



**Partnerships
within the
public sector
to achieve
health
objectives**

*Performance-based
management in an
evolving
decentralized public
health system in
West Africa: The
case of Burkina
Faso*

World Bank
Washington, DC
March 2003

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ACKNOWLEDGEMENTS

Joseph F. Naimoli (Senior Health Specialist, World Bank) prepared this report. Denise Vaillancourt (Senior Health Specialist, World Bank), Roland Kabore (Consultant), and Zacharie Balima (Consultant) provided substantial technical assistance in the report's preparation.

Others who contributed valuable time and information included Dr. Jean Gabriel Ouango (Secretary General of Health/MOH); Dr. Sosthene Daogo Sosthene (Director General of Health/MOH); Dr. Ouedraogo Arzouma (Chief Medical Officer, Kaya district); Dr. Pabakda Roamba (Chief Medical Officer, Sapone District); Dr. Andre Yameogo (Expanded Program for Immunization/MOH); Dr. Therry Ouedraogo (Malaria Control Program/MOH); the Kaya District Health team; Community/Facility Health Committee, Kaya District; Dr. S. Celestin Traore (Health Program Administrator, UNICEF); Ini Huijts (Health Advisor, Embassy of the Netherlands in Burkina Faso);

Ms. Koutou Sy Ramata (Save the Children/Netherlands); Dr. Mohamed Mohmoud Hacem, (Representative, World Health Organization); Dr. Mone (World Health Organization); Miriam Schneidman (Senior Health Specialist, World Bank); Timothy Johnston (Senior Human Development Specialist, World Bank); Anthony Measham (Consultant, World Bank); Rena Eichler, (Health Economist, Management Sciences for Health); and Dr. Stephen Hadler (Medical Epidemiologist, Centers for Disease Control and Prevention).

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ABBREVIATIONS AND ACRONYMS

| | |
|---------|---|
| MOH: | Ministry of Health |
| IDA: | International Development Association |
| PRSP: | Poverty Reduction Strategy Paper |
| MOF: | Ministry of Finance |
| NGO: | Non-governmental organization |
| M&E: | Monitoring and Evaluation |
| DTP3: | Diphtheria, Tetanus, Pertussis vaccines |
| HIV: | Human Immundeficiency Virus |
| AIDS: | Acquired Immune Deficiency Syndrome |
| MIS: | Management Information System |
| EPI: | Expanded Program on Immunization |
| UNICEF: | United Nations Childrens' Fund |
| GAVI: | Global Alliance for Vaccines and Immunization |

EXECUTIVE SUMMARY

The World Bank has promoted decentralization as an instrument for improving health system effectiveness and efficiency. Bank-supported projects in the health sector, however, have not always been designed or implemented in a way to ensure decentralization's success. Insufficient attention to the administrative implications of decentralization, a lack of clarity in the roles and responsibilities of different actors at each level in the system, as well as an underestimation of the guidance and preparation needed to help sub-national units carry out their responsibilities have all been identified as obstacles to success. In sum, a lack of institutional capacity has hindered efforts to successfully decentralize health services.

In 1995, the World Bank launched a six-year, \$31.2 million Health and Nutrition Development Project in Burkina Faso. This project represented the most ambitious and well-financed attempt, on a large scale, to strengthen the institutional capacity of the Ministry of Health (MOH) to decentralize health services, and to improve health system performance. The priority elements of performance included the quality, utilization, and coverage of essential health services.

Dissatisfaction with the pace and effectiveness of the project after just two years of implementation, however, led to its redesign. The redesign represented a departure by both the Bank and the government from their traditional ways of doing business together. For the Bank, the redesign involved changes in project management, oversight,

planning, financing and procurement. For the government, the redesign required a greater devolution of authority, responsibility, and control from the national level to sub-national levels and the community. It also required new mechanisms for ensuring accountability and transparency in the use of public resources and the achievement of results.

The Bank and the government adopted a locally defined form of performance contracting, commonly referred to as "relational contracting", as a means for improving the public provision of health services with public financing. The two guiding principles of the scheme were a results orientation and a new spirit of partnership. These principles were realized through a four-phase process.

The four phases included 1) the formulation of action plans; 2) negotiation and formal adoption of the plans; 3) the signing of a quasi-contractual implementation agreement, followed by implementation of planned activities; and 4) monitoring and evaluation.

Although the implementation agreement adopted the language and form of a classical contract, it did not carry the weight of a legal document and the tools of enforcement were largely of an administrative and management nature. The special relationship between the contracting parties (the government "owned" the suppliers of services) served as the keystone for accountability.

The full potential of the performance-based management scheme could not be

realized in the limited time available; however, there is enough evidence for us to recommend this approach, with certain modifications, as a promising model for building institutional capacity to support the continuing decentralization of health services in Burkina Faso and possibly in other African countries.

The feasibility of implementing this scheme under controlled conditions was demonstrated and widely appreciated at all levels. There was broad participation in and appropriation of the scheme at sub-national levels. Flexible implementation agreements demonstrated that the national and sub-national levels of the Ministry of Health were willing to share and manage the risks involved with mounting this innovation.

The scheme's central management unit created a system and standardized tools to guide implementation. They also prepared participants to carry out their agreements through training and other forms of interpersonal support. Institutional capacity in critical public health functions, particularly planning and budgeting, and expenditure and financial management, were developed.

Had more time and resources been available, improvements in information management, ensuring accountability, and other activities to enhance implementation, such as operational research, might also have been realized. Perhaps most importantly, through increased liquidity at operational levels, resources were pushed down to the lowest levels in the health system, particularly towards the end of the scheme.

Although there appears to have been growth in some output indicators during the period of the scheme (i.e., immunization coverage), while others remained static (i.e., assisted deliveries and utilization of curative care services), methodological limitations make it difficult to link the scheme to either of these phenomena. There is some evidence to suggest that deficiencies in the health system's delivery structure may also have influenced performance during this period.

Greater attention needs to be paid in the future to incorporating into schemes of this kind a systematic research evaluation component. Research is necessary to examine the effect of institutional capacity and delivery structure variables on a variety of health system performance outputs that are linked to individual/household behavior change and ultimately to improved health status outcomes. Scientifically sound evidence that performance-based management schemes in the public sector can contribute to improved health system performance is urgently needed.

The foremost challenge for the immediate future is whether this model, implemented under project auspices with Bank financing, can now be replicated by the national government, with the transitional support of a bilateral donor. It is of paramount importance that the legal framework within which the scheme was implemented, in particular, a waiver to the existing law of finance, be re-evaluated. Procedures and requirements will also need to be simplified. Priorities as articulated in the performance indicators will need to be re-examined to ensure compatibility with the new health sector development plan.

A better balance must be achieved between financial and technical performance auditing. Increased engagement of technical managers of vertical disease control programs at central level also must be obtained. To achieve better efficiencies, greater decentralization of scheme oversight and management responsibilities should be considered. Support to health facility-community management committees came late in the scheme; henceforth, this should become a primary focus of attention.

In the long-term, many outstanding questions remain. Can additional government funds, such as those made available through poverty reduction efforts, be invested in districts to support performance-based management? Can greater coherency be achieved in internal and external assistance to sub-national levels so that managers can exercise greater autonomy and control over the resources required to achieve their priority outputs? Institutional capacity is necessary but not sufficient to achieve improved health system performance. There are a considerable number of delivery structure problems in Burkina Faso. Can they be adequately addressed?

An important lesson learned from this first experience is that decentralized management schemes are likely to achieve only partial success without concurrent policy reforms and capacity building at central level in a wide range of systems, such as planning, budgeting and health information.

1

INTRODUCTION

In low-income countries, chronic under-financing of essential public health and clinical services and persistent under-utilization of these services (due to continuing poor access and quality, high cost, and frequent unavailability of essential commodities) have led ministries of health to search for new arrangements for managing and delivering public services. One popular reform strategy in the health sector in these settings has been health service decentralization. Decentralization has been pursued widely, in a variety of forms (i.e., deconcentration, delegation, devolution), with varying degrees of effort, and with uneven levels of success.

The World Bank has promoted decentralization as an instrument for improving health system effectiveness and efficiency (World Bank, 1993). Bank-supported projects in the health sector, however, have not always been designed or implemented in a way to ensure decentralization's success. Weaknesses have included insufficient attention to the administrative implications of decentralization, a lack of clarity in the roles and responsibilities of different actors at each level in the system, as well as an underestimation of the guidance and preparation needed to help sub-national units carry out their responsibilities (Stout and Johnston, 1999). In sum, a lack of institutional capacity has hindered efforts to successfully decentralize health services.

Within this context of devolved management experience, performance contracting is emerging as a potentially promising approach for generating

desired supply and demand side behaviors that might lead, ultimately, to greater satisfaction with services, protection from catastrophic financial loss, and improved health status. The major focus of attention to date with performance contracting in the health sector in developing countries has been on schemes that entail the private provision of services with public financing. A recent World Bank note identified 5 different schemes that involved the transfer of responsibilities and risks from government to private providers through a contracting mechanism or similar kind of formal arrangement (Marek and Yamamoto, 2002).

Far less attention has been paid to the use of performance contracting in developing countries as a possible tool for improving the public provision of health services with public financing. In keeping with the political, fiscal, and administrative realities within its public sector, Burkina Faso's adaptation of the classical contracting approach and its application in the health sector represents one of the few experiences we have with this kind of scheme. This approach, known as "relational contracting", however, is not unique to Burkina Faso, to developing countries, or to the health sector. It has been used primarily in industrialized countries, particularly in Europe, in a variety of sectors (Lidbury, 1999).

We begin with a description of the analytical framework that will be used throughout the paper. This will be followed by an overview of health system performance and institutional capacity in Burkina Faso prior to the

period. Consequently, in 1996, the Ministry of Health (MOH) began to decentralize health services, adopting deconcentration as the variant of choice. Donor, World Bank, and community financing schemes all supported deconcentration in the field. Unfortunately, this reform effort did not improve health status, health sector performance, or institutional capacity as hoped.

There was little or no progress between 1996 and 1999, for example, in reducing the high rates of infant and maternal mortality. According to Bodart et al., the population's share of the total health care costs at the district level remained high and dissatisfaction with health care quality persisted (Bodart et al., 2001). Two 1997 studies of perceived quality in areas supported with financing from the German government revealed high levels of client dissatisfaction, which was linked primarily to perceptions of poor health personnel performance and high cost of care (Bodart et al., 2001). Furthermore, resources continued to be poorly allocated, with few arriving at the point of greatest need, and competing financing schemes within the same administrative unit created management difficulties (Bodart et al., 2001).

Dissatisfaction within the government and its partners with the pace and effectiveness of deconcentration eventually led to the redesign of the World Bank's 6-year (1995-2001), \$31.2 million Health and Nutrition Development Project after only two years of implementation. This project represented the most ambitious and well-financed attempt, on a large scale, to strengthen the institutional capacity of

the MOH to decentralize health services, and to improve the quality, utilization, and coverage of essential health services. In addition to the problems cited previously, there were other institutional constraints in the health system, all of which contributed to project implementation difficulties, and thus to a failure in achieving the MOH's decentralization goals.

The key constraints included a weak national health policy framework, the lack of a national health development plan, and frequent changes in key political and administrative posts. Regular dialogue between the government and all donors in the health sector was also absent, as were clear directives and guidelines from the MOH that defined expectations, roles, and responsibilities at each administrative level in the health system (World Bank, 2001a). There were other institutional limitations as well.

For example, comprehensive, district-wide health development plans were not routinely available as late as 1998. Although various vertical programs managed from the central level, particularly those supported with external donor assistance, required districts to develop some kind of action plan, this resulted in a plethora of disease control-specific plans at district level. Capacity to adequately plan, however, varied widely, and a standard format for developing action plans was never adopted.

A standard set of process and output indicators that could guide plan implementation were never developed or agreed upon by all actors in the health sector. In districts that did not benefit

from substantial donor assistance, there was little follow-up or support for plan implementation, where they existed. Micro-planning at the community level was infrequent.

Financial management and oversight of the execution of health activities at sub-national level were also problematical. Government funds often arrived in districts 3 to 6 months into the budget cycle, leaving inadequate time to implement as planned. Local needs and centrally authorized budget line items were often not in alignment, and districts did not all benefit equally from external financing.

In areas of significant donor financing, district management teams were often confronted by a multitude of complex and rigid management procedures. Local autonomy in the management of financial resources was also limited. Furthermore, financing from government and donor sources was often inadequate to implement action plans that may have existed.

Health information was infrequently used to guide decision-making at any level, and there were serious deficiencies in the availability of information technology in the periphery. Organizational capacity was also tenuous, which further weakened the potential for decentralization to be successful. Skills to manage a decentralized approach to the delivery of health services were insufficient at national and sub-national levels. Coordination and collaboration among actors at every level in the health system were insufficient.

There was an overall lack of human, material, and financial capacity to support service delivery. Districts had difficulties exploiting existing management tools, most of which were ill adapted to field realities. Monitoring and evaluation of project activities and accomplishments were uniformly deficient. Activities to create demand for services were not actively pursued to the extent necessary to improve the use of either preventive or curative services.

A coherent and comprehensive response to the institutional problems impeding improvement in health sector performance, and, by consequence, the aims of decentralization in the health sector, required a departure by both the Bank and the government from their traditional ways of doing business together.

For the Bank, the response involved major changes in project management, oversight, planning, financing and procurement as specified in its amended credit agreement with the government. For the government, the response involved a greater devolution of authority, responsibility, and control from the national level to sub-national level and to the community. It also required new mechanisms for ensuring accountability and transparency in the use of public resources and the achievement of results.

It was decided that a locally defined form of performance contracting might be the best foundation upon which to build a new business partnership.

4 METHODS

The primary data collection methods for this study included 1) a review of official government statistics; 2) a review of selected archival records assembled by the performance-based management scheme, including district-level action plans and progress reports, the annual summary of progress reports, internal and external evaluation reports, and other project-related documentation; and 3) interviews with key informants within the government (at central, district, and community level), the donor community, and the World Bank. Quantitative analyses were performed with Microsoft Excel 2000 software. Qualitative analyses consisted of text analyses of field notes and official reports.

5 DESCRIPTION OF THE SCHEME

A results orientation and a new spirit of partnership were the two guiding principles of the Burkina Faso performance-based management scheme. These principles were realized through a four-phase process. The four phases of the process included 1) the formulation of action plans; 2) negotiation and formal adoption of the plans; 3) the signing of a quasi-contractual implementation agreement, followed by implementation of planned activities; and 4) monitoring and evaluation.

A national coordinating committee, which was chaired by the Secretary General of Health, provided leadership and guided the process. A semi-

autonomous, Bank-financed management unit at national level provided the day-to-day support necessary for the realization of each phase of the scheme. The unit worked in close collaboration with the Bank's project implementation unit and various MOH departments. Each of these phases will now be explained in greater detail.

Formulation

Participatory action planning was a critical first step in a process that promoted the integration of health activities and the engagement of multiple stakeholders at all levels. The primary stakeholders at the central level included the Ministry of Finance (MOF), the MOH, the scheme's national coordinating committee, the national disease control programs, and the scheme management unit and its MOH collaborators. The primary stakeholders in the periphery included regional health teams, district health teams, health facility staff, and facility-community management committees.

Regions and districts developed annual action plans. Facility-community management committees developed micro-plans, which were incorporated, as they became available, into district-level plans. All planners followed a standard planning protocol. Plan components included a situational analysis, a statement of goals and objectives, an implementation plan, a monitoring and evaluation plan, and a detailed budget proposal. Priorities were aligned with those of the government's Poverty Reduction Strategy Paper (PRSP).

All major actors in the health sector reached consensus on a key set of performance indicators, which reflected the objectives in the PRSP. The indicators measured both level of effort (process indicators), and effectiveness (output indicators) (Table 1). They were incorporated into every plan. The central management unit developed tools to guide the calculation of these indicators. They also trained sub-national staff to use these tools.

Adoption

The objectives, activities, indicators and budgets proposed in the action plans were presented, debated, negotiated, amended, and informally adopted during an annual public forum at regional level. The forum involved all major stakeholders in each region. The national coordinating committee reserved the right to amend all requested allocations and acted as the final arbitrator on all technical and financial matters.

Implementation

Contracting. Once the plans had been amended and approved, government officials and their counterparts in the field entered into a quasi-contractual implementation agreement. The agreement provided the formal structure for an exchange of performance (per process and output indicators in the action plans), for technical support and funding from the government above and beyond that available through the routine government budget channels (i.e., IDA funds). These agreements were considered quasi-contractual for several reasons.

Table 1. Process and output indicators for Burkina Faso performance-based management scheme

| Indicator Type | Indicator |
|--|---|
| Process | Number of supervisory visits to health facility in the year |
| | Number of meetings with district health team/facility in-charge |
| | District team's activity implementation rate |
| | District team's financial absorption rate |
| | Number of local management committees established |
| | Number of essential medicine depots established |
| | Number of health facilities with essential medicine depot |
| Output | Utilization of curative services rate |
| | BCG coverage rate |
| | DTP1 coverage rate |
| | DTP3 coverage rate |
| | DTP1-DTP3 dropout rate |
| | Measles coverage rate |
| | Yellow fever coverage rate |
| | Number of couple-months of protection |
| | Tetanus-toxoid coverage for women of child-bearing age |
| | % of births attended by trained health worker |
| | Family planning contraceptive prevalence rate |
| Family planning couple-years of protection | |

First, they adopted the language and form of a classical contract, but did not carry the weight of a legal document. Components of the agreement included statements of purpose and of the obligations of signatories, modalities for financial transactions, accounting procedures, auditing requirements, and terms for cancellation. Joint signatures of the Secretary General and the

contracting parties (regional directors, district directors, facility in-charge) were required for formal authorization.

Second, the tools of enforcement were largely of an administrative and management nature, in contrast to formal rewards and sanctions, which are more common in enforceable contracts. Third, the primary vehicle to ensure accountability for the use of public monies was the spirit of the agreement, based on the special relationship between the parties, rather than the terms of a legal document. Consequently, these agreements provided some flexibility in the event of unforeseen circumstances.

Contracts of this kind, in which the government “owns” the suppliers of goods and services, are often referred to as “relational contracts” (Lidbury, 1999). The major characteristics of “relational” and “classical” contracts are summarized in Table 2. Implementation agreements were necessary but not sufficient to realize the action plans. Adequate and timely financing was also a critical component of the implementation phase.

Financing. The modality for government financing of action plans in accordance with the implementation agreements was a special dispensation to the existing finance law granted by the MOF to the MOH. This dispensation permitted the transfer of government funds (IDA money) directly to commercial bank accounts at regional and district level. This mechanism was intended to ensure a timely, secure, and liquid funding stream, local autonomy over resources for the execution of a wide range of activities at every level, and a more rigorous transparency and accountability of health sector funds.

Table 2. “Relational” vs. “Classical” contracting

| Element | Relational contract | Classical contract |
|--|---|--|
| Nature of the arrangement | Structured exchange between parties with shared needs | Structured exchange between parties with different needs |
| Form of the arrangement | Quasi contractual: language and form of a contract | Formal contract (legal document) |
| Supplier of goods or services | Owned by the government | Not owned by the government |
| Enforcement | Administrative oversight, management interventions | Sanctions and penalties in accordance with existing legal code for enforceable contracts |
| Accountability for the use of public money | Spirit of the agreement based on the special relationship between the parties (room for unforeseen circumstances) | Terms of the legal document (no room for unforeseen circumstances) |

Source: Adapted from Lidbury (1999)

Ordinarily, expenditures at regional and district level are made through a credit arrangement granted by the Treasury. Funds are controlled by the local government financial comptroller. Historically, disbursements were not made against an action plan and fiscal liquidity at operational levels was frequently a problem.

The financing of district plans, however, was a shared arrangement between the government and external donors. The amount of IDA allocation was adjusted on a district-by-district basis in accordance with the amount of funding already available from donors. IDA funds were released upon formal

authorization of the implementation agreement and action plan, and were distributed on a quarterly basis. Donor funds were distributed in accordance with established agency protocols for disbursement.

The scheme's management unit developed a procedures manual for the management of IDA funds. The unit also developed various financial management tools for use by regional and district health teams to ensure timely allocation of resources. The unit also provided training in the use of these tools to regional and district accountants, including those already at post and newly recruited personnel.

Scheme organizers also engaged the services of auditors to ensure accuracy and transparency in all operations involving government funds. Donor funds were managed according to the established accounting procedures of each donor.

Successful implementation of plans in accordance with a formal agreement within a decentralized environment depends not only on clear rules of engagement and financial liquidity at operational levels, but also effective management of a complex social and behavioral dynamic. This dynamic involves multiple stakeholders at multiple levels with divergent interests.

Spirit of partnership. Two key elements of effective partnership in relational contracting arrangements include 1) the clear specification of and agreement on essential roles and relationships, and 2) transparency and accountability in all interactions among partners. Achieving clarity in the roles

and relationships between and among stakeholders was a critical first step towards an effective partnership. As mentioned previously, there were many stakeholders in the scheme, and each had a particular role to play.

The primary role of the MOF was to secure the dispensation from the existing finance law that would permit local autonomy in the receipt and disbursement of government funds. The MOH at central level was to create an enabling environment for scheme implementation by designing a national health development plan, initiating a regular dialogue with all donors in the health sector, and ensuring a linkage between this initiative and existing authority for administrative decentralization. The MOH also established and convened the national coordinating committee, and assumed responsibility for recruiting new personnel, such as medical doctors, auditors, and accountants.

The national coordinating committee played a crucial role in the development, implementation, monitoring and evaluation of the scheme, and provided overall leadership for its execution. The committee defined the process and output indicators for the scheme, and provided guidance in the development and adoption of action plans and budgets. The committee was also responsible for approving the action plans at every level, signing the implementation agreements, and authorizing the financing of all activities. All annual allocations of funds to regions and districts were contingent upon the committee's examination and approval of the accomplishments from the previous year. It also supported the

districts in the establishment of structures and tools of decentralization, including the local bank accounts and accountability procedures.

Managers of the national disease control programs were expected to engage in the planning, execution, monitoring and evaluation of scheme activities at all levels. The responsibility of the region was to support scheme implementation in the districts. District health teams were responsible for developing action plans, implementing and monitoring them, and reporting on their progress on a quarterly basis. They also supported the health facility-community management teams in their development and implementation of micro-plans.

At the community level, the facility-community management committee was responsible for developing and implementing micro-plans. Community members contributed to the financing of health facility operations, as well as the monitoring of micro-plans in certain districts. Donors were expected to subscribe to the scheme and participate actively in plan development and implementation in those regions and districts where they were active.

The experimental and innovative nature of the scheme, and the absence of a formal reward and sanction program directly tied to degree of performance, required a high degree of transparency and accountability. One of the greatest challenges faced by the scheme was to find an appropriate balance between risk-taking (allowing freedom to manage) and accountability. The free flow of timely and high quality information, prepared and reported

according to standard guidelines, with specific tools, and accompanied by training in their use, was one mechanism for ensuring transparency and accountability. A considerable amount of financial and technical information was collected, reported, consolidated, verified, analyzed, and used at all levels in the health system. The procurement of information technology for regions and districts facilitated information management.

The second mechanism was an active management oversight system, which relied primarily on three major activities: 1) frequent interpersonal interactions and communications between scheme managers and regional and district health teams, and between district teams and facility-community management committees; 2) an annual public performance review of past year's accomplishments, and negotiation of the subsequent year's proposed activities and budget; and 3) various ad hoc interventions, including public acknowledgement or recognition, technical assistance to improve problem areas, and reduction in subsequent year's allocation, if necessary, to ensure accomplishment of the previous year's work plan.

Other factors contributing to scheme transparency and accountability, albeit not easily measured, included expressions by partners of trust and mutual respect, on-going dialogue, and a spirit of coordination and cooperation.

Monitoring and Evaluation (M&E)

Internal and external M&E methods were used to assess the completion of activities and the achievement of

outputs. Internally, both self-assessment and peer assessment were used. For example, districts and regions assessed their own process and output indicators on a quarterly basis and reported their degree of accomplishment in quarterly progress reports. Reporting was followed up with supervisory visits, which were intended to address problems and generate solutions. Peer assessment visits involved district health teams traveling to neighboring districts to observe and learn from their observations.

External assessments were of two kinds. First, a local contractor was engaged to provide an objective judgment of strengths and weaknesses. Second, World Bank staff carried out regularly scheduled supervisory visits to assess the use of IDA funds. The findings of these visits were documented in a variety of reports, which were widely disseminated within the country.

6 FINDINGS

Following a brief description of the scope of the performance-based management scheme, we will present three categories of findings. First, we will examine evidence of institutional capacity. Information on the 5 elements of institutional capacity cited in the analytical framework in Figure 1 will be summarized. Second, we will present health system performance data, including service statistics, expressions of satisfaction, and unanticipated outcomes. Third, we will address the issue of sustainability.

Scope

The performance-based management scheme was mounted in 1998 with a variety of preparatory measures that were pursued throughout the year. Consequently, the first full year of implementation was 1999. The second and last full year of implementation was 2000. Bank financing concluded in September of 2001, which resulted in approximately 6 months of actual field implementation in 2001, considering delays in the arrival of the first quarter allocation. In summary, the actual duration of scheme implementation was 2.5 years.

This was the only health sector reform scheme in Burkina Faso that was national in scope. The scheme implicated all 11 regions, 53 districts, and approximately 800 health facility-community management committees. The number of districts per region ranged from a low of 2 to a high of 11. The population of a district ranged from a low of about 28,000 to a high of 470,000, with approximately 220,000 the average population size.

The number of health and social promotion centers (which included a dispensary, maternity, and pharmacy) ranged from a low of 2 per district to a high of 35 per district, with approximately 14 the average number of centers per district. The catchment population of a health and social promotion center is usually between 10,000 and 15,000 people. The facility-community management committees included a president and treasurer, both of whom were selected by the community, and a secretary, who was usually the in-charge of the health

facility. The actual role of the in-charge varied considerably from one committee to another.

Institutional capacity

Responses to seven evaluative questions related to institutional capacity development were sought. Those questions were as follows.

1. Were regional and district action plans developed and approved?
2. Were implementation agreements developed and approved at regional and district level?
3. Were funds allocated and disbursed?
4. Were activities as agreed to in the action plans realized?
5. Were financial management and other control measures executed according to plan?
6. Were regulatory and legal procedures enacted to facilitate scheme implementation?
7. Were incentives designed and applied as intended?

Each of these questions will now be considered in turn.

1. Were regional and district action plans developed and approved?

Each year between 1999 and 2001, 11 regional action plans were expected to be produced. This represented 33 plans in 3 years. During this period, 100% (33/33) of these plans were developed and approved. Also, each year between 1999 and 2001, 52 district action plans were expected to be produced. This translated into 156 plans in 3 years. As with the regional plans, 100% (156/156) of these district plans were produced.

Finally, 104 micro-plans were projected for this period. Again, 100% (104/104) of these micro-plans were produced¹.

Total or near-total subscription to these plans was obtained from all partners operating at district level. However, regional and district plans were not always funded at the full request level. Full funding of micro-plans at original request levels appears to have been more routinely adopted. Finally, key informants, external evaluators, and project documents repeatedly cited new planning capacity as a major accomplishment of the scheme.

2. Were implementation agreements developed and approved at regional and district level?

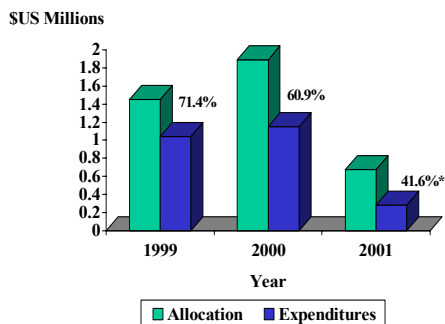
Each year between 1999 and 2001, 11 regional implementation agreements were expected to be produced. This represented 33 agreements in 3 years. During this period, 100% (33/33) of these agreements were developed and approved. Also, each year between 1999 and 2001, 52 district implementation agreements were expected to be produced. This translated into 156 agreements in 3 years. As with the regional agreements, 100% (156/156) of these agreements were produced. Finally, 104 implementation agreements at community level were projected for 2001. Again, 100% (104/104) of these agreements were produced.

¹ The number of expected micro plans was inferior to the total number of facility-community management committees because of the delay in initiating bottom-up planning.

3. Were funds allocated and expended as anticipated?

In 1999, approximately 1.4 million dollars (U.S.) were allocated to all regions and districts². Of this, approximately 1 million dollars, or 71.4% of the total allocation, was expended. In 2000, allocations increased to approximately 1.9 million dollars (U.S.)³. Of this, approximately 1.2 million dollars, or 60.9% of the total allocation, was expended. Data for 2001 are incomplete. During the first six months, approximately 700,00 dollars (U.S.) were allocated. Of this, approximately 280,000 dollars, or 41.6%, were spent. These data are summarized in Figure 2.

Figure 2. Finance absorption rate All regions and districts, 1999-2001



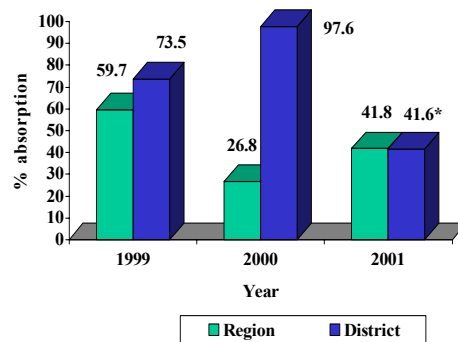
*Note: 2001 absorption rate based on 6-month period only

² Districts received approximately 85% of the total allocations, while regions received 15%. The majority of districts (61%) received between 11 and 20 million FCFA (\$18,000-33,000 US). Approximately 29% of districts received between 5 and 10 million FCFA (\$8,333-16,666 US), while 10% received between 21 and 30 million FCFA (\$35,000-50,000 US)

³ Districts received approximately 69% of the total allocations, while regions received 31%. Distributional shares at the district level were similar to those of 1999.

In 1999 and 2000, absorption rates at the district level were superior to those at the regional level. Although these rates were somewhat comparable during 1999 (59.7% region, 73.5% district), there was a large disparity in absorption between region and district during 2000 (26.8% region, 97.6% district). While absorption capacity at the district level increased considerably between 1999 and 2000 (73.5% to 97.6%), it decreased considerably at regional level (59.7% to 26.8%). These data are summarized in Figure 3. No region or district in 1999 or 2000 was able to expend 100% of its allocation.

Figure 3. Finance absorption rate Regions vs. districts, 1999-2001



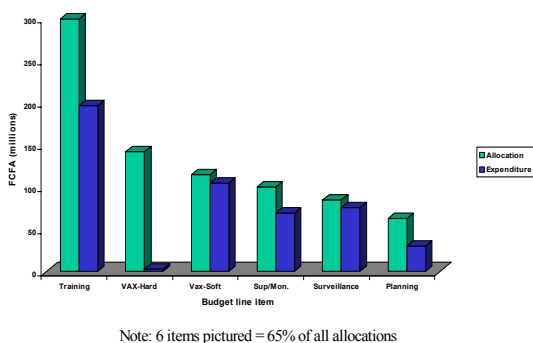
*Note: 2001 absorption rate based on 6-month period only

In 2000, approximately 65% of all allocations financed 6 major activities. The remaining 35% were spread among 19 other budget line items. The three leading beneficiaries of this financing were training, immunization hardware (e.g., vehicles, cold chain equipment, etc.), and immunization software (i.e., all recurrent costs associated with immunization), followed by

supervision/monitoring, disease surveillance, and planning.

Absorption rates in 2000, however, did not match the allocation pattern. Absorption rates were best for vaccination software (91%) and surveillance (89%), moderate for supervision/monitoring (69%) and training (66%), and worst for planning (48%) and vaccination hardware (2%). These data are summarized in Figure 4.

Figure 4. Absorption rate by type of activity, 2000 (FCFA millions)

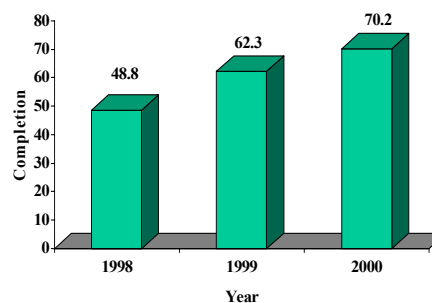


4. *Were activities as agreed to in the action plans realized?*

District-level activity completion rates increased steadily from 48.8% in 1998, which was primarily a planning year, to 62.3% in 1999, to 70.2% in 2000 (Figure 5). In 1999, 756 reports, including progress reports, activity reports, and financial status reports from all regions and districts were expected to be submitted to the central management committee. All of these expected reports were submitted, and all were received on time. In 2000, the same number of reports were anticipated. Of these, 98%

(744/756) were submitted, and all of these were received on time.

Figure 5. Activity Completion Rate* District level, 1998-2000



*Note: 1999: N=47; 2000: N=51; 2001: N=51

5. *Were financial management and control measures realized as intended?*

A procedures manual that provided guidance to regions and districts in the management of IDA funds was developed and disseminated widely. Commercial bank accounts were opened in 11 regions and 52 districts. All 11 regional accountants that were recruited were hired. These new accountants, and the 52 existing district accountants were trained in financial management procedures according to the manual. The 3 regional auditors and 3 district auditors that were recruited were also hired.

Four regional-level audits and 4 district-level audits were planned for 1999 and 2000, while 2 audits were projected for 2001. This represented 20 audits in 3 years. Of these 20 audits, 100% (20/20) were carried out as planned. These audits revealed occasional deficiencies in compliance with standard procedures, but they provided no evidence of misuse of

funds. Finally, key informants, external evaluators, and project documents repeatedly cited increased capacity in financial management as a major accomplishment of the scheme.

6. Were regulatory and legal procedures enacted as necessary to facilitate scheme implementation?

Key actors in the health sector and external evaluators judged the performance-based management scheme to be entirely compatible with the spirit of deconcentration in the health sector, and with the legal texts authorizing administrative decentralization. The MOH cannot formally contract, in the classical sense, with its own employees at sub-national levels because they are part of the same legal entity (i.e., the public sector). Consequently, the term “implementation agreement” instead of “performance contract” was adopted to conform with existing legal codes.

The signatures of the Secretary General of Health and sub-national managers were successfully secured for all implementation agreements. A special dispensation from the existing finance law was successfully obtained to ensure transparency in the management of IDA funds at regional, district, and community levels, and fiscal liquidity at each of these levels.

7. Were incentives designed and applied as intended?

Formal rewards and sanctions in return for different degrees of performance were not applied in this scheme. The realization of fiscal liquidity at all levels of the system, however, was widely considered to be

the primary incentive for achieving process and output indicators as specified in the action plans. The annual performance review and plan adoption exercise also appears to have generated a constructive competition among professional colleagues.

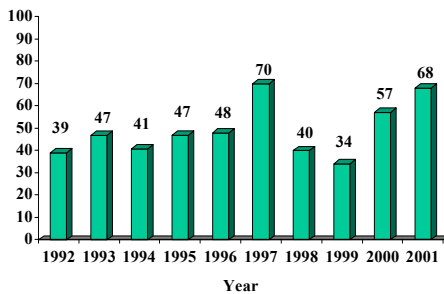
Health system performance

One measure of scheme effectiveness is documented progress in output performance indicators as specified in the district health plans. Of the 12 output indicators, only those for which official government estimates were available for every district were selected for review. These included DTP3 immunization coverage, measles immunization coverage, assisted deliveries, and utilization of curative services. Trends are described below and summarized graphically in a series of figures. Interpretation of these findings should be made with care, however, due to attribution problems as explained in the Discussion section.

Immunization coverage. Burkina Faso’s immunization program has experienced uneven progress since 1992. Three patterns of growth for DTP3 coverage can be identified (Figure 6). Between 1992 and 1996, the program was not able to achieve at any one time at least 50% coverage of the target population. The range of coverage during this period was a low of 39% in 1992 to a high of 48% in 1996, with modest fluctuations from one year to another. In 1997, a significant spike occurred: coverage of 70% of the target population was achieved. This coverage spike marked the beginning of a second pattern: a precipitous decline from 70% in 1997 to 40% in 1998 (the year of

scheme preparation) to a decade-low figure of 34% in 1999 (first year of scheme implementation). From 1999 to 2001 a third pattern emerged: a steady increase in coverage to 57% in 2000 (2nd year of scheme implementation) to 68% in 2001 (3rd year of scheme implementation). The 2001 achievement was the highest since the 1997 spike.

Figure 6. Immunization coverage (est.), DTP3, 1992-2001

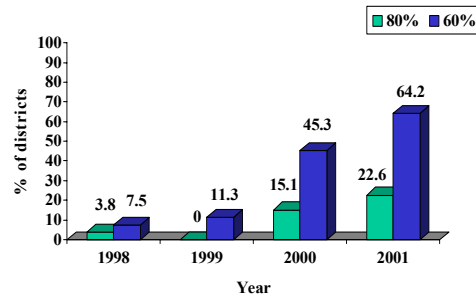


Source: Official country estimates, EPI Program

Despite an overall positive trend in national DTP3 coverage from 1999 to 2001, progress in reaching the global 80/80 target (minimum of 80% coverage in 100% of districts in at least 80% of all developing countries) was less notable (Figure 7). By 2001, slightly less than one-quarter of all districts had achieved 80% coverage. Progress towards this goal between 1999 and 2001 was steady, but very modest.

Far better progress was achieved in reaching 60% coverage. Well over half of all districts (64.2%) had achieved at least 60% coverage by 2001, compared with just 7.5% of districts in 1998, 11.3% in 1999, and 45.3% in 2000.

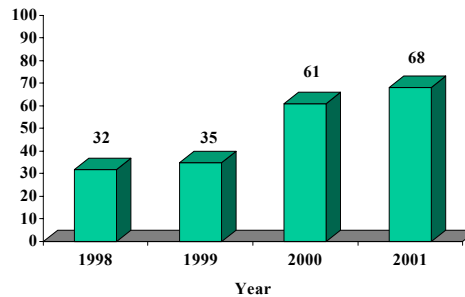
Figure 7. Immunization coverage (est.) % of districts achieving at least 60% and 80% DTP3 coverage, by year, 1998-2001



Source: Official country estimates, EPI Program

DTP3 coverage in high poverty zones⁴ increased dramatically between 1998 and 2001 (Figure 8).

Figure 8. Immunization coverage (est.) DTP3, 1998-2001, High poverty zones*



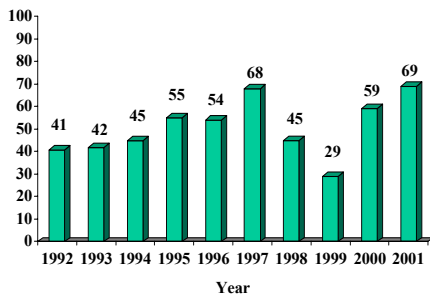
Source: Official country estimates, EPI Program
*1998: N=31 districts; 1999-2001: N=32 districts

Three patterns of growth for measles coverage also can be identified (Figure 9). Between 1992 and 1996, the program achieved steady but modest progress in coverage, although at no point in time was a minimum of 60% coverage of the target population attained. The range of coverage during this period was a low of 41% in 1992 to a high of 55% in 1995.

⁴ Districts with 47.9 % or more of the population living below the established poverty line (World Bank., 2001b).

In 1997, as was the case with DTP3, a significant spike occurred: coverage of 68% of the target population was achieved. This coverage spike marked the beginning of a second pattern: a precipitous decline from 68% in 1997 to 45% in 1998 (the year of scheme preparation) to a decade-low figure of 29% in 1999 (first year of scheme implementation). From 1999 to 2001 a third pattern emerged: a steady increase in coverage to 59% in 2000 (2nd year of scheme implementation) to 69% in 2001 (3rd year of scheme implementation). The 2001 achievement slightly surpassed the coverage spike of 1997.

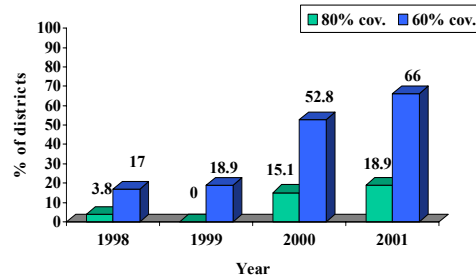
Figure 9. Immunization coverage (est.), Measles, 1997-2001



Source: Official country estimates, EPI Program

With respect to the World Bank's IDA replenishment goal of at least 60% measles coverage in most countries, Burkina met this goal in 2001 (Figure 10). District-level performance in measles coverage mirrors that of DTP3: consistent progress from year to year

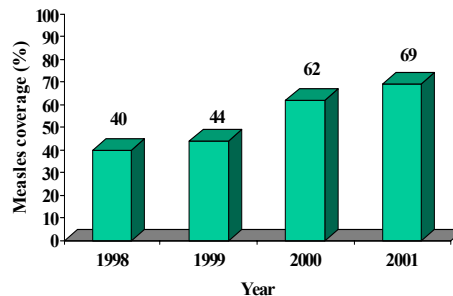
Figure 10. Immunization coverage (est.) % of districts achieving at least 60% and 80% Measles coverage, by year (1998-2001)



Source: Official country estimates, EPI Program

towards the 60% target, but very little progress towards the 80% target. As with DTP3, measles coverage in high poverty zones increased dramatically between 1998 and 2001 (Figure 11).

Figure 11. Immunization coverage (est.): Measles, 1998-2001, High poverty zones*

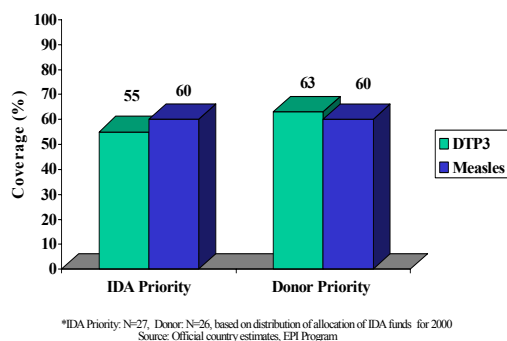


Source: Official country estimates, EPI Program

*1998: N=31 districts; 1999-2001: N=32 districts

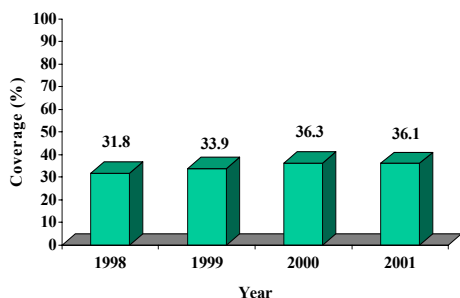
A comparison of 27 districts whose 2000 budget was primarily financed by IDA funds with 26 districts whose 2000 budget was primarily financed by donor funds shows no absolute difference in coverage for measles and only a slight absolute difference for DTP3 (Figure 12). Also of note is the wide variation among districts in DTP3 and measles coverage. A separate analysis will attempt to explain this variation.

Figure 12. Immunization coverage (est.):
DTP3 and Measles, 2000
IDA Priority vs. Donor Priority Districts*



Assisted deliveries. Figure 13 provides information on trends in assisted deliveries between 1998 and 2001. There has been virtually no progress on this indicator during this period: approximately 32% of deliveries were assisted by trained staff in 1998, 34% in 1999, and 36% in 2000 and 2001.

Figure 13. Obstetrical coverage
(Assisted deliveries), 1998-2001

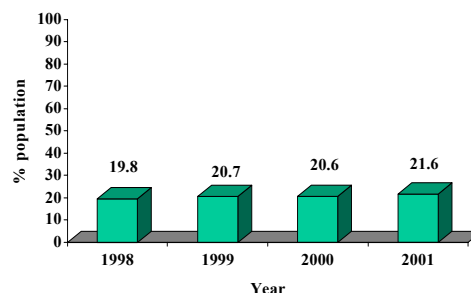


Source: Official country estimates, Direction des Etudes et Planification

Utilization of curative care. Figure 14 provides information on trends in use of curative health services during the period 1998-2001. The pattern of no progress on this indicator during this

period parallels that for assisted deliveries. Use of curative services has held steady at about 20%.

Figure 14. Service utilization (curative)
1998-2001



Source: Official country estimates, Direction des Etudes et Planification

Satisfaction. Perhaps the best measure of satisfaction with the scheme was the substantial demand expressed by regions, districts, and communities at the close of IDA financing that this initiative be continued. It was not unheard of for the central ministry of health to receive telephone calls requesting explanations for the discontinuation of the financing. Operationally, the increased liquidity at every administrative level, increased control over resources to implement plans (demonstrating, according to some informants, the central level's confidence in the abilities of health professionals), and flexibility in management procedures were repeatedly cited as the chief sources of satisfaction with the scheme.

Other sources of satisfaction included the auditing function at decentralized levels, frequent interactions between scheme organizers and implementers, and the spirit of competition generated by the need to justify actions in front of peers. New skills in planning and

financial management and the opportunity for self-monitoring of progress were also appreciated.

The primary sources of dissatisfaction included those instances in which the national coordinating committee chose not to fund action plans according to the original budget request, the perceived burden of management and oversight (e.g., too much reporting, complexity of management tools, too much oversight), and complaints from some districts in which IDA financing represented a smaller share of its budget than was the case in other districts. It should be noted that the budget “topping-off” approach of the scheme was purposive.

Unanticipated outcomes. There were several unexpected outcomes. For example, activities that were not associated with achieving the process or output indicators, or not included within the mandate of the donor-funded project, were neglected. Consequently, some major public health problems in Burkina Faso may not have been addressed adequately by the scheme. Malaria was perhaps the best case in point.

Another unexpected outcome was the major interest generated by the scheme outside of Burkina Faso. The government welcomed delegations from various African countries that were interested in learning about how the scheme was designed and implemented. Finally, as a result of its participation in this scheme, one district is considering using a performance-based management approach for its HIV/AIDS control programming.

Sustainability.

To what extent did the scheme continue to function following the termination of IDA financing? In those districts that were primarily supported by one or more donors, it appeared that some degree of district-level planning and activity in accordance with the modalities and mechanisms established by the scheme continued. It was not possible, however, to determine the degree to which this applied in all relevant districts.

In those districts that were primarily supported with IDA funds, however, district-level planning and action in accordance with scheme modalities and mechanisms ceased entirely. A second opportunity to apply the lessons learned from this first experience, and to extend capacity in performance-based management is possible, however, through a transition project to be financed by the Dutch government for the period 2002-2004. The Dutch are committed to an output-based approach implemented in a similar manner, and they have engaged the services of one of the managers of the initial scheme to ensure continuity.

7 DISCUSSION

This section will examine a variety of factors that may help to explain the successes or failures in developing institutional capacity, improving health system performance, and sustaining the performance-based management scheme. Challenges for the future will also be highlighted as appropriate. The district is the primary focus of this discussion, unless otherwise noted.

Institutional capacity

Regulatory and legal framework

Although formal texts authorizing administrative and health decentralization of public services in Burkina Faso had been in place for some time, the feasibility of this reform measure had never been adequately tested because of a lack of resources and capacity. The performance-based management scheme was legally compatible with on-going efforts to decentralize public services in Burkina Faso. It also provided an example of how these services could be decentralized in a practical way on a large scale.

The quasi-contractual, implementation agreement made explicit, in performance terms, what had previously been an implicit expectation of MOH officials. By tying an offer of increased funding, fiscal liquidity, and technical assistance to this expectation, the government created a structured, formal, and highly public exchange that offered greater accountability for the use of public funds to the government and to the public.

The implementation agreement not only focused all actors' attention on a set of priority results, but also clarified the specific roles and responsibilities of all actors involved in the exchange. A lack of clarity concerning roles and responsibilities of the different actors in the many devolved management structures that have become increasingly common in developing countries has been a persistent problem with this reform strategy (Stout and Johnston, 1999). The fact that the scheme

management team and scheme implementers delivered on their promises, on the most part, at least with respect to level of effort in the short-term, further established the credibility of the agreement.

The agreements were also designed in such a way as to minimize transaction costs. The agreements were valid for 1 year; indicators, management tools, and reporting formats were standardized; and quarterly progress reports were based on a self-reporting system. According to England, an additional advantage of a performance contract is that it can "instill a 'performance culture' in managers and staff encouraging them to seek better ways of doing things." (England, 2000). Although this notion was not examined in the course of the present review, it is another potential consequence of the scheme that should be explored in future research in Burkina Faso and in other countries that choose to adopt such a scheme.

The implementation agreement modality represented a major innovation for the health sector. It was introduced successfully without major changes to the existing regulatory or legal framework, with one exception: the special dispensation to the existing finance law. Now that IDA financing has ended, an important challenge for the future is whether the scheme can operate equally well within the parameters of the existing law. If not, can the law be modified to ensure liquidity at operational levels? Or, will this special dispensation become a permanent prerequisite for the successful realization of this kind of scheme?

Planning and budgeting

Although external evaluators found that plan quality varied from district to district, most were in line with the methodology proposed by scheme organizers. Most key informants judged the plans overall to be of high quality. A non-scientific review of several years of plans from 28 districts indicated improvements in quality over time.

The requirement of a situational analysis in every plan was intended to encourage managers to align their activities and budget requests with local needs. The significant delay in micro-planning until 2001, however, limited the degree of community input into district plans, thereby rendering many of the situational assessments far less reflective of local needs than was anticipated. Micro-planning, however, should become the centerpiece of future performance-based management efforts.

In some instances, the degree of donor participation in the development of regional and district action plans was considered to be inadequate. Partial subscription to action plans usually related to donors' need to exercise control over funds in line with their own procedural and reporting requirements. The planning process at district level, however, continues to focus primarily on the programming of donor resources. This reflects, in part, the paucity of government funds for districts once money for salaries and other fixed items has been spent. It also reflects the unpredictability of the government budget and the cumbersome rules associated with accessing, expending, and accounting for government funds.

The annual performance review and plan adoption exercise appears to have been a valuable exercise for all participants. The meeting provided an opportunity to assess and compare progress, to discuss obstacles encountered, and to identify possible strategies for overcoming these obstacles in subsequent planning and budget cycles. Districts often expressed dissatisfaction when, on occasion, their budget requests were reduced at central level following the plan adoption meeting. There were two main reasons for this. Either the coordinating committee judged the request to be inflated on the basis of the activities planned, or the incomplete implementation of the previous year's activities resulted in money being carried forward, which resulted in a reduction in the following year's request.

A challenge for the future is to ensure that these discussions take full advantage of the opportunity to improve decision-making, and avoid becoming an exercise simply to justify past actions and future funding requests. Also, because this review at the end of each year came too late to improve actions in the current year, other, and more frequent, opportunities for providing feedback on performance must be explored, and those already in place strengthened.

Expenditure and finance

The availability of trained accountants, the use of auditors, and access to management tools all seem to have contributed to the successful accounting of IDA funds. Occasionally, some teams experienced difficulty in applying certain IDA accounting procedures. There was one instance of

suspension of IDA allocations to a particular district when expenditures from a previous allocation could not be justified. All funds supporting district action plans, however, were not subject to the same degree of oversight.

For example, audits of IDA disbursements did not extend to donor funds at district level. Financial management systems instituted by other donors were accompanied by their own auditing rules and regulations. In districts with multiple donors, accounting systems were often duplicative, and the sheer number of competing systems often created difficulties for district teams.

The overall amount and frequency of financial reporting was considered by some to be burdensome, particularly in districts with multiple donors. The high degree of accountability for the use of financial resources did not extend to technical performance, which was never audited. It appears that direct allocations from districts to the facility-community management committees were better later in the project when micro-planning was more robust, but it was also at this level that unintended disbursements may have been more problematical.

Districts fared far better than regions in their ability to expend resources. The aggregate absorption rate of 61% for 2000 masks the excellent performance achieved by districts (98%). There are numerous possible explanations for incomplete absorption of IDA financing by regions and districts between 1999 and 2001.

In some instances, there were delays in the authorization of the

implementation agreements. Also, first quarter allocations often arrived 1-2 months into the quarter, resulting in 10-11 months of execution of a plan that was budgeted for 12 months. Approximately one-quarter of districts in their 2000 action plans cited delays in allocation of financial resources for planned activities as major constraints to achieving their outputs. This delay represented, however, a major improvement over the 3-6 month delay frequently encountered in the arrival of regular budget funds from the government.

In some cases, budgets may have been over-estimated, or plans may have been over-ambitious. Staff time was not always sufficient to carry out key activities associated with the indicators. Difficulties at sub-national level in procuring capital goods, such as vehicles and equipment, may explain the low expenditure relative to allocation for immunization hardware. Regional health teams' preoccupations with a major disease outbreak in 2000 may explain, in part, their poor absorptive performance.

Certain deficiencies in absorptive capacity were not the only constraint to achieving performance targets. The manner in which funds at district level were allocated to different activities may have been a more serious problem. Because each partner supported only those activities in line with both its special area of expertise or interest, and its mandate as specified in its formal agreement with the government, gaps in the financing of certain activities necessary to achieve agreed-upon outputs at district level were inevitable.

For example, the ability of IDA financing to influence change in the reproductive health indicators was limited. These indicators were not identified as priorities in the Bank's credit agreement with the government. Unless donor funds supported reproductive health activities in a given district, it would be difficult for the district to achieve these objectives.

Although IDA funds supported all districts in some measure, the degree of financial and technical support varied among districts. In those districts in which donors supported a major share of the district health plan budget, IDA support was reduced. Where donors were less active, IDA funds represented a larger share of the district budget⁵. Unfortunately, donors did not always deliver on their commitments made during the annual plan adoption meeting. IDA funds could not be reallocated when this occurred. Consequently, even multiple sources of financing may not have been sufficient to achieve the intended outputs.

Finally, shortfalls in activity completion rates seemed to have been tied to a combination of factors. These factors include delays in the receipt of budget allocations, over-ambitious planning, and the fact that some planned activities might have been under-funded. Some informants suggested that the closure of financial operations at the end of each quarter may have weakened implementation momentum.

⁵ Accounting procedures at district level made it difficult to ascertain the total budget available from all sources for any district for any given year.

Information/accountability

The quarterly progress report was one of the most important monitoring tools used in the scheme. This self-reporting device helped teams to keep track of progress on their process and output indicators, provided them with an opportunity to make adjustments before the end of the year, and symbolized the confidence of the government in their ability to control their own resources and manage their own activities. Some districts, however, had problems completing these reports, particularly in calculating the indicators and reporting their progress towards the annual target in a cumulative fashion. Also, it was difficult to judge whether these quarterly reports were used to improve decision-making, and whether they led to strategic adjustments on a periodic basis.

Regular supervision, from region to district, and from district to facilities and communities, was another important monitoring tool. Although the frequency of supervisory contacts was measured routinely and reported in the quarterly progress reports, the extent to which these visits were useful in improving performance is difficult to judge. Anecdotal information suggests, however, that the quality of supervision was an aspect of the scheme needing improvement, particularly in areas of technical assistance and feedback, which were not systematic. It may have been the case that more emphasis was placed on conducting the visit rather than on the quality of the encounter between supervisor and supervisee, as has been observed in similar settings.

Oversight provided by the scheme management team was another means of

monitoring progress and ensuring accountability. The scheme benefited from a highly competent, proactive, and productive management team at central level; however, a few persons were called upon to provide support to many actors, in an extensive geographic area, in a very short period of time. Although the design of the implementation agreement was intended to minimize transaction costs, the administrative enforcement of these agreements was both time- and resource-intensive. Consequently, not all management functions could be implemented in their entirety.

For example, time and manpower constraints left little space for operational research, the development and maintenance of a management information system (MIS), and systematic feedback to improve performance. Although document archiving was an excellent feature of the scheme, the lack of an electronic management information system that would have provided ready access to the wealth of quantitative and qualitative data collected was a limitation. These data might have been used for investigating operational problems and for providing periodic feedback on performance.

Finally, although the results orientation of the scheme was widely appreciated for its ability to set priorities and channel activities, managing by results presented some problems that will need to be addressed in the future. For example, we had hoped to use the data reported by districts in their quarterly progress reports to assess progress on indicators during the period of the scheme. After a comprehensive

review of these data, however, it was ultimately decided that they could not be used for these purposes, for several reasons.

First, despite specific guidelines and training, teams experienced several problems with the calculation of some indicators. Second, it is likely that the indicators may not have been calculated in the same manner with the same degree of accuracy in all the districts. Third, the method of cumulative reporting of progress on a quarterly basis was not mastered in a considerable number of districts.

Fourth, numerator and denominator data were not always available to permit verification or recalculation of indicators. In cases in which these data were available, particularly for immunization coverage, population denominators were at variance with those used at the national level. Fifth, the data in many districts were incomplete for the year in question, and therefore did not accurately reflect the true level of accomplishment in each district. Finally, a systematic effort to retrospectively verify and recalculate the indicators posed considerable technical and logistical challenges.

Improving regional, district and facility capacity to manage data (collection, reporting, consolidation, verification, and analysis) and to use information for continuous performance improvement during implementation will require increased attention. Indicators, management tools, and reports should certainly be revised in light of difficulties encountered in this first experience. Ensuring continued transparency and accountability will

continue to be critical, of course, but avoiding bureaucratic burden in the process will remain a significant challenge.

Incentives

Although there is some evidence that performance in developing countries can be improved by linking financial payments to well-defined statements of achievement (Eichler, 2001), the government and scheme managers were not ready to adopt a formal reward and sanction system. There was no prior experience in the country, or much elsewhere, to suggest that such a scheme could be mounted successfully. Consequently, in this first test of the scheme, potential gains in efficiency and performance were deferred in favor of ensuring political acceptability and administrative feasibility. Considering the problems that were encountered in measuring performance adequately, the government's decision to proceed cautiously appears to have been sensible.

Identifying new incentives for performance improvement, both financial and non-financial, could add additional muscle to the implementation agreement. New incentives, particularly financial ones, however, must be accompanied by certain assurances. Performance must be understood in the same way by all stakeholders, be measured accurately and uniformly, and be subject to validation through periodic independent review.

Although fiscal liquidity to implement results-driven business plans appears to have been the primary inducement for sub-national managers to achieve their process and output targets,

the power of the annual performance reviews to influence behavior should not be underestimated. First, the threat that these reviews might publicly expose possible managerial failings of regional and district medical officers, combined with anxiety that subsequent allocations might be affected accordingly, probably created some pressure for managers to strive to achieve their objectives. Another possible source of motivation to achieve targets was the concern that an unfavorable review might result in reputational and professional damage to the careers of the managers.

Key informants and project documents indicated that data generated by the scheme could have been put to better use. The absence of systematic and regular feedback on performance to the field, for example, may have been a missed opportunity to improve performance in the absence of more formal sanctions and rewards. For example, although annual summary reports of field activities by scheme managers contained a wealth of information related to both process and output indicators, in both tabular and graphic form, it does not appear that this information was used in a timely manner to influence behavior. In the future, consideration should be given to inter-regional performance benchmarking to identify outstanding practices. These data can be used as an incentive for improving performance in Burkina and elsewhere.

Finally, it is important to note that district teams invested time and resources primarily in those activities that were associated with the achievement of the indicators for which they were being held accountable (i.e.,

manage what you measure applies) and for which they had a clear mandate. There were no clear incentives associated with investing in activities that might be associated with the achievement of other potentially important indicators, but which were not included in the implementation agreements (e.g., malaria).

Also, it appears that some facility-based health personnel, in some areas, may have been reticent to hand over to or share management responsibility with community representatives. One possible explanation advanced for this was a perception that this delegation of responsibility would diminish the professional in the eyes of the community. Other possible implementation constraints at this level included the illiteracy of many committee members, which may have caused problems for the facility in-charge, and the daily occupations and preoccupations of committee members, which may have limited the time available to spend on scheme operations. Lack of motivation may also have been a factor in some cases. One community management team mentioned lack of transport, lack of recognition, and lack of pay as indicators that their participation may not have been valued.

Health system performance

Immunization coverage

For immunization coverage we used official data from the national Expanded Program on Immunization (EPI). National reported immunization coverage is an estimate of coverage based on the number of doses of vaccine administered to the target population

(children under 1) each year. Vaccine coverage surveys in the late 1990s indicated that reported coverage during this period was commensurate with the findings of the surveys. Reported coverage during the period of the scheme, however, has yet to be validated by a coverage survey.

Assuming that these national estimates are accurate, it appears that there was growth in immunization coverage during the period of the scheme—the only time in the last decade in which any kind of sustained progress was observed. It is possible that the scheme may have contributed to these improvements in coverage. For example, districts spent IDA funds on recurrent cost items, on monitoring and surveillance activities, and on activities in support of the efforts of the facility-community management committees, particularly in 2001.

An insufficient number of observations over time, particularly after completion of the scheme, and the lack of a comparison or control group, however, make it difficult to rule out rival hypotheses, particularly concurrent historical events or natural developments that might also explain progress.

For example, improvement in the overall quantity and quality of the administration and implementation of the EPI program is one rival explanation for change. The 10 percentage point increase between 2000 and 2001 for DTP3 and measles might be explained, in part, by the government's decision to offer immunizations free to the population. Prior to 2001, parents were required to purchase injection material in return for the vaccine (Eichler, 2001).

A greater number of immunization campaigns and outreach activities at district-level were reported to have contributed to improved coverage (Eichler, 2001). The extent to which IDA resources were used during this period to support these activities was difficult to verify.

Increased donor attention to and resources for immunization is another possible explanation for improvement in coverage. For example, the government began benefiting from GAVI support for routine immunization services in 2000. Changes in the measuring instruments, reporting procedures, or the manner in which these indicators were calculated, or overall improved reporting may also account, in part, for these changes.

There are several factors that might explain slow progress in the districts in reaching the DTP3 80/80 goal. Although the government is self-sufficient in vaccine financing, districts reported periodic stock-outs in vaccines during this period. Major problems associated with low vaccination coverage in districts, as reported in the annual action plans, included low literacy in the population (resulting in lack of knowledge of vaccination calendar, loss of immunization cards, etc.); dangerous traditional beliefs; professional manpower problems (movement of personnel, important percentage of newly trained nurses); and ignorance of the vaccination status of migratory populations.

Approximately 28% of districts reported in their 2000 annual plan that weak community participation and mobilization were constraints in meeting their output indicators. Increases in

DTP3 coverage in high poverty zones between 1998 and 2001 might be explained, in part, by UNICEF's targeted assistance to 11 districts of the eastern and central regions of the country, where poverty is most acute.

Assisted deliveries

The national health information system was the source of data for the indicator on assisted deliveries. The completeness and accuracy of these data could not be independently validated. Assuming these data are accurate, one possible explanation for the lack of progress in assisted deliveries between 1998 and 2001 could be the chronic inadequacy of trained personnel, particularly qualified midwives and auxiliary midwives. In the 2000 action plans, approximately 36% of all districts cited insufficient number of qualified staff in health facilities, particularly auxiliary midwives, as a major constraint to achieving their output indicators.

Another factor could be that IDA support for reproductive health activities was proscribed by the terms of the World Bank's credit agreement with the government. It is also possible that insufficient time elapsed for change to occur: two and one-half years of implementation may not have been sufficient to achieve the impact intended. Finally, there are many factors associated with the capacity of the health system to provide quality maternal-newborn care in developing countries, and many barriers that keep women from accessing maternity care. A more in-depth analysis is required to identify those factors that might be the most important determinants of low obstetrical coverage in Burkina Faso.

Use of curative services

The national health information system was the source of data for the indicator on use of curative services. As was the case with assisted deliveries, the completeness and accuracy of these data could not be independently validated. Since 1998, service utilization has remained constant at around 20%. It is difficult to improve service utilization without improving quality of care, increasing access to services and the availability of essential medicines and other commodities, and reducing cost.

As mentioned previously, the scheme did not systematically measure health care quality or promote quality improvement interventions. Quality of care is not as easily measured as coverage, and direct observation techniques that are commonly used to measure technical quality are time-, skill-, and resource-intensive. Measuring and improving quality is important, however, as it can improve relations with communities, and ultimately increase demand for both curative and preventive services.

There is evidence, however, that quality of care continues to be a problem in Burkina Faso, and this evidence comes from various sources. A study of perceived quality of care in one health district in a rural area (based on 1081 respondents from 11 health centers) revealed client dissatisfaction with the adequacy of resources and services, as well as financial and physical accessibility (Baltussen, 2002). The situational analyses in district action plans often made reference to problems with health care quality.

For example, the Barsalogo Action Plan of 2001 offered the following explanations for poor quality of care observed in this district: 1) major turnover in personnel, which undermines any notion of sustainable programs and requires iterative training; 2) deficiencies in the management of career plans and of follow-up of personnel records of staff; 3) inadequacy of pre-service training vis-a-vis field imperatives; 4) high workload, especially at the secondary level, with respect to the responsibilities of the district management team; and 5) unjustified absences of certain staff, which undermines continuity of care. Growth in quality assurance activities in certain districts, such as Kaya, and anecdotal remarks made by key informants at all levels, provide further suggestive evidence of the seriousness of this problem.

In the 2000 action plans, approximately 40% of all districts cited difficult geographic access, and 21% cited poor coverage of the population with health facilities, as major constraints to achieving their output indicators. Approximately 60% of districts have between 11% and 30% of their populations residing more than 10 kilometers from a health facility. Approximately 28% of districts have between 31% and 60% of their populations living at this distance from a health facility.

Also in the 2000 plans, inadequacy and poor condition of medical equipment and logistical support was the most frequently reported major constraint to achieving effectiveness (cited by 68% of all districts). About 1/5 of all districts reported frequent stock-

outs of medicines and vaccines. Other possible impediments to the use of curative services mentioned by participants in the management scheme included the construction of new facilities, which might have diverted patients from existing facilities; strong utilization of traditional medicine and self-medication by potential clients; and professional manpower problems, chief among them being high staff turnover.

Summary

By the end of 2001, after only 2.5 years of implementation, the performance-based management scheme was still a work-in-progress. Considerable advances had been made in building institutional capacity, but much unfinished business remained due to time, personnel, and funding constraints. Consequently, certain enduring deficiencies in institutional capacity may have contributed to districts' incomplete achievement of their output performance indicators. As noted previously, these deficiencies included district-level variability in the quality of actions plans and budgets, delays in allocations, weaknesses in financial absorption capacity, and problems in information management.

A review of the three performance indicators discussed above indicates, however, that insufficient institutional capacity was probably only one factor influencing health system performance, as our analytical framework suggests. Clearly, the discussion above points to many problems in the health care delivery structure.

Inadequate numbers of qualified staff, the frequent movement of personnel,

lack of professional experience and inadequate skills, and poorly delivered care were all cited by districts as obstacles to achieving effectiveness. Logistical problems, particularly stock-outs of important commodities, and insufficient education of the population were also cited as constraints. The performance-based management scheme had far less control over many of these factors, yet their role in explaining some part of health system performance during this period appears to have been important.

Sustainability

There are both opportunities for institutionalizing the performance-based management experience in Burkina Faso, as well as threats to its sustainability over the medium- and long-term. Both of these factors are discussed briefly.

Strengths/opportunities. Current leadership within the MOH views a sustainable decentralization program in the health sector as a political obligation. The leadership also acknowledges the accomplishments and value of this first experience, and recognizes that the lessons learned, both positive and negative, can serve them as they look for support for the new health sector development plan. A donor round-table on the sector development plan is scheduled for March 2003.

The scheme also demonstrated to the MOF that successful reforms in the health sector could be mounted when an environment even partially conducive to such schemes was created. Not only was there a strong demand from regions and districts for a continuation of the

scheme, but also the utility of the scheme was recognized at the point of service delivery and in communities. The fact that other donors and countries in Sub-Saharan Africa are looking to Burkina Faso for guidance on how to implement similar reforms also suggests that investment of government resources in such a scheme can have high instrumental and reputational value.

Consequently, advocacy at the highest levels might improve the chances that additional government resources could be made available for schemes of this kind. Time and staff were insufficient to advocate for the scheme during the period of implementation.

Weaknesses/threats. Despite certain opportunities for institutionalizing the performance-based management scheme, its sustainability is threatened by several factors.

One of the most important threats is the instability of reform champions. Many high-ranking government advocates moved on to other positions during the period of implementation. It is not evident that like-minded individuals succeeded those champions. This problem is not unique to Burkina Faso (Abt Associates, 2001).

Another risk is that this reform effort was viewed by some important decision-makers as a time-limited “project” not fully integrated into the larger health sector development plan, and therefore of limited relevance. On a related note, there remains much uncertainty within the government about the advisability or feasibility of extending the special dispensation to the finance law that

permitted transfer of government funds to commercial bank accounts. In fact, integrating the government budget into the district planning approach remains a major challenge.

For example, upon termination of IDA financing, it was agreed that petty cash accounts (“regie d’avance”) could facilitate budget decentralization in the absence of disbursements to commercial banks. To ensure continuity in the use of government funds, including potential dollars from poverty reduction efforts, it was hoped that these mechanisms could be established immediately following the close of the World Bank project. Unfortunately, these accounts did not become operational until January, 2003, which was approximately one year later than expected. Furthermore, while these accounts may contribute to improved liquidity at operational levels, they, alone, do not ensure improvements in performance.

Another danger for both the short- and medium-term future, when more intensive engagement of central ministry of health officials will be required, is that scheme implementation was beset by multiple problems at the central level. Limited management capacity, competition for resources, bureaucratic politics, and lack of appropriation of the scheme were all present to one degree or another, and all may prove to be constraints to future implementation. For example, although demand for the continuation of the scheme was strong at all levels, the MOH did not actively seek support from other donors who might have been ready to ensure continuity once World Bank support ended. It is the opinion of some informants that resistance by some technicians at the

central level, chiefly physicians, to scheme implementation led by non-physician health service administrators may have contributed, in part, to a delay in the start of the transition project to be funded by the Dutch government.

There was also resistance to and uneven involvement in the scheme by managers of some vertical, disease-control programs. For those programs for which indicators had been incorporated into the scheme's monitoring system, such as EPI, large benefits accrued to regional- and district-level operations in support of the national program. In the absence of such indicators, as was the case for malaria control, no such benefits were obtained. In neither case, however, were funds directly allocated to support central-level activities. For well-funded programs, this is not a major problem; however, for programs with tight budgets, the lack of support may be a disincentive for engagement in the scheme.⁶

Finally, there are a number of managerial and operational issues that will have to be revisited to ensure efficient and effective implementation of this kind of scheme in the future.

⁶ Vertical programs can benefit from the building of a primary health care infrastructure through decentralization and can reinforce efforts at that level. Vertical programs need to spend more time advocating for investment in their programs at regional and district level, where decisions about resource allocation are made and where implementation resources are usually greater than those at central level. Actors in decentralization must also reach out to vertical programs to engage them in this process and to ensure that national public health priorities are being adequately addressed (e.g., malaria) and policies implemented. This requires consensus building and negotiation.

For example, the managerial oversight adopted to ensure transparency and accountability for results involved high transaction costs that may be difficult to sustain. As confidence grows in the ability of regions, districts, facilities and communities to assume increasing responsibility for performance, and to manage correctly the resources to achieve it, these costs can likely be reduced. A centralized, "super management unit" also poses both administrative and morale problems that might best be avoided by spreading responsibilities across central administrative units within the ministry of health.

Sufficient manpower is needed to manage and implement this kind of scheme. Unless their value is better appreciated, through a variety of financial and non-financial incentives, they are likely to perform at sub-optimal level or depart. Finally, the demand created by the performance-based management experience has raised expectations of ministry of health employees and the population, which may be difficult to satisfy.

8 CONCLUSION

The full potential of the performance-based management scheme in Burkina Faso could not be realized in the limited time allotted; however, there is enough evidence for us to recommend this approach, with certain modifications, as a promising model for building institutional capacity to support the continuing decentralization of health services in Burkina Faso and in other African countries.

The feasibility of implementing this scheme under controlled conditions was demonstrated and widely appreciated at all levels. There was broad participation in and appropriation of the scheme at sub-national levels. Flexible implementation agreements demonstrated that the national and sub-national levels of the ministry of health were willing to share and manage the risks involved with mounting this innovation.

The scheme's central management unit created a system and standardized tools to guide scheme implementation. They also prepared participants to carry out implementation agreements through training and other forms of interpersonal support. Institutional capacity in critical public health functions, particularly planning and budgeting, and expenditure and financial management, were developed.

Had more time and resources been available, improvements in information management, ensuring accountability, and other activities to enhance implementation, such as operational research, might also have been realized. Perhaps most importantly, through increased liquidity at operational levels, resources were pushed down to the lowest levels in the health system, particularly towards the end of the scheme.

There appears to have been growth in some output indicators during the period of the scheme (i.e., immunization coverage), while others remained static (i.e., assisted deliveries and utilization of curative care services). Methodological limitations, however, make it difficult to link the scheme to either of these

phenomena. There is some evidence to suggest that deficiencies in the delivery structure may also have influenced health system performance during this period.

Greater attention needs to be paid in the future to incorporating into schemes of this kind a systematic research evaluation component. Research is necessary to examine the effect of institutional capacity and delivery structure variables on a variety of health system performance outputs that are linked to individual/household behavior change and ultimately to improved health status outcomes. Scientifically sound evidence that performance-based management schemes in the public sector can contribute to improved health system performance is urgently needed.

The foremost challenge for the immediate future is whether a model implemented under project auspices can now be replicated by the national government, with the transitional support of a bilateral donor. It remains to be seen whether the interruption in scheme implementation will undermine the credibility of the project in the eyes of those who are expected to implement it anew, or of those who benefited the first time around. To ensure success, it is of paramount importance that the legal framework within which the scheme is to be implemented, in particular, the existing law of finance, be addressed. Certainly, procedures and requirements will need to be simplified.

Furthermore, priorities as articulated in the performance indicators will need to be re-examined to ensure compatibility with the health sector development plan. For example, quality

of care and malaria are major health sector problems in Burkina Faso that cannot be overlooked. To address them properly, a better balance must be achieved between financial and technical auditing procedures and tools, and closer collaboration with the technical managers of vertical disease control programs at central level.

To achieve better efficiencies, greater decentralization of oversight and management responsibilities should be considered. This would imply an increasing role of the central coordination committee in conceptualization, operational research, analysis, and feedback, while operational features of the scheme, such as training, monitoring and follow up, are decentralized. Support to health facility-community management committees came late in the scheme; henceforth, this should become a primary focus of attention, as well as maintaining and enhancing community participation in such a reform effort.

In the long-term, many outstanding questions remain. First, can additional government funds, such as those made available through poverty reduction efforts, be invested in decentralized performance-based management? While such resources, in principle, could be used to increase district-level budgets, they are currently being managed at central level, and are being used to strengthen infrastructure, purchase equipment, and hire contractual staff. It

appears that district-level input into the use of these funds is limited. Therefore, while newly purchased equipment, for example, might be destined for district use, the risk is that this equipment may not respond to current needs.

Second, the link between performance and budget continues to be a problem in many countries (Stout and Johnston, 1999). Consequently, can greater coherency be achieved in internal and external assistance to the health sector, particularly at sub-national levels, so that managers can exercise greater autonomy and control over the use and management of all the resources required to achieve their priority outputs? Is a basket funding approach a feasible and acceptable solution?

Finally, institutional capacity is necessary but not sufficient to achieve improved health system performance. A variety of delivery structure problems, including inadequate distribution of existing health personnel, insufficient numbers of health personnel overall, and inadequate skills are substantial problems in Burkina Faso, as they are in other African countries. These problems also must be addressed.

An important lesson learned from this first experience is that decentralized management schemes are likely to achieve only partial success without concurrent policy reforms and capacity building at central level in a wide range of systems, such as planning, budgeting and health information.

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