of DH Budget Forecasting and Execution

During the period 1997-2002, budgetary execution amounted to 80 percent of the forecasted budget. However, there are large annual variations in the levels of execution (table 5.8, chart 5.7). The execution level was only 47 percent in 1999 and 67 percent in 2001, compared to 102 percent in 2000 and 99 percent in 2002. The execution rate is slightly higher for domestically funded activities (79 percent) compared to externally funded projects (74 percent). A possible explanation for this difference may be the multitude of different procedures governing externally funded activities. The procedures not only differ from national ones but can also vary significantly from one donor to another. This leads to delays in budget execution and the problems are aggravated by the weak capacity of the public administration. The execution level for recurrent expenditure is relatively high (93 percent of the budget forecasts). Within this category, staff expenditure has the highest execution rate (95 percent) against 92 percent for other recurrent expenditure.

Table 5.8: Evolution of the budgetary execution rate in DH

	1997	1998	1999	2000	2001	2002
Budgeted expenditures	8,332.3	9,603.4	9,480.7	5,744.3	6,470.1	5,389.5
Executed Expenditures	7,392.5	6,987.8	4,476.3	5,883.7	4,332.2	5,335.5
Execution rate	89	73	47	102	67	99

Chart 5.7: Evolution of DH budgeted/executed expenditures, 1997-2002 (millions CFAF)



The large annual differences between budgeted expenditure and executed expenditure reflect weaknesses in public expenditure management. The elapsed time between the preparation of tender dossiers and the submittal of signed contracts (with the successful contractor/service provider) is typically up to 12 months according to a recent review of contracts entered into by DH in 2002/03.[96] Furthermore, a period of 3 to 6 months is needed for the administrative procedures between tender evaluation and the commencement of works. Another factor is that government procedures do not allow for committing new expenditures from October while payments cannot be effected from November. Finally, inadequate budget preparation resulting in unrealistic budget requests is also a contributory factor. A better collaboration between the DH and the DPP in the preparation of the *BudgetProgramme* and the annual budget would improve both budgetary forecasts and ultimately actual expenditure.

Efficiency in the Sector

Linking performance with budgetary allocations is difficult because of lags between realized expenditures and construction of facilities and because expenditure on facilities construction is not known. As can be seen from table 5.9, there is no correlation between the number of constructed facilities and the total capital expenditure. The latter include substantial recurrent expenditures which may not all be related to construction of new facilities. Further expenditure imputed to the annual financial statement includes both ongoing expenditure and/or expenses committed/authorized in previous years but not

[96] Study carried out by the program *Appui Institutionnel à la DH* (Danida funding). No date.

paid before the close of the annual budgetary exercise. This means that an executed amount included in year "n" might also comprise payments for the years "n-1" and "n-2". At the technical level, several activities other than the construction and completion of a water point itself have to be executed (for example, social mobilization, training, technical studies, purchase of pumps). The expenditure related to these activities, is often spread out over a period of 2 to 3 years, and cannot be linked directly to the construction of the water facility itself.

Table 5.9: Constructed Water Points and executed investment expenditures 1997-2002

	1997	1998	1999	2000	2001	2002
Number of constructed Water Points	645	331	513	535	394	691
Investment Expenditures	7,250.7	6,858.8	4,345.0	5,735.3	4,157.8	4,776.8

The "Borgou-Alibori" project started in 1998 clearly illustrates why it is so difficult to link executed expenditure to the annual "production" of water facilities. The total executed expenditure for 1998/99 (CFAF 1.3 billion) was used for training (i.e., NGOs, small and medium-size enterprises, water committees), local consultancies, office and computer equipment, vehicles and international technical assistance, i.e. for preparatory or complementary activities which precede and/or accompany the actual construction works. The latter started in year 2000 but represented only 2 percent of the expenditure executed in 2000, 24 percent in 2001 and 26 percent in 2002.

Meaningful indicators for measuring efficiency in both construction as well as operation and maintenance need to be developed. Since operation and maintenance is financed by both public funds (technical support provided by SDH) and community financing, indicators need to be developed for both aspects.

Unit Costs – Rural Water Supply Facilities

The unit costs currently being used by the DH in programming activities are based on actual costs incurred during past contracts with national firms. Table 5.10 below presents the unit costs per type of facility (total estimated installation costs - design, supervision, social mobilization etc. - related to a completed facility).[97] The cost ranges from about US$11,500 for a borehole equipped with a hand pump to US$14,500 for a modern well and US$146,000 for a rural piped water scheme.

[97] *Budget Programme* DH 2004-2006.

Table 5.10: DH Unit Costs for different type of facilities, 2003

Facility	Cost in CFAF	Cost in US$[a]
Borehole equipped with a hand pump	5,950,000	11,472
Modern Well	7,500,000	14,461
Rural Piped Scheme (AEV)	75,500,000	145,571
Rehabilitation of borehole with hand pump	1,600,000	3,085
Rehabilitation/extension of Rural Piped Scheme (AEV)	20,750,000	40,008
PEA	22,600,000	43,575

a/ Exchange rate: 1 € = 655 CFAF, 1 € = US$1.26.
Note: includes the cost of studies and social mobilization.

The cost of an equipped borehole in Benin (including hand pump but excluding costs of studies, supervision and social mobilization) is higher than estimates obtained from other African countries. This cost in Benin including all amounts to US$9,600 (CFAF 5.95 million) with 18 percent VAT included and US$8,100 with (CFAF 4.2 millions) if the VAT is excluded.[98] In contrast, other African countries have experienced substantially lower installation costs as shown in table 5.11.

Table 5.11: Cost of a borehole with hand pump in other African Countries, 2003 (US$)

Ghana (60 meters - 2002)	6,200[a]
Malawi	5,000
Uganda	9,133
South Africa (50 meters - 2002, Mpupalanga)	4,200

a/ Borehole of 60 meters: US$4,500 ; Pump (Vergnet or Modified India Mark II) : US$800, Siting: US$900. Figures confirmed by the Community Water and Sanitation Agency - Ministry of Works and Housing, Ghana.
Source: World Bank 2003. "Background Paper on the Water Sector," in Mozambique Public Expenditure Review, Washington D.C: World Bank, May.

Limited competition in public procurement markets may contribute to raising unit costs in Benin. In accordance with the national strategy, tendering of drilling contracts is *de facto* open to national firms only and the volume of work is modest (often less than 50 boreholes per contract). This limits considerably the potential benefits arising economies of scale. Only four domestic companies are qualified and equipped to carry out such works.

The unit costs have remained quite stable for all types of equipment except for modern wells.[99] The latter has apparently diminished by 15 to 20 percent according to the findings of an analysis of the evolution of actual contract prices in the period 1997-2002. The relative stability of prices may also reflect limited competition among drilling firms.

Recurrent Costs associated with Water Supply Facilities

The costs associated with the operation, maintenance and replacement of water supply facilities (boreholes excluded) are expected to be borne entirely by the beneficiaries. Trained artisans and the equipment suppliers' maintenance services (pumping systems) operate on request from the communities to ensure adequate maintenance and repair of the facilities.

[98] DANIDA 2003. *Rapport de Mission, Assistance technique à la composante "Appui institutionnel" - PADSEA - Danida à la DH*, July 11.

[99] Estimate on the basis of a limited sample of contracts entered in 1997, 2000 and 2002. The quality of the information is however questionable.

A private network for the distribution of spare parts for hand pumps has in principle been established nation-wide. The cost of maintenance influences the choice of equipment: typically, modern wells require low-cost maintenance (ropes and buckets which are available in local markets). At the other extreme, piped water schemes require the most sophisticated type of maintenance.

In most cases, water from pumps and wells is not sold at source despite the recommendations of the DH and hence there is no stable fund available for operations and maintenance, nor for replacement of these facilities. Communities often collect funds for repairs on an ad hoc basis and, therefore, the facility can remain nonfunctional during long periods. The DH recommends that each water point committee collects a minimum amount of CFAF 19,500 per month for maintenance and replacement of the facility (CFAF 9,500 for maintenance and CFAF 10,000 for replacement).[100] Communities with a well or a pump from which water is sold normally apply a tariff of between CFAF 250 and CFAF 750 per m^3.

Communities with piped water supply schemes do sell water and manage to accumulate a significant amount of funds after 3-5 years of operation. In accordance with DH's instructions to the associations, these funds are usually placed in a blocked bank account.

Existing water tariffs appear adequate to cover operation and maintenance as well as eventual replacement of the facility. When water is sold, the approximate cost for a household of 8 people amounts to ca. CFAF 7,200 per year (calculated on the basis of an average tariff of CFAF 500 per m^3). Based on an average of 5 liters of sold water per person per day (when sold, water is normally used only for cooking and drinking), the potable water cost amounts to CFAF 75 per person per month. In a community of 250 persons – the norm for a borehole equipped with a hand pump – the annual income from sale of water would generate CFAF 225,000, which would be sufficient to cover operating costs (remuneration of a water vendor, maintenance costs) as well as replacement of the equipment. In the case of a piped water scheme, the tariff being fixed by the water association typically amounts to CFAF 500 per m^3. The cost of operation, maintenance and replacement of the equipment varies from one facility to another depending on the energy source (thermal energy being more expensive than, e.g., solar power and power from the national grid), the capacity and configuration of the equipment and the number of consumers. Nevertheless, a rough calculation shows that the annual income from sale of water in a community of 2,000 inhabitants served by a piped scheme would, potentially, amount to CFAF 1.8 million, which would be sufficient to cover operation and replacement costs.

Water tariffs do not pose an unaffordable burden for most households since in most cases, people use potable water only for cooking and drinking. They rely on other water sources for their other needs.

Hence, the main problem in financing the operation and maintenance costs as well as replacement is not the level of the water tariff but collection efficiency and the management

[100] *"Stratégie nationale de l'approvisionnement en eau potable et de l'assainissement en milieu rural du Bénin,"* draft 3, December 2003.

and use of accumulated funds. Community management of larger and complex systems (usually piped schemes) often encounters serious problems. Benin has also experienced these types of problems, especially in the Lac area. The development of improved management models (e.g. professional management contracts or privatization of the facilities) is currently being considered by the DH. This type of initiative is welcome, especially in the context of sharing the funding of sector development between the beneficiaries (on the basis of the water tariff) and the Government. The AFD intends to support the development of new management models in the water sector from 2005.

Public expenditure on sanitation

Public funds allocated for sanitation in rural areas represented only 10 percent of the investment funds allocated to the rural water supply. From 1997 to 2002, latrine construction and awareness-raising on hygiene has mainly taken place through the PADEAR programs funded by Germany, Denmark and the World Bank (table 5.12). Other donors include WHO, UNICEF, Japan and the National Budget.

Table 5.12: Investment Budget 1997-2002 – Latrines (million CFAF)

Program/project	Funding	1997	1998	1999	2000	2001	2002	Total
Water-Hygiene-Environment	UNICEF	30	30	30	30	61	58	*239*
Health – Environment	WHO	30	24	24	40	40	40	*198*
PADEAR								
	GTZ/KFW[a]	0	20	40	10	127	10	*207*
	DANIDA	0	0	200	150	350	300	*1.000*
	IDA/DANIDA	104	104	104	250	0	0	*562*
Japanese grant	Japan	0	28	14	0	0	0	*42*
PSP	IDA	0	0	16	25	25	0	*66*
PIP	National Budget	0	100	96	50	88	75	*409*
PDSS	IDA	0	0	0	35	14	0	*49*
Total		**164**	**306**	**524**	**590**	**705**	**483**	***2,772***

a/ *Gesellschaft für Technische Zusammenarbeit* (GTZ- German technical cooperation agency) and *Kreditanstalt für Wiederaufbau* (Agency for financing development).
Source: DHAB/MSP.

Conclusions and Recommendations

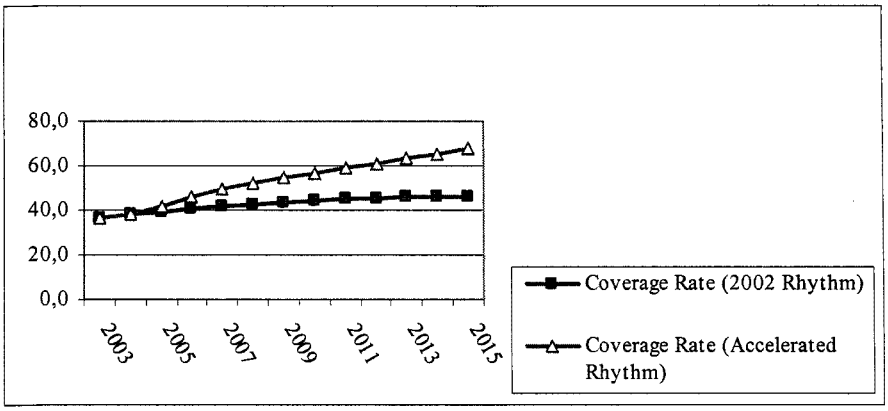
Towards the Millennium Development Goals

Achieving the MDGs by 2015 implies that the rural water coverage rate in Benin should increase from 35 percent in 2002 to 67.5 percent in 2015. This will require that 6.3 million Beninese living in a rural or semi-urban environment gain access to potable water by 2015.[101] An additional 4.2 million inhabitants should be provided access in the period 2003-2015.

[101] With an average annual growth rate of 3.52 percent (growth rate for the period 1992-2002 according to INSAE) the rural population would amount to more than 9.4 million in 2015. Information provided by the DH's *Cellule de la Banque de Données.*

In order to achieve the MDGs, the pace of annual implementation will have to be more than doubled compared to the period under review. About 17,500 new water points need to be constructed in the course of the period 2003-2015, equivalent to 1,350 water points per year. To this should be added approximately 200 water points per year to cater for the rehabilitation of facilities breaking down throughout the period. This compares with the current average annual rate of construction of 518 facilities. Chart 5.8 shows two possible scenarios for the evolution of the coverage rate in a MDG perspective. The first scenario, based on the current implementation capacity in the sector, shows that the coverage rate will reach only 49 percent of the MDG targets by 2015. The second scenario aligns the investment level to achieve the MDG targets.

Chart 5.8: Evolution of Water Supply Coverage rate 2003-2015; 2002 Rhythm and Accelerated Rhythm



The annual investment expenditure will have to increase by 2-3 times over the present level. Based on the unit costs used in the DH's *Budget Programme* 2004-2006, it is estimated that achieving the MDGs will require between CFAF 120 and 140 billion or approximately 9 to 14 billion per year for investments alone (construction works, studies, supervision and social mobilization). To this should be added the government's incremental costs related to planning, implementation management and the regular monitoring of activities. The total investment budget (domestic and external funding) in 2002 amounted to CFAF 4.7 billion.

At first sight, the achievement of the MDGs might seem impossible when the current capacity of the sector and the magnitude of the required funds are taken into account. The objectives constitute a major challenge and an extraordinary opportunity to reconsider implementation and sector funding modalities, and to develop new forms of partnerships.

The Government is probably not in a position to provide all the funds required to meet the MDGs (at least CFAF 9 billion per year). As discussed above, public expenditure in the water sector has decreased dramatically in the period 1997-2002 and, even though now on the increase, domestic funds only partly compensate for the decrease in external funding of sector activities. It remains unclear if this decrease in sector funds will continue or not.

However, current political trends are rather favorable towards the water sector. The improvement of access to potable water constitutes a priority for Benin as clearly stated in the Government's Poverty Reduction Strategy Document adopted in 2003. Moreover, the international community has committed itself at the Earth Summit in Johannesburg in 2002 to assist developing countries in achieving the MDGs with a view to reducing poverty by half and to improving access to potable water and management of water resources.

To take up the challenges posed by the MDGs, the water sector has to: (i) increase its absorption capacity; (ii) increase the efficiency of public expenditure; (iii) seek new ways of increasing support to the sector; and (iv) share funding sector activities with other partners. The following recommendations are grouped under each of these headings.

Increase absorption capacity in the sector

Improving expenditure management is critical to increasing absorptive capacity. Specific actions include: strengthening the knowledge of budget administrators (*gestionnaires de credit*) on procedures for budget execution; advance preparation of a plan for commitments; clarifying procedures for the preparation and validation of tender dossiers; anticipating the difficulties encountered in contracting, and systematically monitoring the duration of each step in the planning of contracts and in the expenditure cycle.

The Ministry of Mines has to prepare itself for the introduction of procedures related to a program authorization and annual payment credits, which will be introduced by the Ministry of Finance and Economy with effect from 2005. The possibility of committing expenditures over several years will positively impact on the utilization of the capital budget by reducing both the number of tender dossiers to be prepared and launched and the number of contracts to be prepared, approved and monitored. This will also make it possible to reduce the duration of the various steps in the tendering and contracting process that, despite improvements achieved through the reform of public tendering procedures, remain very long and can adversely impact on the use of credits.

Increase efficiency in public spending

More attention should be given to activities related to sanitation and the development of behavioral changes within hygiene, as these aspects have a decisive impact on the improvement of heath conditions, a core objective of water supply investments. These include safe disposal of waste and washing hands with soap which can substantially reduce the spread of diarrheal diseases.

A national strategic action plan for rural water supply and sanitation within the perspective of the 2015 objectives should be prepared with a view to guiding the preparation of the DH's three-year program budgets. The preparation of this plan could start in June 2004 with the assistance of, for example, the Water and Sanitation Program and other partners in the sector. The plan would make it possible to enhance equity in public spending, to address poverty issues in a more concerted way and to continuously monitor the process of moving towards the achievement of sector objectives. The preparation of this plan is

necessary as the program budgets of the DH have not been prepared to date on the basis of long term and global strategic considerations.

There is a need for DH to develop strategies and modalities on how to enhance geographical equity in the access to potable water and thus gradually to ensure regional equity in water coverage throughout the country. Lack of information among households regarding the benefits of using safe water is a factor constraining demand. These constraints occur especially in the southern part of Benin. The DH needs to adopt strategies to reinforce awareness-raising and training on the benefits of potable water with a view to generating greater demand in the medium- and long-term perspective. Moreover, special programs in zones which pose particular hydro geological difficulties should be developed.

The reduction of unit costs for borehole drilling in Benin should constitute a priority in the sector. Benin must foster greater competition by allowing regional companies (within the UEMOA zone) or even international companies to tender for drilling contracts and by increasing the volume of work agreed under each contract. This recommendation also applies for the construction of piped schemes.

Enhanced functionality of the facilities should also constitute a priority as the current level of 20 percent is unacceptably high. The DH must give much more attention to the monitoring of the distribution of spare parts in the regions. The supply of parts is a contractual responsibility of the pump supplier and the DH needs to monitor regularly that regional spare part shops are adequately supplied. The strengthening of the network of artisans providing pump maintenance services should also by addressed by the regional water offices in order to improve performance. Since 2002, the DH has received substantial additional funding, to monitor water facilities and the spare parts network. The increased financial resources to DH for these activities must result in an enhanced rate in the functioning of the facilities.

The DH must take action to improve management of piped schemes (AEV) through support to more professional performance-based management systems. The DH should revise its current policy on the use of accumulated funds for replacement as it limits the development of the water service. The DH must provide support to the operators of the piped schemes in terms of management and development strategies for the water service and assist the communities and the municipalities in entering into management contracts with local private operators (*affermage*) before major problems in operation and maintenance occur. Management committees formed purely on the basis of volunteers are insufficient to manage the more sophisticated schemes such as piped water supply. The forthcoming AFD support to the sector will provide institutional support to DH in this respect. Enhanced management of the facilities will ensure a better sustainability of investments as well as provide resources for the extension of the water service through improved collection efficiency and funds management.

Another element in the search for reduced unit costs is the development of new technologies and the simplification of existing technologies. This aspect is currently being considered in the context of the revision of the national sector strategy.

Increase support to the sector

Donors need to provide support to the sector in the form of budget support and to participate in the strengthening of national plans, programs and procedures. Currently, the sector remains very dependent on donors who continue to provide most of their support in terms of projects, each with their own specific modalities and procedures. This strains the limited capacity of the DH. A shift towards programmatic support will also reduce the transaction costs associated with the preparation, implementation and monitoring of different donor projects. This makes it possible to allocate additional resources to other investments and post-investment monitoring. Convincing donors to modify their project approach, however, requires a major effort on the part of the GOB to strengthen dialogue, improve transparency, battle against corruption and improve the efficiency of national procedures.

The orientation towards monitoring results and performance, as reflected in the program budget, based on results, needs to be reinforced. Implementation based on objectives, activities and indicators related to expenditure in the framework of a unified budget makes it possible to evaluate program efficiency and performance and provides greater transparency than in the past. The Ministry of Mines and the DH in particular must use the *Budget Programme* as a tool for dialogue with their partners in order to strengthen their participation and enhance transparency and the financial and technical monitoring of sector activities. The ongoing establishment of a sector data base constitutes an important element to enhance planning and monitoring as is the development of standard periodic report formats approved by all partners, including the Ministry of Finance and Economy and the Ministry of Planning.

The development of a mechanism to monitor cost efficiency is required to encourage partners to support the sector, in particular through the national budget. Such a mechanism would provide reliable and updated financial data to the budget preparation process on the one hand and make it possible to detect irregularities on the other. Suggested indictors to monitor cost efficiency are as follows: (i). unit costs (boreholes, wells, piped schemes); (ii) per capita cost for water delivery; (iii) completed facilities per year compared to executed expenditures; and (iv) ratio of recurrent costs to investment costs.

The annual sector review process initiated in 2003 is an excellent means of improving communication and monitoring and should continue. The preparatory work preceding the review (funded by DANIDA, AFD and the Water and Sanitation Program/WB) aims to assess the national program and to strengthen the capacity of the ministry and the DH in terms of monitoring, internal control and financial reporting. The suggestion to invite the private sector (contractors, NGOs and consultancy firms) and the municipalities to participate in the 2004 review constitutes an excellent new opportunity to discuss the challenges of the sector in the years to come and to jointly seek solutions from all partners to the problems related to the absorption capacity in the sector.

Develop new partnerships to fund sector activities

The user contribution to initial investments is very low and ways of increasing it should be considered. The current financial contribution amounts to between 3 to 7 percent of the total investment (installation costs). The initial contribution to the capital cost could be increased to 10 percent to be paid before the start of construction or through two installments (the first to be paid before the start of construction and the second after one year of operation). This would compel communities to establish systems to generate funds to defray the initial investment costs and would increase funds that could be used to serve other communities. In the case of poorer communities (criteria to be defined), the user contribution could be paid gradually over a number of years. This user contribution system would be applicable for hand pumps and modern wells.

The development of new ways of funding investment through the private sector should also be investigated, especially in relation to the construction of piped schemes in settlements of between 2,000 to 10,000 inhabitants. However, to involve the private sector in the funding of the initial investment and in the operation and maintenance of water facilities will require strong support and commitment on the part of Government. The ongoing decentralization process, through which responsibility for water supply will be transferred to the municipalities, may also provide opportunities to develop partnerships with the private sector. The DH should support the municipalities in this respect because direct municipal management of water facilities has often proven difficult. The decentralization process requires a repositioning of the DH to ensure that it essentially plays a facilitative role towards the municipalities. This would also imply that the DH should now start assisting the municipalities in setting up professional management systems of existing and new piped schemes.

Developing and expanding piped schemes through funds generated by the sale of water represents an important way of achieving the MDGs. Some of the associations with substantial accumulated funds have started to invest a part of these savings to improve their water service (installation of additional public stand posts and of household connections) instead of leaving the funds idle in a bank account. There are approximately 150 rural piped water schemes in Benin. If each of them constructs two water points per year with their own funds, this would represent half of the number of water points funded yearly by Government. It is therefore crucial that the DH encourages such initiatives and provides all the necessary support to enhance the professional management of rural piped schemes in order to make it possible for the communities to further develop their water services on their own.

The DH should renounce funding the extension of rural piped schemes and give priority to funding of facilities in communities without a potable water facility. Public funds (domestic and external) should be used to meet potable water needs in communities without access to potable water. The extension, rehabilitation and replacement of equipment in existing schemes should be the responsibility of the communities themselves, except in special cases such as, for example, the rehabilitation of points sources with an obsolete hand pump for which spare parts are no longer available.

The decentralization process should also create new financial resources that will enable

municipalities to contribute to the improvement of water services. However, it is too early to assess the total amount of this type of funding and the possible impact in the years to come in terms of increase of the water supply coverage.

Annex 5.1

Donor Participation in the Rural Water Sector

DANIDA contributes to the development of the sector through the water supply programmes in five regions (Zou, Atlantique, Collines, Borgou and Atacora) and also provides institutional support to the DH and the regional SDHs. A second phase of the Danish support to the sector (2005-2009) is currently under preparation. Within a budget of US$46 million, the program will comprise support to increase water supply coverage in four of the regions supported in the first phase (Collines is no longer included), strengthen the DH and the municipalities, support the development of the management of water resources and sanitation through the Ministry of Public Health, and strengthen the role of the private sector.

Germany currently supports several projects in the Mono, Couffo, Plateau and Ouémé Regions and is also providing institutional support to the DH and the regional SDHs. The next phase of the program (2005-2008) of German support will comprise a budget of approximately 10 million Euros that will support urban water supply, rural water supply and the development of Integrated Water Resources Management.

The Belgian development agency currently finances a pilot project (2003-2005) in two regions (Atacora and Donga). The project has as its objective the establishment of 150 new water points and rehabilitation of 60 water facilities in four municipalities. The German development assistance plans to take in the four municipalities in 2006 when the Belgian project comes to an end.

The AFD is currently preparing a new support phase of 4 years with a total financial commitment of 7 millions Euros. With a focus on the Collines Region, the program will comprise of the construction of water points (280 boreholes) and latrines, the construction and extension of 40 piped water supply schemes, and support the definition and implementation of a policy on private sector involvement in the management, operation and maintenance of water supply schemes in small towns.

The World Bank provides budgetary support to the GOB through the PRSC (Poverty Reduction Strategy Credit) within the framework of support to the implementation of the Government's Poverty Reduction Strategy. The Water and Sanitation Program further supports the DH through short-term technical assistance missions.

The Dutch development assistance agency is currently considering budgetary support to the sector through decentralized structures.

Chapter 6

Public Expenditure Management

Introduction

At the end of the 1990s, the GOB embarked on an ambitious program of reforming public expenditure management supported by donors through various instruments.[102] These reforms are being deepened and extended to individual sectors within the context of the Poverty Reduction Support Credit (PRSC)-1. Specific measures have been introduced to strengthen institutional arrangements and management practices with the aim of ensuring aggregate fiscal discipline, improving resource allocation according to strategic priorities and strengthening the efficient use of resources in public service delivery. The key reform measures under the PERAC included:[103] (i) improving budget preparation through developing program budgets within a MTEF, developing and monitoring performance indicators and utilizing program budgets to facilitate negotiations within and between sectors; and (ii) strengthening budget execution by giving more responsibility in budget execution, strengthening control through improved internal and external audit arrangements, and improving transparency. The PRSC identifies several major issues for advancing the long-term reform agenda: (i) strengthening results-based budgeting; (ii) improving spending procedures and ensuring that all expenditures are managed through the computerized budget management system; and (iii) improving the fiduciary framework, in particular further reforming public procurement, financial management and internal control and audit.

The Public Expenditure Management (PEM) reform agenda had to address problems inherited from the period of structural adjustment when little attention was paid to the content of the budget and the management of public expenditures. During the nineties, attention was focused on ensuring fiscal discipline, enhancing revenues (though broadening the tax base and strengthening tax administration) and containing the wage bill. Compression of the wage bill occurred through various ad hoc measures, rather than a comprehensive civil service reform which continue to have a major impact on service delivery (see chapters on education and health). These measures included a voluntary departure scheme, a wage freeze implemented since 1988 and reducing the civil service size through attrition. Some reforms in PEM were initiated in 1997 but they concentrated on introducing quick improvements in budgetary procedures and institutional arrangements. These included improving reporting of budget execution on payments basis by the Treasury, eliminating the extended period for budget execution and commitment beyond the financial year, and identifying/removing bottlenecks in the budget preparation and execution processes.

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[102] These include: IDA/Public Expenditure Reform Adjustment Credit (PERAC); AfDP/PARB (adjustment operation; French cooperation/PAAFIE (project), EU/PUM (institutional development project to modernize the MFE).

[103] See the letter of development policy of the Minister of Finance in the Memorandum and Recommendations of the President on the PERAC.

This main aim of this chapter is to take stock of the reforms to date. It reviews the current situation in budget management and discusses progress made in modernizing the budget system. The existing processes are discussed in some detail and specific steps to better achieve the three basic objectives of public expenditure management are also suggested. The chapter is structured as follows. The first section examines the budgeting process, covering the instruments and the process of budget preparation. The second discusses budget execution, covering the budget execution cycle, financial monitoring and accounting, budget execution in the regions, performance monitoring. The third deals with other public expenditure management issues, including procurement, audit and some management initiatives. Suggestions for improving the budgetary process are summarized at the end.

The budgeting process

The instruments

a) The budgetary documents

The budgetary documents submitted to Parliament include:

- An economic and social report which presents the recent economic developments, budget execution of the current year and the annual budget forecasts
- The draft annual "general budget", which includes revenue forecasts and expenditure estimates for ministries and high institutions.
- The annexed budgets, which consist of the budgets of the *Caisse Autonome d'Amortissemen* (CAA; part of the Ministry of Finance), which is responsible for debt management, the road fund, and the *Fonds National de Retraite du Bénin* (FNRB), which manages the pensions.
- The special accounts of the Treasury which include the advance and loan accounts and the budget of the project SYDONIA (*Système Douanier Automatisé*) (expenditures for IT equipment and software in customs administration, amounting to CFAF 1.23 billion) that is outside the "*budget général*" and is financed from earmarked resources.
- The Public Investment Program which gives the total costs and the forward costs over a three year period of the investment projects included in the general budget.[104]

In addition, the three-year program budgets of the ministries that are involved in the program budgeting exercise are transmitted to the Finance Commission of Parliament. The economic and social report presents only the annual budget forecasts. As discussed

[104] According to the Annex 7 of the PRSC draft project document the PIP was not presented to the Parliament in 2003. Nevertheless, two documents, dated October 2003, have been prepared: (i) a PIP for 2004 (*Programme d'investissement publics pour la gestion 2004*); and (ii) a three-year 2004-2006 PIP (*Programme d'investissements publics pour le triennial 2004-2006*).

below, it will be desirable to include a budget policy paper and the expenditure framework for a three-year period in the budgetary documents.

Since 2001 the general budget has been unified.[105] Recurrent expenditures, socio-administrative investment and investment projects have been grouped together by ministry, instead of being presented in separate parts of the budget. A common line-item classification *(classification par nature)* has been adopted for both the recurrent and capital expenditure of the general budget and the annexed budgets.

To a large extent, the budget enforces the principles of unity and universality[106] which are crucial for ensuring fiscal discipline and efficient allocation of resources. The expenditures financed by external sources are included in the general budget, except for a few projects financed by external grants where information is lacking.

The budget does not detail the expenditures of autonomous organizations (e.g. the *Centre Nationale Hopitalier Universitaire* and the universities). It includes only the subsidy granted to these organizations. Similarly, with a few exceptions, expenditures financed from user charges are not included in the budget. This is useful in order to improve efficiency and to encourage them to collect revenues, since it allows these establishments to have a certain degree of flexibility in using their own resources. However, for policy analysis and performance monitoring, it will be important to disclose planned expenditures of the establishments involved in service delivery in gross terms (not netted from their own resources). While the amounts allocated to these organizations are small relative to the total budget, they are significant for individual sectors; besides the efficient use of these funds is important for realizing the sectoral objectives. As suggested below (paragraph b.), this information could be included in the program budgets.

b. Budget presentation

The expenditure classification system implemented in 2001 complies with the directive 04-98 of the WAEMU. It includes: (i) an administrative classification; (ii) an economic/line-item classification; and (iii) a functional classification, which is, with a few exceptions[107], compatible with the COFOG[108] (Classification of Functions of Government).

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[105] Until 2001, the general budget of the State included the following parts: (i) the recurrent budget *(budget national de fonctionnement)*; (ii) the socio-administrative equipment budget, which included various capital expenditures such as purchase of cars and building repairs; (iii) the public investment budget; and (iv) the expenditures financed by earmarked taxes.

[106] The principle of unity states that all revenues and expenditures must be included in the budget. The principle of universality is based on two rules: the rule of non-assignment, which states that budgetary revenue may not be allocated to particular items of expenditure, and the gross budget principle which states that all revenue and expenditure must be entered in full in the budget without any adjustment against each other.

[107] The administrative activities of the ministries that have social or economic functions are often classified under the general administration sector, while according to the UN COFOG (also *Classification des fonctions des administrations publiques* - CFAP) principles they should be classified under the function they administer.

[108] A functional classification scheme of expenditures by purpose that is independent of governmental organization structure. It is a valuable tool for policy analysis, and for historical and international comparisons. The international standard is the UN COFOG. For more details, see the Public Expenditure Management Country Assessment and Action Plan for HIPC report, 2001.

The current budget classification system is an effective instrument for administering the budget and for input controls but it is not yet an instrument for policy analysis. The functional classification is not used in an operational manner. The budget does not include summaries showing the expenditures by function. Outlays related to primary and secondary education are not presented separately in the budget. They are presented in the program budget, but comparing the annual budget and program budgets is not straightforward despite the fact that mapping tables have been established. For sectors such as health, establishing the relationship between the annual budget and the program budget is even more difficult.

In order to better identify expenditure targeted to regional services and the poor, the administrative classification has been detailed at the territorial level with the expenditures of the regional divisions of the ministries being presented in separate sub-chapters. This will help in monitoring the performance of the de-concentrated services. However, concerning the education sector, it would be necessary to distinguish primary from secondary education for each regional entity.

Since 2001, the allocations for line ministries reflect better the real cost of their activities as appropriations for "socio-administrative" equipment and utilities consumption which were previously managed by the Ministry of Finance are included in their respective budgets. Thus, the share of non-allocated expenditures in the budget (investment projects and interest excluded) declined from 43 percent in 2000 to 31 percent in 2001 and 24 percent in 2003. In principle, this should enable line ministries to use their funds more efficiently. However, 12 percent of personnel expenditures are still not allocated to line ministries.[109] These personnel expenditures should be allocated to ministries when preparing the budget. While the balance of personnel expenditures is nominally allocated to line ministries, in practice the management of personnel expenditure continues to be highly centralized.

Programs, projects and activities should be presented in the different expenditure programming documents according to formats that are easily comparable. The program classification should become a level of the budget nomenclature to avoid using estimated parameters to map the budget lines to the program budget, as planned under PRSC-1. In a few cases, the structure of the program budgets will need to be modified to ensure that the program structure is suitable to budget administration.

c. The MTEF

The GOB prepares a rolling three-year MTEF. The 2004-2006 MTEF consists of a set of tables that give expenditure projections for each ministry and nine groups of budget line-items.[110]

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[109] These include wages of contractual workers, various bonuses and allowances for civil servants, and a reserve for unforeseen measures.

[110] Personnel allocated to departments (*charges réparties*), personnel non-allocated (*charges communes*), goods and services allocated, goods and services non-allocated, subsidies, other transfers, socio-administrative equipment, capital expenditures financed by domestic resources, capital expenditures financed by external resources.

The MTEF is consistent with the macroeconomic framework and effectively frames budget preparation. In 2002, the 2003-2005 MTEF was, in fact, a section of the PRSP, which presented two scenarios for public expenditure projections. Being part of the PRSP, the 2003-05 MTEF was submitted to the National Assembly, published and reviewed by a large audience. In August 2003, the 2003-2005 MTEF projections were updated and rolled over, by a team including technicians from the secretariat of the CNDLP,[111] the DGAE,[112] and the DGB. The high case scenario of the PRSP (scenario 2) has been adopted for the 2004 budget and the 2004-2006 MTEF.

The 2004-2006 MTEF tables are not accompanied by a policy statement that recalls existing policies and reviews the policy changes. These tables were not included in the set of the 2004 budgetary documents presented to Parliament. As discussed below, reinforcing the function of the MTEF in budget policy formulation is desirable.

d. The PIP

The PEM reform agenda foresaw a unified budget as a precondition for the transition to consolidated programmatic support but the PIP document still exists although not in conformity with the legislation. The PIP is prepared annually by the Ministry of Planning and presents data on a three-year rolling investment program. In 2003, a separate PIP was not prepared but in 2004, it was prepared though it is not clear whether it was submitted to the National Assembly. The database provides detailed information on projects (total costs, annual costs for a three-year period, payments, expenditure to date, sources of funding and physical achievements). Such data are not currently available elsewhere. Apart from continuing the separation of recurrent and capital expenditure, the PIP database is not comprehensive. Moreover, currently, the three documents (annual budget, program budgets and PIP) present and group the investment projects in three different manners and they are not all consistent. The information that is available in the PIP (such as forward costs of investment projects, especially of the ministries that do not prepare program budgets) should be shown in a special document or in an annex to the budgetary documents.

e. The program budgets

With the view to strengthening allocative efficiency and promoting operational performance, the PERAC supported the development of a programmatic approach beginning with five priority ministries. Currently, eleven ministries prepare three-year rolling program budgets.[113] The program budgets supplement the annual budget, but the government activities are still administered through the annual budget.

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[111] *Commission nationale pour le Développement et la lutte contre la pauvreté* (Commission for Development and the Fight Against Poverty).

[112] *Direction Générale des Affaires Economiques.*

[113] Ministries of the education sector, MACT (*Ministère de la Culture, de l'Artisanat et du Tourisme*), MJLDH (justice), MSP (health), MAEP (agriculture), MEHU (environment and urban), MICPE (*Ministère de l'Industrie, du Commerce et de la Promotion de l'Emploi*), MMEH (mines, energy and water) and MTPT (public transport).

Presentation

The program budgets are documents of 100 to 200 pages, which include:

- a presentation of the ministry's missions and strategies;
- a summary presentation of the program budget which shows: (i) the annual costs of each program by activity and broad economic category; (ii) the financing plan of the program budget by financing source; and (iii) a summary table mapping the budget program into the budget; and
- a detailed presentation of each program, which includes a narrative statement on the objectives of the programs, the logical framework of the program, performance indicators, cost tables, which are detailed by broad economic categories and for investment by project, and justifications of new projects.

The program budgets of the ministries include a limited number of programs (from 1 to 5, depending on the ministry). Each program is expected to encompass both recurrent and capital expenditures associated with it.

These program budgets give useful information for analyzing budget policy, but as they are voluminous, they are not widely disseminated nor are they readable. Preparation of a published summary and an accessible presentation of the program budgets will facilitate the review of sector policies. As planned under PRSC-1 a methodological guide for the preparation of the program budgets and a template for program budget documents should be prepared (details are provided in the PRSC-1 program document).

The structure of the program budgets

For some ministries, the program structure has been easily derived from the existing organization structure and hence facilitates the move towards results-based budgeting; for other ministries, there is no coherence between the demarcation of programs and institutional responsibilities. Generally, the programs of a program budget should group the government's activities according to both the ministry's objectives and the "responsibility centers" responsible for implementing these activities (e.g. directorate, projects, etc.). In order to establish satisfactory program structures, the ministries should be preferably organized along functional lines. As a rare example, the Ministry of Environment has rationalized its organization structure to ensure consistency between the approach by objective and the approach by responsibility center. This was partly due to the fact that the Ministry of Environment is a very new ministry. Another example is the forestry directorate which conducted an institutional audit as a basis for restructuring. For other ministries which perform complex tasks (health) or are very large (education), such re-organizations are difficult. For others, inertia and the lack of perception about the benefits.

A number of ministries have rightly distinguished: (i) a general administration program, which groups the administrative and planning activities of the ministry,[114] and (ii) operational programs, which correspond to a specific mission of the ministry, and have grouped the set of activities of one or several departments of the ministry.

Among the PERAC ministries, the rationale of the program budget structure adopted by the Ministry of Health is least clear.[115] Sometimes the activities have been grouped according to their economic nature (the program 1 covers mainly construction activities), sometimes according to the "traditional" separation between the recurrent budget and the PIP (thus, program 4 includes only investment projects). The MSP is monitoring indicators by health zones and it is unclear whether the program budget structure gives them a more appropriate framework to do this than the annual budget administrative classification *(classification par destination)*, which allows the regional services to be identified.

In the education sector, the program budget for school education separates the different levels of the education sector in contrast to the annual budget. A table with estimated coefficients for individual budget lines is used to map allocations to primary and secondary education, respectively. The coefficients for allocations within regions are derived using the proportion of permanent staff at the primary and secondary level. This mapping process is cumbersome and not very transparent, leading to errors in coefficients for some regions, for example. It would be better to change the presentation of the annual budget to show allocations separately for primary and secondary education (and preferably lower secondary and upper secondary education). Moreover, with the division of the single ministry into three education ministries, there are three program budgets and a consolidated picture for the sector as a whole is not available.

The coverage of the program budgets

The expenditures financed by user's charges, own resources of autonomous establishments (e.g. universities), earmarked resources (e.g., for road maintenance) and appropriations for "non-allocated expenditures" (for contractual personnel) are not included in the program budgets. In order to formulate policy and monitor the performance of organizations, a broader approach will be desirable. For example, it is questionable whether road transport policy can be assessed on the basis of a program budget that includes only a small part of road maintenance expenditures. The sphere of the program budget of a ministry should preferably cover the entire budget of its subordinate agencies, including the revenue forecasts of autonomous agencies and expenditures financed by own revenues. In parallel, as discussed earlier, all personnel expenditures should be allocated to ministries in the budget. While this does not address the broader problems of effectively

[114] However, some programs mix sector administration activities with operational activities. Generally, it is preferable to group the activities of the administration and planning departments of a ministry in a specific program, since the specific objectives and the performance indicators for these departments and for the operational departments will differ.

[115] Program 1 includes constructions and equipment of health care centers, but it does not include the operating costs of the existing health care centers. Program 2 covers both the operating costs of the health establishments (subsidies to the hospitals excluded) and the administrative expenses of the ministry. Program 3 cover the subsidies to the hospital and a few investment projects related to actions against disease. Program 4 includes vertical projects for priority diseases (malaria, tuberculosis and AIDS). Program 5 deals with family welfare programs.

decentralizing personnel expenditure and personnel management to line ministry, it will at least make the analysis of sectoral expenditures more comprehensive.

Performance indicators

An initial set of monitoring indicators have been set up for each program of the program budgets but establishing a satisfactory system of indicators needs time and skills. In many cases, the indicators can be deemed satisfactory as an initial step. However, immediate improvements in the existing system of indicators are also needed. For example, according to a recent review,[116] the program budget of the Ministry of Transport (transport) includes many indicators, but these indicators deal with the physical progress of investment projects and are insufficient to assess the efficiency and the effectiveness of the programs. Many indicators of the program budget of the Ministry of Agriculture are not yet quantified and are not always consistent with the objectives. This program budget also includes a number of socioeconomic indicators (e.g. increase of production). Such indicators are very useful to review the economic developments in a sector, but they are not directly attributable to the program performance. For complex programs, developing appropriate indicators is difficult.

Apart from a few exceptions such as the Ministry of Environment (environment), most ministries do not yet use performance indicators in public expenditure management; a pragmatic approach is required to move towards greater performance orientation. Performance indicators are monitored, although sometimes with significant delays, but they are not used systematically for budget formulation or for analyzing the deficiencies in program implementation. This reflects lack of capacity to collect and monitor data and the high cost of collection and analysis, but in some cases, it also reflects inherent difficulties in linking resource allocations to outputs. Control through outputs is most workable when the task is simple; for complex tasks and programs, it may be better to concentrate on informed dialogue (between Ministry of Finance/donors and line ministries) to assess and stimulate performance.

The budget preparation process

a. Current situation

Currently the budget preparation process is organized as follows.

- The process is coordinated by the Ministry of Finance (*Direction du Budget*) with inputs from STPAS (*Secrétariat technique du programme d'ajustement*) and the Ministry of Planning which provides inputs on investments. At the end of May the Ministry of Finance issues the budget circular which includes the forms to be completed by line ministries and give guidelines for budget preparation. In 2003, the budget circular stipulated that the line ministries should prepare their 2004 budget requests within the spending limits given by the 2003/04 MTEF prepared

[116] *Rapport de mission technique des consultants dans le cadre de la mission conjointe Commission Européenne, Confédération Helvétique, Royaume du Danemark et Royaume des Pays Bas de formulation d'un programme conjoint d'appui budgétaire 2003-2005 à la mise en oeuvre de la Stratégie de Réduction de la Pauvreté du Bénin.*

in 2002, but they were allowed to present a supplementary list of requests beyond these spending limits. Line ministries that prepare program budgets were requested to annex their program budget to their budget submission.

- In June-July, line ministries prepare their budget requests.
- In August the DGB reviews the annual budget request; while the PIP is not expected to be formally prepared, the Ministry of Planning compiles the draft sector PIP at this time.
- Budgetary conferences are held at the beginning of September to review the annual budget request. These budget conferences are chaired by the DGB and attended by line ministries and the MCPPD. Following the budget conferences the draft annual budget is finalized by the DGB. Line ministries update their program budgets on the basis of the decisions made for the annual budget. Following the discussions between the DGB and the technical staff of the line ministries, there are negotiations between the Minister of Finance and the sector ministers.
- The draft budget is reviewed by the Cabinet headed by the president and presented to Parliament by October 15.

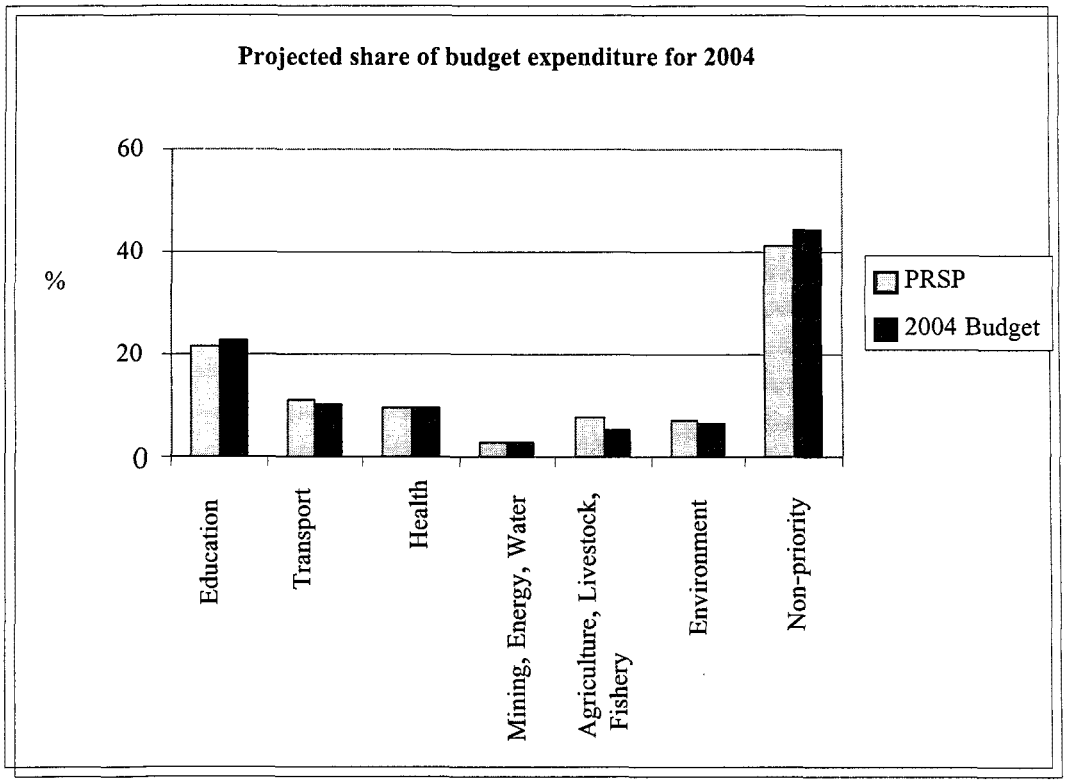
The Benin MTEF covers the entire budget and has been effective in ensuring fiscal discipline and compliance with the priorities defined in the PRSP. After some teething troubles in 2001, the line ministries have, since 2002, complied with the MTEF ceilings when preparing their budgets. As noted earlier, these ceilings are broken down by major economic category and type of financing source. Chart 6.1 compares the 2004 resource allocation among sectors projected in the scenario 2 of the PRSP to 2004 budget (and the 2004-2006 MTEF). Although there has been a small shift in favor of the non-priority sectors, the broad sectoral priorities have been maintained when preparing the MTEF and the budget.

However, formal compliance with the MTEF ceilings at the time of budget preparation has not been systematically accompanied by the required program prioritization and tradeoffs during execution. For example, utilities' consumption often exceeds budget appropriations. The Ministry of Transport has accumulated arrears that amount to CFAF 3.6 billions because liabilities arising from the investment program implementation exceeded budget authorizations.[117] To diminish such fiduciary risks, it will be necessary to implement, among other measures, commitment appropriation (*autorisation de programme*), as suggested below. However, such arrears problems also arise from weaknesses in budget preparation and program prioritization. Forward costs of ongoing commitments need to be carefully reviewed when preparing the MTEF, in order to identify adjustments required to ensure that the MTEF ceilings can be enforced without the generation of arrears. When scrutinizing line ministries' budget requests, the Ministry of Finance should verify that scarce funds have not been scattered among an excessive number of projects. Arrears on investment expenditures also arise because delays in

[117] According to a statement prepared by the MTPT *("Point des décomptes ou factures en attente pour insuffisance de credits-Budget général-gestion 2003-Situation arrêtée à la date du 31 décembre 2003").*

completing the work raise the actual cost above the original estimates in the agreements and that normal commitment procedures are not applied.

Chart 6.1



Source: PRSP and 2004 Budget.

Preparing the budget under sectoral ceilings has been an important achievement of the budget reforms but changing the core processes of budget preparation will take time. The DGB has set up teams to follow up the program budgeting activities of line ministries but, in practice, budgetary negotiations and budgetary conferences focus on the annual budget. The dual budgeting procedure, though formally abolished, is in practice sustained due to the lack of clarity between the roles of the Ministry of Finance and the MCPPD. Not all line ministries that prepare program budgets attach the draft program budget together with the annual budget request. The discussions on the traditional budget are required because input controls are still needed so as to ensure that personnel expenditure are kept under control and because the GOB faces fiduciary risks such as those related to arrears generation for utilities' consumption. However, during budget negotiation and finalization, the Ministry of Finance should discuss the program budget together with the budget request.

b. Reinforcing the budget-policy link and the function of the MTEF

Under PRSC-1 the government will prepare and implement an action plan to improve the MTEF, the links of the program budgets with the PRSP, and define and codify the budgeting process.

The budgeting process should be reorganized with a view to improving the strategic (inter-sectoral) allocation of resources and to encourage line ministries to prioritize their programs. For different reasons, including uncertainty in the availability of external financing, the 2003-2005 MTEF was updated and rolled over only in August 2003. To encourage program-prioritization and facilitate the preparation of the program budgets, MTEF spending limits should be notified at an earlier stage of budget preparation. Preparing a MTEF at the outset of budget preparation will help in developing a strategic approach in budgeting, which will involve reviewing policy choices, identifying required policy changes and deciding inter-sectoral allocation of resources.

For this purpose, the initial (and strategic) phase of the budget preparation cycle should include the following activities:

From January to April

- Review of the constraints related to existing policies. These budget requests correctly distinguish expenditures for existing policies (*services votés*) and new policies for the annual budget and the first year of the MTEF period. This helps in analyzing the budget policy. This approach could be extended to the three-year period of the MTEF and the program budgets. The recurrent costs of the investment projects that will be completed over the programming period should be estimated and included in the projected costs.
- Preparation of the macroeconomic framework and the medium-term fiscal framework (MTFF/TOFE).
- Preparation of the MTEF for the next three-year period;
- Preparation of a budget policy strategic paper that will define inter-sectoral priorities and will estimate the fiscal impact of policy changes;
- Review of the budget policy paper and the initial ceilings by the Council of Ministers.

In May

- Notification of the MTEF to line ministries to frame the annual budget and the program budgets.

c. Pursuing the implementation of an unified budgeting process

Although the budget has been unified in terms of presentation, the process of preparing the unified estimates for the budget and public expenditure programming is still weak. Multi-year expenditure programming should involve the preparation of the program budgets,

the investment program (for ministries that do not prepare a program budget) and commitment appropriations *(autorisations de programme)*. To be carried out efficiently, these activities should be coordinated by the same central ministry. This suggests transferring responsibilities for PIP preparation and monitoring to the Ministry of Finance, with the Ministry of Planning focusing on strategic and policy issues.[118]

Unifying the budgeting process depends also on the stand adopted by donors and their ability to shift from an approach based on individual projects to a programmatic approach. The program budget approach is more successful where donors have accepted the approach. As noted in the PRSC-1 program document "progress in developing program-base budgeting is hampered by the prominence of externally driven projects especially in transport where investment represent more than 90 percent of total expenditure and more than 90 per cent of investment is externally financed, and in agriculture where investment is scattered among about 100 projects."

Budget preparation within line ministries

Within line ministries, the program budget, the annual budget and the PIP are prepared in a coordinated manner. These activities are undertaken in the ministries that prepare program budgets by the "monitoring and evaluation cell", placed within the DPP *(Direction de la Programmation et de la Prospective)*. The aims of the exercise are generally understood by the staff of these cells. The program budgeting exercise is contributing effectively to modernizing the budgeting culture of the staff of line ministries involved in budget preparation activities. Nevertheless further training is required.

The technical and regional departments of the line ministries are involved in the program budgeting exercise to different degrees, depending on the ministry. In some ministries, the involvement of these departments in expenditure programming activities is limited to the preparation of mere lists of needs, program prioritization being prepared by the DPP. On the other hand, the Ministry of Environment has established appropriate organizational arrangements to manage its program budget. For each program, a program manager is responsible for preparing and monitoring the program. This ministry has also established procedures to ensure effective implementation of program activities.

Personnel expenditure budgeting is somewhat disconnected from other expenditure programming. Line ministries do not have a robust information base for sound programming of personnel expenditures. This is a major weakness that should be addressed. As long as the current highly centralized system of personnel management continues (see following paragraphs), the procedure for transmitting data on personnel to line ministries should be improved so that they can be prepare realistic program budgets.

[118] Taking into account the fact that the MCPPD has competent staff for reviewing investment projects and monitoring the PIP, a part of the MCPPD staff responsible for PIP activities could be transferred to the MFE.

Budget execution

The budget execution cycle

a. Responsibilities

The authorizing officers *(ordonnateurs)* are responsible for committing and verifying *(liquider)* expenditures and for issuing payment orders *(ordonnnacements)*. In conformity with the guidelines of the WAEMU, the Minister of Finance is the only authorizing officer for the government budget. However, since 2001, within the context of the reforms supported by the PERAC, the Minister of Finance delegates his authorizing powers to the DAs *(Directions de l'Administration)* of the line ministries, who are "delegate" authorizing officers. For expenditures made by the deconcentrated services in the regions the Prefect of the *département* is the "secondary" authorizing officer.

The Financial Controller, who is a Ministry of Finance officer, is responsible for controlling ex-ante expenditure commitments, payment orders and other decisions that have a fiscal impact. Since 2001, to ease budget implementation, delegate financial controllers have been posted within line ministries. These delegate financial controllers report to the Financial Controller. In principle, the Treasury's accountants are the only people authorized to handle public money.

b. The standard budget execution procedure

The standard budget execution cycle includes the following phases:

- *Commitment.* Expenditure commitments are submitted to ex-ante control of the financial controller who makes a control regarding the regularity of the expenditure.[119]
- *Verification (liquidation).* Verification is made by the authorizing officers, but deliveries are verified by special commissions, in conformity with procurement regulations.
- *Payment order* (*ordonnancement*). Payment orders prepared by the authorizing officers are submitted to the ex-ante control of the financial controller and, then, sent to the Treasury's officers, who make an additional regularity control before accepting them for payment. For certain categories of expenditures the commitment and payment order stages are merged; therefore the financial controller makes only one ex-ante control, at the payment order stage.
- *Payments.* Payments are made by the Treasury.

The standard control system has been significantly simplified. However, some duplicate controls remain. For example, the payment order is controlled by both the delegate

[119] The financial controller controls the legal regularity of the transaction, and verifies that money has been appropriated for the purpose in the budget and sufficient funds remain available for the proper category of expenditure, and that the expenditure is proposed under the correct category.

financial controller and the Treasury. For certain categories of expenditures the delegate financial controller controls both the commitment and the payment order. In the regions there is additional control from the Prefect (see below).

Management of personnel expenditures is fully centralized. Three central Directorates are involved in civil service pay management: (i) DGB which issues the payment orders; (ii) the Directorate of Pay at the Treasury which makes the monthly payment to civil servants; and (iii) the Directorate of Career Management at the Ministry of Civil Service (*Ministère de la Fonction publique, du Travail et de la Réforme administrative* – MFPTRA, hereafter cited as Ministry of Civil Service) which issues all the administrative documents. Recruitments are authorized by the Ministry of Civil Service and submitted to financial control, as are other decisions on personnel that have a fiscal impact. The financial and administrative components, respectively, of the integrated civil service file are maintained by the latter two directorates and are still in the process of being harmonized .

c. The commitment

As a result of the recent reforms, the payment process is generally seen as more efficient.[120] However, further rationalization measures are needed, including further simplifications of the budget execution system.

The first measure should be to rationalize commitment accounting. Currently, most commitments are accounted for when the services or the goods are delivered, not when the government enters into a legal commitment (contract, order, etc.). Nevertheless, deficiencies in registering commitments have been noted in the PERAC supervision reports and Implementation Completion Report: for example, commitments of expenditure financed by external loans are not regularly registered. A second issue in rationalizing commitment accounting is that for certain categories of expenditure, such as utilities' consumption, where the commitment stage and the delivery stage correspond to the same event. For convenience, the commitment stage and the payment order stage can be merged for petty expenditures.

The most important issue is to rationalize commitment accounting for contracts and orders of a significant amount, including multi-year contracts, in order to ensure expenditure control and advance planning of cash needs. Paradoxically, at present, the commitments for the largest contracts are accounted for only when the delivery is made. Commitment control and accounting will be an effective instrument for budget management only if commitments *of significant amounts* are accounted for before or at the same time the legal commitment is made.

[120] In 2000, the time between the date when a provider submits his invoice and the date on which payment is made was approximately 30 days, according to the estimates made during PERAC preparation. In 2003, according to data recorded in the SIGFIP system, the time required for payment by the Treasury was 18 days, but this time-period does not include possible additional delays caused by cash constraints. Therefore, the efficiency gain is difficult to measure accurately because the data are not strictly comparable.

Multi-year commitments appropriations *(autorisations de programme)*, **which are allowed by the enabling budget legislation, have not yet been carried out, which generates problems in budget implementation.** Article 12 of the organic budget law of September 26, 1986 states that the budget should include commitment appropriations (including authorized multi-year commitments) with the related payments being authorized only by the annual payment appropriations. Partly because of the lack of an appropriate instrument, there are inconstancies in the method of processing multi-year contracts. On the one hand, some multi-year contracts are being implemented, but the legal commitment is not accounted for and not fully taken into account when preparing the annual budget. This leads to the generation of arrears. On the other hand, other multi-year contracts are not approved by the Ministry of Finance since their amounts exceeds the annual payment appropriation. This hampers efficiency in program implementation.

The implementation of multi-year commitment appropriation in the budget is planned under the PRSC-1. A new type of transaction called "reservation of appropriation" *(réservation de credit)* is in the process of being introduced into the budget execution information system (SIGFIP). This transaction will be registered when a ministry plans a legal commitment. Its registration will make up for lack of proper commitment accounting.

d. Special payment procedures

The Ministry of Finance and line ministries often use a simplified budget execution procedure which does not respect the standard ex-ante controls. This special procedure applies to expenditures that: (i) are considered urgent; (ii) the original cash advances to imprest accounts (*régies d'avance*); and (iii) specific expenditure items such as, for example, advance payments to utility companies.

Special payment orders *(ordres de paiement)* are issued by the authorizing officers and verified by the delegate financial controllers without being supported by standard documentation. Contrary to the *ordonnancements,* the *ordres de paiement* can be issued before the service is rendered or the goods are delivered. In principle, such expenditures must be documented and justified ex-post, but this is not systematically done. Until recently, the *ordres de paiement* were not systematically controlled against budget appropriations; they are now expected to be recorded in the SIGFIP system as soon as there are issued.[121]

The special payment procedure applies to imprest accounts from which a significant share of domestically financed expenditures are paid. In 2002, domestically financed investment expenditures paid from imprest accounts amounted to CFAF 24.4 billions, while recurrent expenditures paid from such accounts amounted to CFAF 40.7 billions.[122]

[121] However, there are still a number of problems to recognize them as budget expenditure in the Treasury's accounts because of the lack of proper documentation.

[122] The imprest accounts are managed by line ministry officers, who are appointed as *régisseur d'avance* by the MFE, upon proposal of the line minister. The imprest accounts are held with the Treasury or, in some cases, with a commercial bank. They are credited by an original advance of 25 percent of the budget allocation and then they are replenished on the basis of the documentation justifying the expenditures made previously.

About 50 percent of investment expenditure and about 24 percent of total expenditures financed by domestic resources were paid from the imprest accounts. In addition, expenditures financed by external sources are often paid from special accounts opened at the request of the donors and administered by the project manager.

Because of weaknesses in the internal audit system and lack of proper reporting and accounting system, imprest accounts entail a high level of fiduciary risk. Therefore, in 2002/03, the government has reduced the number of imprest accounts from 617 to 317. The use of the imprest accounts and other special payment procedures has been further reduced as prerequisite for PRSC-1 negotiations.

However, imprest accounts can be desirable for managing certain activities, particularly those carried out by remote agencies and investment projects. In order to diminish the level of fiduciary risk, it will be imperative to implement appropriate reporting, accounting and audit procedures for the imprest accounts.[123] Agencies and projects that use imprest accounts should be required to produce regularly both accounting reports and reports on delivered outputs.

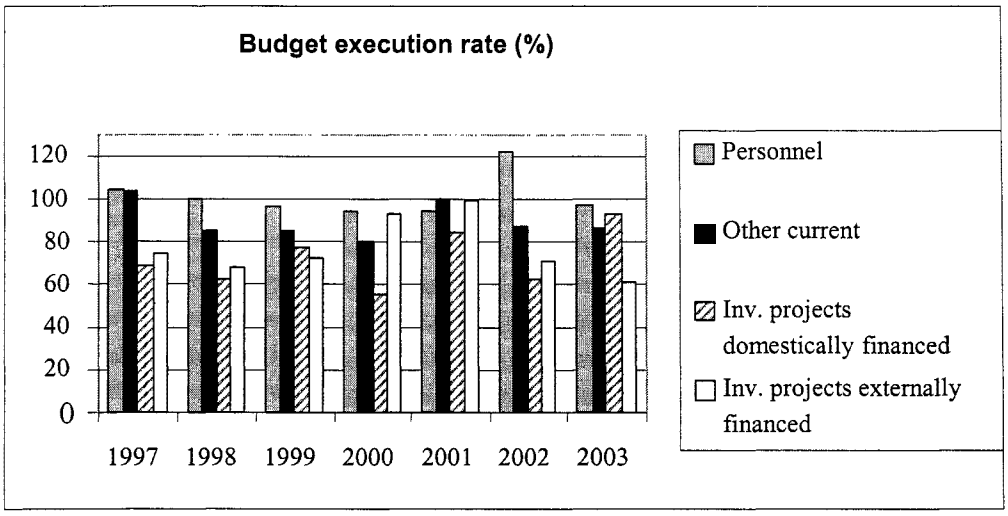
e. In year adjustments

Assuring predictability of appropriations will be one of the most important tasks to develop a performance-oriented approach in budgeting. As noted in chapter 2, in periods of fiscal stress the Ministry of Finance freezes a part of appropriations. These adjustments affect mainly domestically financed investment expenditures and, to a lesser extent, non-personnel recurrent expenditures. These adjustments of investment projects have been particularly significant in 2002 (chart 6.2) and has affected priority as well as non-priority sectors. This was the result of unforeseen expenditures such as increases in civil service wages and higher than expected cotton subsidy. In 2004, overestimation of revenue and the changes in external trade have lead to budget cuts. Better budget forecasts are required in order to avoid such volatility. Cash management consists often of merely delaying cash payments, but in recent years this procedure has been used only moderately and its impact on budget execution does not seem significant.[124] In 2003, the budget execution rate of non-personnel expenditures is more satisfactory than in 2002.

[123] For example, imprest account managers should disclose monthly financial statements and send monthly the documentation justifying their transactions to the delegate authorizing officer and the Treasury.

[124] The government can face in-year cash shortages. However, according to the TOFE net change in domestic arrears remain negative over the recent years.

Chart 6.2



Source: Ministry of Finance.

f. Appropriation management rule

The budget is executed over the calendar year and there is no complementary period for payment orders, but carrying over can be authorized for capital expenditures by decree *(arrêté)* of the Minister of Finance.

The procedure for transfers between appropriations at the lowest level of line-item classification could be simplified. At present, controls of the SIGFIP system are made at the lowest level of the line-item budget (paragraphs and lines), and transfers require a decision of the DGB. Transfers (*virements*) between the articles of the budget, that is between broad input categories (e.g., between personnel expenditures and goods and services) are submitted to the approval of the Ministry of Finance. Such input controls are still required for ensuring fiscal discipline, but the development of a performance oriented approach suggests that these be relaxed progressively (for example, against an agreement on delivered outputs). This is provided in the budget law framework.

Financial monitoring and accounting

A budget execution information system, the *Système Intégré de Gestion des Finances Publiques* (SIGFIP), has been implemented in 2001. Budget execution in the administrative phase (from commitment to the registration of the payment order stage) is made through this system. In parallel, the Treasury operates an accounting system (WMONEY) to record actual payments and maintain government accounts. Under the reform program supported by PRSC-1, the Treasury will implement in 2004 a full fledged accounting and treasury management system, the ASTER system, which will be linked to SIGFIP.

After some teething problems, SIGFIP has been effectively implemented. Line ministries are electronically connected to the central SIGFIP database. They enter commitment and payment order transactions for the non-personnel expenditures financed by domestic resources. This, together the delegated responsibilities for issuing the payment orders, has improved efficiency in budget implementation.

However, there are still a number of problems that limit benefits from computerization. Although the payroll is automated, data on personnel expenditures are recorded in the SIGFIP belatedly.[125] Ministries do not have information on the wage bill paid in their sector in a timely and systematic manner. The total of recurrent expenditures as recorded in the SIGFIP detailed accounts (*Etat d'éxecution des dépenses par ministère et nature économique*) sometimes do not match the total obtained from other tables provided by the DGB. For instance, in 2002, personnel expenditures from three different sources wee as follows: SIGFIP - CFAF 96.7 billion; DGB tables – 101.2 billion; and TOFE – 90.1 billion.

Since the SIGFIP reports give expenditures only on a commitment basis and on a payment order basis (including both normal and special payment orders), line ministries do not have the information on cash payments made out of their budget. Such information is required for sound program and contract management. This issue should be reviewed when implementing the ASTER system.

Expenditures financed by external sources are recorded in the SIGFIP system by the CAA, but data on most projects financed by external grants are currently missing. For the moment, the PIP monitoring reports prepared by the Ministry of Planning provide the most information on external investment. Under PRSC-1, an action plan will be implemented to ensure that externally financed expenditures are fully accounted for in government accounts and financial reports.

For the moment, there is no interface between the budget execution system and the accounting system. As a result all the payments order issued through SIGFIP are manually entered in WMONEY, generating risks of errors, contributing to delays and making the Treasury accounts difficult to reconcile with budgetary data. In addition, the coverage of the Treasury accounts is not comprehensive, because notably they do not cover all transactions financed by external sources and are limited to the transactions paid through the Treasury.

Integration of the financial management information systems is part of the PRSC agenda. This should cover SIGFIP, the payroll system, and the Treasury accounting system in order to ensure that SIGFIP provides managers with all data on their program execution (including personnel expenditures and cash payments) and develop proper reporting system encompassing all expenditures made by government's agencies (including autonomous agencies).

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[125] For example, the comparison of the SIGFIP statements for the period January-November 2003 and January-December 2003 shows that the wage bill of a majority of ministries was not included in the 2003 SIGFIP budget execution statement prepared at the end of January 2004. For 2001, the wage bill of the Ministry of Health in SIGFIP statements is considerably underestimated.

Budget execution in the regions

About one third of non-personnel recurrent expenditures in the health sector and about one fourth in primary education are managed by the regional divisions of the respective ministries through the procedure of *délégation de credit.* [126] In order to allot the budget funds to the regional divisions of the ministries, the DA of the ministry prepares a *délégation de credit* which is submitted to the ex-ante control of the delegate financial controller and is accounted for as "commitment". This warrant is transmitted to regional department *(direction départementale)* of the line ministry, the Ministry of Finance and the Prefect of the *département.* Request for entering into legal commitment and payment are transmitted by the line ministry's regional department to the Prefect, who is the "secondary" authorizing officer for the expenditures of deconcentrated services. The Prefect issues the payments orders which are controlled by the delegate financial controller posted in the *department,* the payment being made by the regional branches of the Treasury.

This budget execution procedure is somewhat cumbersome and leads to delays. Budget implementation is regularly delayed, the allotment warrant being often issued only in April. The allotment of appropriations to the regions could be automatic and made in January for ministries where the expenditures of the regional divisions are presented in the budget under specific chapter (e.g., health and education). The transactions of line agencies are submitted to several ex-ante controls. Appointing the head of the *direction départementale* of the line ministry as delegate authorizing officer should be considered as one option.

The decentralization process poses additional challenges for improving public expenditure management. This process began to be implemented following the December 2002 municipal elections. Since 1999, local taxes are being supplemented with sharing arrangements for the VAT. Some donors plan to support local governments directly or through budget support. Apart from developing sound reporting, accounting and auditing systems, institutional issues such as the links between the deconcentrated services of the sectors and the local governments need to be addressed. In the health sector, the decentralized health zone may overlap two communes. These issues have been analyzed in a number of Bank reports and the implementation process needs to be monitored.

Performance monitoring

The monitoring and evaluation cells which have been set up within priority ministries are responsible for performance monitoring but their function in budget management is not very well established. A number of these cells have prepared 6-month performance monitoring reports (called *rapports de suivi-évaluation*), although in some key sectors, such as primary and secondary education, only the 2001 reports are available. These reports present the financial budget execution, the results of the monitoring of the performance indicators of the program budget and discuss difficulties met in budget implementation. These reports have contributed to placing the emphasis on performance

[126] SIGFIP "*Etat d'exécution des crédits délégués*" (Health: 2001-2003; primary education: 2002-2003).

and have been transmitted to the Chambers of Account, which has audited them and sent to the National Assembly.

It will be important to ensure that all ministries involved in the program budgeting exercise produce these monitoring reports in a timely manner. The monitoring reports should be reviewed during budget preparation with the view to identifying program implementation problem. They should also be part of a management improvement process if they are accompanied with appropriate working methods as those being implemented in the Ministry of Environment (see box 6.1).

The "monitoring and evaluation" cells do not conduct "evaluation" studies.[127] Generally, their staff does not have the adequate experience to carry out such studies and their priority task should be to set up a permanent performance monitoring system. However, line ministries should favorably consider preparing and carrying out, or commissioning, an evaluation study program, focusing on a limited number of programs.

Other PEM issues

Procurement

The World Bank Country Procurement Assessment Report (CPAR) of 1999 identified a number of deficiencies in the procurement system and measures to streamline the procurement process. In December 2003, a three-year Procurement Reform Action Plan was adopted by the Council of Ministers, which includes measures to improve the legal and institutional framework, modernize the procurement procedures, strengthen procurement capacity, strengthen the procurement control system, and enforcing measures against corruption. This reform plan is supported by the PRSC-1 and the African Development Bank (AfDB) 2004 budget support operation.

Progress has been made in reducing time needed in procurement. Within the context of the PERAC, efficiency indicators for procurement were defined. Procurement lags defined as the average time between the deadline for submitting bids and the notification to the beneficiary were expected to decline from 8 months in 2000 to 5 months in 2003; the actual lag in 2002 was 4 months.

However, in a number of cases the elapsed time for procurement is excessively high, for both preparing the tender within line ministries and for securing final government approval of the contracts. According to the procurement cell of the Ministry of Environment, the period between the date of the agreement of the tender dossier by the National Procurement Committee (*Commission Nationale des Marchés Publics* - CNMP) and the signature of the contracts by the Ministry of Finance varies from 65 days to 312 days, and is an average of 207 days. This corresponds to delays from 20 to 227 days, relative to the ministry's target of 85 days. Similarly, in the Ministry of Transport the time between the tender date and the date of approval of the contract varies between 79 – 239 days. Also,

[127] As opposed to performance monitoring, an evaluation study is an in-depth review of the program's objectives and achievements which should be carried out from time to time for selected programs. Even the few developed countries that have robust evaluation systems do not carry out evaluation studies for all programs on a permanent basis.

as noted in chapter 5, there is often a delay of one year between the preparation of the tender and the notification of the contract award in the water sector.

Several factors explain these delays, such as the time needed to obtain all signatures and delays in processing the dossiers within the ministries and transmitting them to the CNMP.[128] In a number of cases, the procurement cells face some inertia from the technical department of their ministries. Actions to reinforce the status of the procurement cells, the capacity of ministries and to develop the use of modern technologies (e.g., automated preparation of the tender dossiers) which are included in the government procurement action plan will be crucial for efficient procurement management. These are supported under the PRSC-1.

Management reforms

The success of the results-based budgeting reforms will depend on complementary reforms of the civil service and will require the development of new management approaches. For the moment, the program budgeting exercise does not seem to have a significant impact on performance in agency and program management but, as noted in the Public Expenditure Management Handbook of the World Bank, the budget system is only one of multiple factors that affect operational performance.[129] While a major administrative reform is envisaged in the PRSC – including establishing a performance-based management and accountability framework, setting up a formal incentive system and developing a modern human resource management system – locally generated initiatives could also be considered. As an example, the Ministry of Environment is developing working methods and organizational arrangements to improve efficiency in program implementation. The arrangements developed in this ministry for this purpose are summarized in box 6.1. The Ministry of Environment experience could be extended to other ministries, with the willingness and capacity to adopt such reforms. Other options are to consider reform of personnel policies in particular sectors (notably education and health) which are most important for the poor and for which broader stakeholder support can be built.

For efficiency in program implementation, some ministries contract-out their own tasks to agencies that operate at arm's length from administrative divisions. These agencies act as delegate-owners *(maître d'ouvrage délégué)*. In turn, they contract out studies and works. It is feared sometimes that this procedure diminishes transparency and increases fiscal risk.[130] This calls for reinforcing the reporting requirements of the delegate-owners and measures are being taken to ensure that these expenditures are fully reflected in government accounts at least by the end of the year.

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[128] Among 10 contracts reviewed by the CNMP of the MEHU, the time needed between the MEHU and the MFE signatures varies from 1 to 2.5 months.

[129] "By the time we get to level 3 outcomes (Programs implemented efficiently and effectively), the budget is only one influence among several, all of which need to be pulling in the direction of better performance if outcomes are to improve." (World Bank. 1998. Public Expenditure Management Handbook, page 17)

[130] For example, sometimes the transactions made by these agencies are not sufficiently justified to be included in the Treasury's accounts as budgetary expenditure (*dépense définitive*).

There have been other initiatives to improve operational performance, in particular to ensure delivery of non-personnel items to the beneficiaries. The Ministry of Primary and Secondary Education (MEPS) has established, with the support of the USAID, special procedures for delivering books and educational material. Delivery plans are established by the cell of the minister responsible for managing these inputs and communicated to the final recipients. The parents participate in the verification of deliveries with the view to avoiding embezzlements. Similarly, in the health sector the manager of the medical districts are informed of the delivery plans and the deliveries to the health centers are verified by the users committee. These arrangements have improved the quality of public spending. However, some embezzlements still exists, especially in the post-delivery stage in the health sector, according to a survey made by the *Centre d'Achats des Médicaments et Equipements*.

Increased managerial autonomy is expected to be granted to some establishments, such as the hospitals, as well as through the decentralization policy and this provides an opportunity to link autonomy in agency management and funding with accountability for outputs. The experience of the imprest accounts, as well as some pitfalls mentioned in this section, shows that this can be considered only if sound reporting and internal auditing systems are set up.

Box 6.1

Ministry of Environment, Housing and Urban Affairs
Arrangements to improve efficiency in budget implementation

Taking into account difficulties met in implementing the 2002 budget, the Ministry of Environment, Housing and Urban Affairs has implemented in 2003 the following measures:

- Notification of mission statements by the Minister to each head of department. These mission statements indicate the tasks they should carry out in 2003.
- In turn, notification by the heads of department of instructions to the heads of their subordinate divisions.
- Preparation of detailed business plans, consistent with the program budget of the ministry.
- Preparation of a budget implementation plan for 2003.
- Preparation of the dossiers for invitation to tender by the end of January.
- Identification of projects and activities that will be contracted out and preparation of the procedure for selecting the contractor.
- Preparation of draft decrees for opening imprest accounts and transmission of these decrees to the Ministry of Finance.
- Preparation of a manual for monitoring procurement contracts by the procurement cell of the ministry.

Source: *Rapport de suivi-évaluation au 31 décembre du Budget Programme 2002-2004 du MEHU*-Page 47. April 3, 2003.

Internal audit

Strengthening internal audit is required to develop a performance oriented approach in management which generally necessitates providing managers with a certain degree of flexibility in management and switching from a system based on ex-ante centralized controls to a system based on accountability.

Internal audit is carried out by the *Inspection Générale des Finances* (IGF), which reports to the Minister of Finance and, within line ministries, by the *Direction de la Vérification et l'Inspection Interne* (DIVI), which reports directly to the minister. The IGF has national responsibilities for nonsystematic control over state-controlled entities. It has about 40 inspectors, who are competent in public finances. In the context of the PERAC, the IGF was strengthened with 17 new auditors and its budget was increased. IGF reports are confidential, destined exclusively for the Minister of Finance. The confidential aspect of these reports diminishes their impact.

The weaknesses identified in the Country Financial Accountability Assessment (CFAA) regarding the DIVIs still exist. This weakness is seen as the main impediment to further progress in relaxing ex-ante controls. The DIVIs are unable to operate efficiently and the impact of their ex-post controls is marginal. They lack the necessary independence to carry out an effective program of work. Their budgets are not always adequate, and they may therefore depend on the budget of the entities they are expected to audit. Their inspectors do not always have the adequate training to carry out their program of work effectively.

An internal control network should be created which should be coordinated by the IGF. Regular internal audit meetings will prepare internal audit program, monitor its implementation, review the results of the audits, and follow up the implementation of recommendations in coordination with the relevant authority. In parallel internal audit procedures should be streamlined to ensure they meet international standards for internal audit, and audit manuals should be completed and staff trained. Improving internal audit is the focus of PRSC-2, including one prior action.

External audit

The Chamber of Accounts, which is a chamber of the Supreme Court, is responsible for external audit. Its mandate is governed by the Constitution and an organic law. It is independent from the executive branch of government, but it depends on the Supreme Court from an administrative and financial standpoint. Under the reforms supported by the PERAC, the Chamber of Accounts has been strengthened via training activities that have been carried out and its staff doubled to about 60 persons currently. It has extended its audit activities to the review of the "monitoring and evaluation" reports of the program budgets. It audits the government's end-of-year accounts and reports directly to Parliament on this audit.

The budget department of the Ministry of Finance prepares the *"comptes administratifs"* which record the expenditure at the payment order stage, and the Treasury the "*comptes*

de gestion". Once the audit report is available, the executive submits to Parliament a draft finance settlement law (*loi de règlement*).

The preparation and audit process of the end-of year accounts has improved in recent years. Nevertheless, the time needed to prepare these accounts is still excessive. The 2001 end-of-year accounts (the *comptes administratifs et de gestion)* were only transmitted to the Chamber of Accounts in June 2003. The last voted *loi de réglement* concerns the 1998 budget. In addition, the *comptes administratifs* do not give a reliable picture of budget execution because many expenditures are omitted or reported wrongly. Production of timely, accurate end-of-year accounts is crucial for accountability.

Recommendations

Budget preparation

- Reinforce the budget preparation procedure, through strengthening the initial and strategic phase of budget preparation. An initial macroeconomic framework and MTEF should be prepared together with a budget policy paper and submitted to the Cabinet by April. The MTEF ceilings should be notified to line ministries by May.
- Unify the budget preparation process through transferring responsibilities for the PIP to the Ministry of Finance and unifying the nomenclatures of the expenditure programming documents.
- Improve the structure of the program budgets, when needed, and to present in the program budgets the expenditures of the organizations involved in public service delivery in gross terms.
- Pursue improvements in the system of performance indicators
- Improve the presentation of the budgetary documents, which should include the MTEF, a budget policy paper for the MTEF period, and the program budgets (or a summary presentation of the program budgets).

Budget execution

- Effectively implement the commitment appropriations (*autorisations de programme*) in the 2005 budget (prior action for PRSC-2).
- Pursue the development of the financial management information system through completing the coverage of the budget execution system, ensuring proper interface with the government accounting system and other financial management systems (notably the payroll system).
- Pursue the implementation of measures aimed at increasing efficiency in budget execution (e.g. making transfer between budget line-items more flexible, eliminating all duplicate central controls).
- Ensure that budget funds are available in the region as soon as the budget is effective (i.e. make the *délégation de crédit* automatic)

- Empower the heads of the "*directions départementales*" of line ministries as "ordonnateurs délégués".
- Produce regularly the performance monitoring reports.

Other PEM issues

- Implement the measures of the procurement reform action plan.
- Provide better training and adequate institutional incentives to line ministries staff involved in procurement.
- Encourage ministries to suggest and experiment with new management approaches, such as in the Ministry of Environment.
- Reinforce internal audit through, notably, creating an audit network.
- The end-of-year accounts should be prepared within a time-limit of 6 months, with the view to submitting to Parliament the draft settlement law for the budget of the previous year at the same time as the draft budget for the current year.