Resource allocation and budgetary mechanisms for decentralized health systems: experiences from Balochistan, Pakistan

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This paper identifies key political and technical issues involved in the development of an appropriate resource allocation and budgetary system for the public health sector, using experience gained in the Province of Balochistan, Pakistan. The resource allocation and budgetary system is a critical, yet often neglected, component of any decentralization policy. Current systems are often based on historical incrementalism that is neither efficient nor equitable. This article describes technical work carried out in Balochistan to develop a system of resource allocation and budgeting that is needs-based, in line with policies of decentralization, and implementable within existing technical constraints. However, the development of technical systems, while necessary, is not a sufficient condition for the implementation of a resource allocation and decentralized budgeting system. This is illustrated by analysing the constraints that have been encountered in the development of such a system in Balochistan.

Keywords: Pakistan; health care rationing; budgets; financial management; public sector; health services accessibility; community health services, organization and administration; models, economic.

Voir page 1033 le résumé en français. En la página 1034 figura un resumen en español.

Background

Health sector reform is now a main focus of attention for the ministries of health in many developing countries. Policy discussions often focus on the development of a more efficient service through initiatives such as distinguishing between the functions of "purchasing" and "provision", the development of the public/private mix, greater autonomy for hospitals, and the development of district-based systems. Critical to the last of these is the development of appropriate systems for allocating resources from central to lower administrative levels. For many countries, the existing system of allocating resources, particularly financial resources, to lower levels in the health service is inconsistent with decentralization policies and the pursuit of equity. However, less attention has been paid to the development of resource allocation processes.

This article analyses issues involved in the development of such resource allocation and budgetary systems, drawing on the experience of work conducted under the Balochistan Health Systems Strengthening Component (BHSSC) of the Second Family Health Project (FH2P). The BHSSC seeks to develop institutional capacity to support a more decentralized and effectively functioning district health system. These objectives are directly linked into the wider Government of Balochistan's Social Action Programme (SAP), which places priority on primary care services and decentralization from the provincial level towards district-based management.

The decentralization strategy being developed and implemented within the project is based primarily around the strengthening of district management and planning capacity brought about by increasing management skills, improving management systems and developing more decentralized organizational structures. This is combined with a strengthening of provincial planning systems to provide strategic policy guidance to districts and builds upon earlier work carried out to establish a provincial health planning system (*1*). Within such a decentralization process, one necessary precondition for achieving equity is the development of systems for allocating resources to districts in line with health needs. The objective is to develop an approach that allows for central resource planning and local health care programming (*2*). The present article is limited to a consideration of resource allocation within the government health sector and does not consider the overall levels of sectoral funding or resource flows to

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nongovernmental elements. The resource allocation and budgeting system in Balochistan is primarily incrementalism. There are various weaknesses, including, most importantly, mismatches between the population health needs, the requirements of existing facilities, and the budgets set. The strategy adopted by the project to initiate a more appropriate resource allocation system has involved the following: analysis of previous resource allocation patterns; development of proposals for modifying resource allocation systems; and development of necessary support systems and organizational structures for linking the resource allocation process into the provincial and district planning and budgeting systems. Despite these technical developments, the project has been unable to produce significant changes in the allocation processes. This is largely the result of failing to gain sufficient support in key areas of government, at both the political and bureaucratic level.

The objectives of this article are as shown below.

- First, we explore the more technical issues involved in resource allocation in developing health systems, an area in which little has been published.
- Second, through an analysis of the Balochistan public health sector, we illustrate that technical solutions alone, in the absence of wider political ownership, will not lead to change. It is argued that any redesign needs to take place within a specific health system context, and this is illustrated with an assessment of the Balochistan system.
- Finally we examine the strategy adopted in Balochistan to move from the current inappropriate system to a more appropriate one through a phased approach, and draw lessons from the experiences and difficulties encountered.

Approaches to resource allocation and budgeting

Resource allocation is taken to be the overall allocation of financial resources to decentralized management areas within the government health service. It is closely related to budgeting, which is concerned with statements of specific expenditure plans within these broad allocative ceilings.

An effective resource allocation mechanism is a key factor in supporting decentralized health systems, which are deconcentrated, i.e. responsibility and authority are decentralized within the public health system. This contrasts with a devolved system, where local government takes responsibility for health care (*3*). Mechanisms for devolved systems require different decision-making and allocative processes (*4*) and are not discussed here. Decentralization (*5*) provides an opportunity to respond to local needs within a national equity-focused policy for allocating resources, though there are potential dangers in inappropriate decentralization (*6*). Misallocation of financial resources is widely accepted as an important cause of poor health service performance and inequity (*7*). Frequently, previous budget allocations (incrementalism), current service or facility patterns, capital developments or political factors heavily influence resource allocation. Such approaches fail to address efficiency and equity objectives.

Research has been carried out on resource allocation between different activities (*8, 9*) and the cost-effectiveness of particular interventions. However, less attention has been paid to allocations between different geographical administrative areas, reflecting perhaps the relatively recent interest in decentralization. While the first of these possibilities focuses on efficiency, the second is more concerned with issues of equity. Despite the development of complex systems of resource allocation in industrialized countries, there are relatively few documented examples of needs-based resource allocation systems in developing countries. Examples include Papua New Guinea, which developed a complex goal programming model (*10*), Zambia (*11*) and South Africa (*12*).

An equity-focused policy would require a shift in resource allocation, away from a mechanism based on existing facilities, to one based on an assessment of the needs of particular areas and their population groups. Fig. 1 sets out a conceptual model for such a process. One of the best documented examples of this approach is the United Kingdom National Health Service (NHS), which in the 1970s developed a resource allocation formula (*13*) based on a model with the following components:

– the health needs of a specified population;
– the relative costs of different services;
– the relative costs associated with different areas;
– the costs associated with non-service delivery, such as teaching costs;
– the use by patients in one area of services in another (cross-boundary flows).

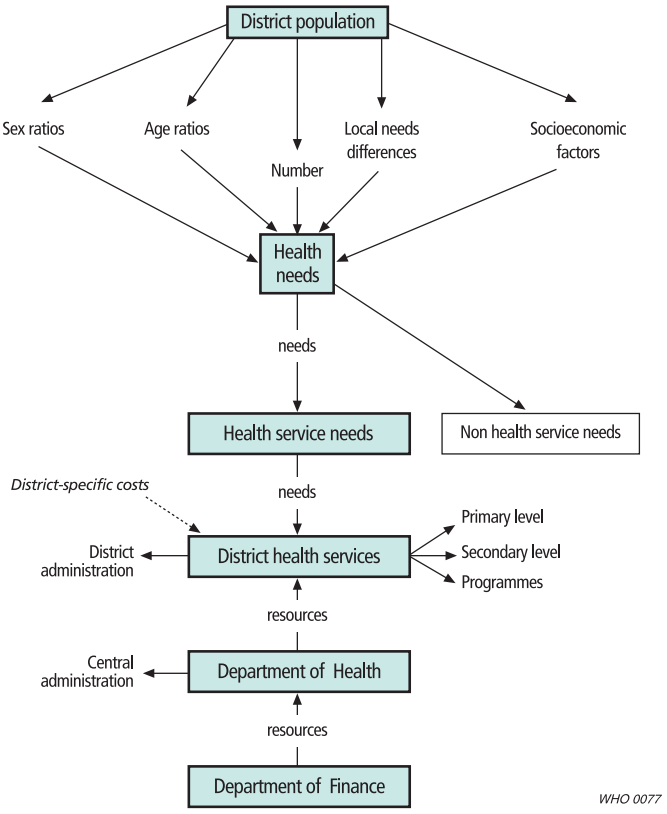
Within a public sector resource allocation system, a further criterion may be the level of private sector health care, as this may reduce the potential need for public sector resources.

The most contentious of these components is the assessment of needs. Potential measures include a combination of the following:

– the size of the population;
– age and sex ratios;
– direct measures of morbidity;
– mortality ratios as an overall proxy for different levels of health need;
– specific indicators of deprivation (to reflect potentially higher levels of relationship between morbidity and mortality, and higher health care costs).

In the NHS resource allocation model, need was split into different components including the following: acute care, maternity, chronic and psychiatric, each with different proxy measures. Issues over measure-

Fig. 1. **Conceptual model for needs-based resource allocation, Balochistan, Pakistan**



ment (e.g. *14, 15*) have centred around whether mortality is a good proxy for morbidity; whether including wider causal deprivation indices, alongside direct health measures, leads to double counting of need; whether morbidity measures are influenced by accessibility to services; the weighting given to different aspects; whether the actual funding based on components of need are translated into equivalent services at the local level; and which services should be centrally provided. Such formulae have tended to concentrate on allocation of recurrent funding, with capital allocations being related to existing capital stock.

There are further issues around the *implementation* of such formulae. These include those discussed below.

- The optimal speed of implementation. This is related, in part, to the absorptive capacity of under-funded areas; the ability to reduce funding of "over-resourced" areas; the overall growth of funding; and the political strength of different areas and their ability to resist a relative reduction in allocation.
- The need to take account of local revenue generation. Some areas, because of their economic conditions, may be able to raise revenue locally (through user charges, for example). Under an equity-focused system, such areas might be expected to receive fewer funds from a central source. Compensatory mechanisms, however, may discourage local revenue generation.
- The existence of adequate information systems. A complex system that is not backed up by appropriate and credible information, such as data on population size, can become easily discredited.
- The dangers of perverse incentives, which send the wrong "signals" to managers. The most obvious of these is where high measures of health are seen to be "rewarded" by high resource flows, with no compensating mechanism to encourage managers to improve the health situation.
- The difficulties of incorporating cross-boundary flows, without encouraging cost-shunting. Where patients may cross health care "boundaries" to seek care from neighbouring health services, some mechanism is required to recompense the receiving health authority for the additional workload. Without this there is a danger of patients being encouraged to seek health care from outside their catchment areas, particularly when the cost is high.

As a result of such constraints, and in particular the paucity of good information, countries considering the adoption of such formulae may need to start with very basic allocative formulae, based primarily or wholly on population distribution, before developing more sophisticated formulae such as those used by the NHS. Over time, it would be possible to incorporate an element of, or surrogate for, "need" without getting involved in formulae that are too complex. Such indicators may be used to weight basic population data, to reflect differing levels of need in similar-sized populations. In Balochistan, an example might be female literacy rates, which in many parts of the province are extremely low and, given the relationship between female education and health status, may provide a potential added measure of need.

Diagnosis of the situation in Balochistan

Any redesign of a resource allocation and budgetary system has to take into consideration the health system to which it applies. Universal systems of reform are unlikely to be successful (*16*). The following sets out key features of the Balochistan health system which have a bearing on the form of allocative system.

The health care system

Balochistan Province is situated in the arid mountainous south-western quadrant of Pakistan. The 26 districts of the province are the main administrative unit. Balochistan's total population is estimated to be around 6.6 million, but densities are low (19 per km^2) and predominantly rural in distribution. Health status is poor, with an estimated infant mortality of 180 per 1000 (*17*).

The health care system is based around government provision of services, although there is a significant and growing private sector that accounts for around half of all service delivery (*18*). State services are organized into a variety of primary level service delivery outlets feeding into small district level hospitals. Larger hospitals and training institutions are located mainly in Quetta, the provincial capital. There are various poorly integrated vertical programmes. The health care system suffers from a number of deficiencies attributable, in part, to problems in the planning and management of services. Most notable among these are high rates of staff absenteeism, limited availability of drugs and supplies, and a critical shortage of female health workers. The resultant poor quality of service leads to low levels of utilization and limited impact upon health problems. In such a context a resource allocation system needs to pay particular attention to its impact on quality and utilization.

Existing resource allocation and budgeting system

The existing resource allocation and budgeting system is based upon budgetary demand covering both the development and revenue sides of the budget. In the Pakistan public sector, the terms revenue and development budgets are used to denote what elsewhere may be known as the recurrent and capital budgets. The system was designed to be "bottom-up" and as such is consistent with a decentralized approach. In theory, budget submissions are proposed by budget holders, typically district health officers, responsible for district primary care services, and hospital medical superintendents. However, the failure of the majority of budget holders to participate in the process has effectively led to a centralization of the process within the provincial Health Department. Any submissions are aggregated, reviewed and subjected to central modification and political influences. No clear policy guidelines or estimates of future financial availability are applied in drawing up the budgets. While some norms are deployed, it is widely recognized that these are outdated and bear little relation to real service costs. Although adjustment is made centrally in recognition of new facilities, the main allocative driver is the historical budget rather than health or health service needs. This leads to the practice of budget holders using the virement process (transfer of items from one financial account to another) to try to adjust budgets *after* they have been set, rather than formulating robust initial budgets, even though virement is itself a cumbersome process. Specific aspects of the system are discussed further below.

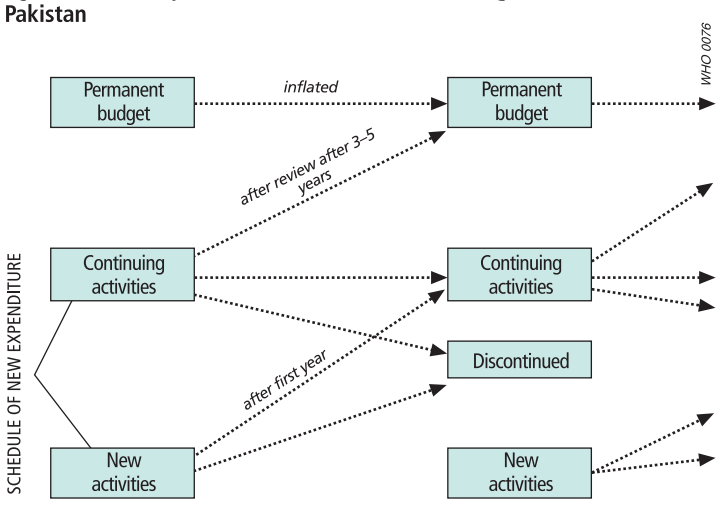
Overall budget structures

One of the issues surrounding the development of resource allocation processes relates to the complexity of the relationships between the existing budgets. In Balochistan each health care system may have a number of budgets, the minimum usually being a recurrent and a capital budget. In addition there may be budget streams associated with project activity. For example, there is a permanent (on-going) budget, which is routinely approved with some inflator, as well as two forms (new and continuing activities) of a temporary budget, which are set out each year in the schedule of new expenditure. The relationship between these is shown diagrammatically in Fig. 2. In addition, a multi-donor supported Social Action Programme (SAP) has been set up, which though in theory is fully integrated into the government budget system, continues to be viewed in some quarters as an additional budget process. As personnel costs are contained within the permanent budget, they are largely protected from budgetary cuts. This has led to a 50% increase in allocation to personnel costs since 1981, and a concomitant relative decrease in non-salary items.

Alongside the revenue budgets (the ultimate responsibility of the provincial Finance Department), there are development budgets in the form of the Annual Development Programme (ADP) that are controlled by a separate Planning and Development Department. In theory an ADP comprises a number of planning proposals which set out the development and revenue implications of a project for overall approval. In practice the revenue implications are considered less critically at the time of the ADP.

The number and type of budgets tend to cause confusion, particularly in terms of the relationship between development items and on-going revenue items. First, as a result of the stringent controls on the use of the permanent revenue budget by the Finance Department, a habit has arisen of using the development budget to finance what effectively are ongoing revenue items. Second, the parallel nature of the revenue budgets, which now include an allocation for SAP activities, leads to complexities in budgeting procedures and a danger of overemphasis on process rather than strategy. In addition, the lack of linkage between development and revenue budgeting has led to an over-extension of future revenue requirements.

Fig. 2. **Relationship between different revenue budgets, Balochistan, Pakistan**



The potential scale of this problem is exemplified in Table 1, which sets out the gross long-term revenue implications of the 1995–96 ADP. At constant prices, a 22% real increase would be required to accommodate the projected revenue implications in 1998–99. This problem is a product of both a failure in the past to recognize the critical strategic importance of viewing the two forms of budget together and, partly as a result of this, the lack of coordination between the two budget arms of the Department.

In addition to the aspects discussed above, the internal budget structures are complex and involve a large number of budget heads and line items (known as objects of classification). This is the result of a growth in activities without a concomitant rationalization of budget structures, and makes allocations difficult to analyse, monitor and change. As we have seen, different budgets (e.g. revenue, development and SAP) have different decision-making and accounting systems, leading to inconsistencies. In Balochistan, powers for virement are extremely centralized at a variety of levels (Directorate, Secretary of Health, or Finance Department) and are dependent on the form and level of re-appropriation/virement that is required. While more robust budget formulation would reduce the need for virement during the year, it is inevitable that some re-appropriation is likely to be necessary. This complexity, together with the centralized control on virement or powers, leads to an over-rigidity in the system and to difficulties in budget formulation and management at the district level.

Financial guidelines

The development of decentralized district budgets needs to occur within a framework of overall policy guidelines. In particular, guidance is needed on overall health strategy, on the criteria by which resources are to be allocated, and on likely levels of future budget growth. Without such a framework, decentralization can easily become fragmented and decentralized plans become unsustainable.

This is well illustrated by the situation in Balochistan, where there are a lack of useful explicit central financial guidelines. There are three levels at which the issuance of guidelines would help. Currently the provincial Finance Department does not provide global sectoral revenue budget estimates for the following year. This causes difficulties for the Department of Health, which is forced to develop its budget in the absence of guidance as to the likely overall budget levels. Similarly the Planning and Development Department does not provide any formal estimate of the likely capital allocation for the following year. In the absence of any central guidance, the Department of Health, in turn, does not provide any guidance for service managers concerning their likely allocation.

Table 1. **Additional revenues required to meet projected health budgets**[a]

Sector	Additional revenues required (Rs x 10^6)				% of Total
	1996–97	1997–98	1998–99	Long-term recurrent requirements	
Primary	35.8	51.4	122.2	467.0	79
Secondary	0.0	0.0	6.9	14.1	2
Tertiary	0.0	37.5	59.4	101.5	17
Support	0.0	5.7	11.0	12.3	2
Total	**35.8**	**94.6**	**199.6**	**594.9**	**100**

[a] The projected data were based on the implications of the Balochistan 1995–96 Annual Development Programme, Balochistan Department of Health Development Budget. See ref. *19*.

Information base

Any budget system needs to be based on robust information that includes health needs, service patterns, and costs. Information systems may not exist for providing the appropriate information for allocating resources to decentralized levels. For Balochistan there is a significant lack of information about either utilization or health care costs, both of which are critical for the development of budgets. Although a health management information system is being developed and should eventually assist in providing health utilization data, it will be some time before it is in a position to provide such information routinely. One particular difficulty relates to population data, where there are concerns over the reliability of estimates based on outdated and disputed 1981 census data. A census was carried out in 1998 which may therefore overcome this constraint to a significant degree. This is further discussed below.

Professional expertise

Up till now we have focused on the budget structures and processes. In addition, it is essential that any allocative process be handled by staff with appropriate professional expertise and who recognize the critical importance of budgets for achieving policy.

The current allocative process in Balochistan is administered predominantly by clerics, and though formally there are various points at which there is administrative or technical scrutiny and approval, in practice it is minimal. Linked to much of the above, either as a cause or effect, is a general lack of budgeting expertise in the Department of Health. For example, there is no professional accountant — a major constraint on the system and a reflection of the medicotechnical dominance in the Department of Health. This, linked to the lack of budgeting skills at the service manager level, is an important factor in budgeting failures. There has been little training in budgeting and this, combined with the complexity of the process, is a disincentive to active involvement by professional or policy-level staff. The situation is exacerbated by the frequent transfer of professional staff, which has caused problems in maintaining continuity.

Political context

The political context, within which decentralization takes place, is critical to the type of decentralization and its success. In Balochistan a number of issues are important in this respect, including the political relationship between the national and provincial governments, the frequent changes in government, the role of the military in politics, and the strength of the medical profession and its role within health care management. The fragile and transitory nature of government tends to result in a short-term policy perspective and a desire to maintain central political control that may run counter to the development of more rational and decentralized systems of budgeting. Finally, in a system where public sector salaries are very low, the potential for the misuse of power for individual financial gain cannot be ignored.

The products of all this are budgets and patterns of resource allocation with high degrees of inequity and inefficiency. The budgets that result are as described below.

- Inefficient between-line items, particularly between salary and non-salary items. For example, salary costs may be as high as 80% of total costs in primary level facilities (*19*).
- Inequitable between similar service units. For example, allocations to hospitals with apparently similar capacity or demands (as indicated by the number of beds or utilization levels) can vary by up to a factor of two, and to primary facilities by as much as five (*20*).
- Inequitable between populations with apparently similar health needs. For example, allocations per capita to primary level services by district vary from 18 to 159 Rs (US$ 1.00 = ca. Rs 32 at the time of the 1995–96 ADP), with an overall provincial average of Rs 37 per capita (*20*).

The above-mentioned constraints were analysed at an early stage in the BHSCC project, from which it became clear that the allocative system was not working in a way that would either induce efficient practice or promote equity between districts, regardless of how the latter was defined and measured. This situation has led to a deep sense of frustration at various levels of the health service, but in particular at the level of the districts. Overall, the budgeting and resource allocation system is viewed as an obstacle rather than a support to the development of decentralized health care. It was clear that the project would need to put emphasis on improving the resource allocation system as part of its decentralization objectives. We turn now to the options that were considered.

Modifying the resource allocation and budgeting system

Technical and organizational design issues

Described below is the process of modifying the resource allocation system operating within Balochistan. The following refers to intraprovincial resource allocation, rather than interprovincial, and only to revenue budgets. It was accepted early on that it would be impossible to include development budgets in the system redesign and that they would have to be tied into the budgeting system through the planning process for the medium term. Within Balochistan, it was agreed that the general criteria for choosing an allocative system to districts were as follows:

- impact on equity;
- impact on efficiency ;
- transparency;
- feasibility including data availability, technical capacity to operate, ability to reduce over-capacity where appropriate, and capacity to absorb growth where appropriate;
- consistency with other government systems;
- flexibility to allow medium- to long-term refinement.

Alternative models

Following diagnosis of the existing situation, criteria were applied to four potential allocative models, including the current one. All the models require a mechanism for allocating a portion of the overall Department of Health budget to cover central costs and those programmes that cannot be managed by districts. These include central and divisional administration, tertiary hospitals and other institutions and training. While it is possible to envisage a situation whereby the bulk of these are also decentralized with districts purchasing them back, this is unlikely to be feasible for some time given current managerial and information constraints.

Model A. Incrementalist (current model). District budgets are based on the previous year's allocation (or expenditure), increased pro rata, though the possibility exists for new budgets to be added through the annual schedule of new expenditure. Though this approach is administratively simple and non-threatening it neither promotes efficiency nor equity.

Model B. Health facility requirement. Budgets would be set to ensure that the major existing primary and secondary level facilities are provided with adequate resources to allow them to operate effectively and more efficiently. This would not lead to an improvement in the distribution of resources between districts. However, it would improve the quality of care at existing facilities, and indeed provides rewards to facilities with high utilization rates. This is an important feature in the Pakistani system where there is no reward, and indeed some disincentives, for improving utilization at facilities that are currently under- or inappropriately resourced. Budgets would take into account the real costs and utilization rates of existing facilities. However, to avoid major swings in allocation to different districts, which might run counter to equity, ceilings on increases would need to be set. Such ceilings could initially be based on a crude per capita basis and would take into account absorptive

capacity. Explicit prioritization would also need to be made between facilities within districts, as this approach on its own will not lead necessarily to adequate overall resource levels in districts. Districts would have to make their own prioritization decisions between facilities, based on their assessment of differential need. Some training would be required for district managers and central staff, but the close links to existing facilities would mean that it was politically acceptable and intuitively understandable. A system would need to be put in place to ensure the above elements were handled at both provincial and district levels.

Model C: Health service requirements. The third approach is an enhancement of the second. Through strong links into district planning, budgets are tied more closely to the overall health service requirements of the district population, rather than the health facility requirements. Districts which, through the planning process, are considered to be underserved would receive particular planning attention and above average allocation growth rates. Development expenditure that is related to plans, and subsequent revenue implications, would be a major mechanism for this. Judgements as to which districts were underserved, and to what degree, would be formed on the basis of similar information to that in Model D (e.g. population and morbidity), but would not be tied formally into a formula. There would be similar implementation implications as to Model B, but an additional need for strengthened central planning capacity.

Model D: Population-based resource allocation. The final model involves the allocation of resources on the basis of population, possibly weighted by factors such as age, sex, specific health needs, density, cross-boundary flows and different costs of health care delivery. Under this, district managers set specific budgets within an overall allocation provided by the formula. In a system of purdah, the ability to access services anonymously may be important and may lead to additional cross-boundary flows (*21*).

The main strength of this model lies in the potential to promote equity. Similar training requirements to those of the other models would be needed. However, the weaknesses in the current information system constitute a major constraint to this model. Furthermore the political opposition from "losing" districts could be major obstacle.

Each of the resource allocation models has advantages and disadvantages. While there was general support for Model D in principle, it was initially felt that it would be impossible to introduce in the short-term, largely as a result of the lack of confidence in the population data. Instead a progressive movement through the models towards Model D was chosen. The current incrementalist approach (Model A) is widely regarded as inappropriate. Development of better systems to meet the operating requirements of current facilities (Model B) would improve their technical efficiency and engender support in the system for the budgeting process. However, it was recognized that this should only be an intermediate step since this, by itself, will not overcome the inefficient and inequitable distribution of current primary and secondary level resources. Model C (through its strong emphasis on links between planning and budgeting) would allow a greater development of health needs sensitivity and responsiveness. The last stage in the progression towards full budgetary decentralization would involve the allocation of resources on the basis of population, weighted to incorporate other aspects of need (Model D).

Supporting components

There are various components required in order to develop the chosen allocative system, including those discussed below.

Improved information

As we have seen, information systems appropriate to the development of a decentralized resource allocation system may not be available and will need to be developed through both routine data collection and research. Within Balochistan, development of a health management information system is proceeding. Full provincial coverage has been achieved in primary level facilities, and a substantial amount of health service activity data is now flowing through the system. This will eventually provide more detailed information on non-financial inputs and service outputs.

Studies have been undertaken to develop a range of unit costs of routine activities in primary level facilities and district hospitals (*22, 23*). The first of these studies provided important information on the actual costs and "standard" levels of resources for primary facilities, taking account of utilization, case mix and other district level costs such as supervision and monitoring (Table 2).

The difference between actual costs and standard requirements gives an indication of the "funding gap" to be filled if services are to run at an improved level of efficiency under Model B. Differential funding needs can be calculated on a district basis and under-funding of existing facilities occurring in the primary health sector can now be estimated. Furthermore, up until 1998–99 it had been expected that SAP would provide real significant increases in health sector spending. This would permit the use of a policy of differential growth (based on the relative size of the gap) to under-resourced areas, rather than achieving resource shifts by cutting absolute allocations to "over"-resourced areas. This, it had been hoped, would minimize political opposition from "losing" districts. Unfortunately, the 1998–99 budget suffered a significant cross-sector cut in response to government concerns over increasing regional political tension following nuclear testing.

One of the major constraints against developing a population-based allocative formula was the lack of general confidence in the official population figures

and the political ramifications of these for different population groups. However, in 1998 a census was carried out, the results of which, formally at least, are expected to be accepted. One result of the census has been an indication that the Department of Health would now be prepared to consider a faster move towards incorporation of population in any formula.

Development of central planning and budgeting systems. Decentralization is often interpreted as a weakening of the central position. This, we would suggest, is misguided. Instead, a change in role is needed, with concomitant energy put into a redevelopment of this role. Within Balochistan, annual guidelines (*24*) have been developed which provide specific guidance on service policy, and broad service delivery targets. All these elements are combined to form the district planning and budgeting guidelines, designed to be issued annually to budget holders by the central health planning unit. In Balochistan, the Planning Cell was supported by the project to produce financial guidelines for district officers. In developing these it was proposed, inter alia, that:

- no district would be allowed to suffer a real net loss in resource levels;
- targets would be set to guide managers in the line item allocation of funds within their overall budget: in particular, these would focus on increasing the size of the non-salary budget;
- hospitals and central programmes would receive increases in line with inflation.

Development of district planning and budgeting systems. One of the key rationales for the development of a decentralized system is the ability to develop plans for districts based on their specific needs, within an overall policy envelope. In Balochistan, a district planning cycle has been developed (*25*) that enables district officers to relate their identified health problems to implementable solutions. Service managers are encouraged to define objectives linked to interventions and activities for the coming three years. Using the resource guidelines and financial information, the intention is that they are then able to develop more rational and appropriate development and revenue budgets. These budgets can then be submitted to the centre for checking and consolidation prior to submission to the Department of Finance.

Implementation experiences

The above section has outlined the technical work carried out to develop an improved allocative system, consistent with the stated decentralization aims of the Department of Health. This section describes the implementation history of this aspect of the project.

Following early preparatory work, agreement was reached on the way forward as described earlier. Costing studies were then carried out; and training in the development of district plans and budgets provided. Initially the BHSSC project was designed to operate province-wide. The financial year 1996–97 was used as a trial year to introduce revised planning and budgetary processes. District plans and development budgets were developed by 12 of the 26 districts in the province. Unfortunately, inadequate time was set aside to prepare revenue budgets and no district was able independently to submit a worked proposal. Due to the limited success of the district-level budgeting process, central allocation guidelines based on unit cost information were applied to existing district budgets. This produced more rational, but still centrally generated, draft district budgets for 1997–98. Insufficient "ownership" within the Budget Section of the Department of Health, however, led to even these drafts not being accepted and introduction of the system being delayed a further year.

Following a mid-term review of the overall project, it was decided to focus more intensively on six trial districts. Though this had little effect on the design issues for a resource allocation system, it did have implications for the human resource aspects of the project. By concentrating resources on a limited number of districts it was, in theory, possible to provide greater support for the development of their budgeting and planning capacity. However, the general problem of frequent staff transfers, referred to earlier, lessened the actual impact of this. Furthermore, the concentration on trial districts gave rise to (unfounded) suspicions that the allocation system might favour such districts in terms of the overall level of resources. Inevitably also the shift in focus to trial districts lessened the inputs of the project at the provincial level.

The trial districts, with technical support from the project, produced draft budgets for 1998–99, but these were not accepted by the Department of Health, ostensibly on the grounds that they were late. The process was started earlier in the following year and trial districts again produced draft budgets for 1999–2000 based on their facilities' needs and using the information provided from the costing studies. Again, however, they were not incorporated in the consolidated budget, with concerns about the favoured status of the trial districts again being voiced. Following the 1998 population census the Department of Health is now considering a shift to centrally determined budgets on the basis of a complex combination of population and facilities (in effect a

Table 2. **Revenue costs per month for types of primary care facility**[a]

	Civil dispensaries		Basic health units		Rural health centres	
	Budget allocation (Rs)	Personnel cost (%)	Budget allocation (Rs)	Personnel cost (%)	Budget allocation (Rs)	Personnel cost (%)
Actual costs	21 062	81	21 062	81	46 043	80
Standard requirements	42 455	52	54 555	49	210 213	46

[a] Actual personnel costs and standard requirement personnel costs are expressed as a percentage of their respective budget allocations. See ref. *22*.

combination of Model B and Model D). However, the project is drawing to an end and no changes are likely to be seen within the next year, with any future changes likely to be implemented through SAP.

Conclusions and lessons to be drawn

In this article we have described one aspect of a broader decentralization project. A number of other aspects are ongoing (including the development of decentralized planning capacity and monitoring processes). However, it is clear that the technical work carried out to support the development of the resource allocation and budgeting system in line with decentralization has not yet led to change. Although it is expected that when this project ends the technical aspects of the work will be taken over by the continuing SAP processes, it is important to analyse the implementation failure and see what lessons can be drawn for other decentralization processes. The causes of failure identified in the article are summarized in Table 3.

One useful framework for analysis of the sort of policy changes discussed here is that proposed by Walt & Gilson (*26*), which suggests the need to assess not only the *policy content* but also the *context, processes,* and *actors*. The focus of the project's work in this area was on the *content* of the reform to the allocative and budget system, with considerable attention being paid to alternative models and their technical robustness. As part of this, the *context* in which the reforms were being proposed was analysed, paying particular attention to the wider government planning and budgeting systems, information availability, and skill levels. Possibly insufficient attention was paid to the decision-making culture. The culture of centralized decision-making and an attendant procedurally driven bureaucracy, coupled with the frequent transfer of staff, means that decentralization both challenges the organizational and management culture and is in fact high risk, albeit with high potential returns in terms of health impact.

The process of change to a new system requires support at all levels. The project had always recognized the sources of resistance to decentralization broadly, and budgeting and resource allocation in particular. Unfortunately, the level and sources of resistance to new systems was underestimated. Various *actors* can be identified as perceiving the process as threatening. These include the following: the senior professionals in the Health Directorate concerned at a loss of role, status and power; clerical staff currently responsible for centralized budgeting concerned about the development of a system which may sideline them; and other central departments, most importantly the Department of Finance, concerned about the potential dangers of decentralization. In addition, politicians able to use the current allocative system as a means of maintaining a political base may be resistant. Underpinning all of this is the critical issue as to whether there *is* shared understanding of and genuine support for equity, the main driving force behind a needs-based resource allocation system.

Lastly, there are questions as to the *process* adopted by the project to introduce the changes. The changes were driven externally by a project operating close to, but largely external to, the government systems. As such it may have underestimated the need for greater internal ownership or championing of the changes by either a senior bureaucrat or politician. The shift by the project halfway through from a province-wide intervention to one using trial districts may also have led to a reduced opportunity for change. Under a province-wide approach greater support from potential winners may have been feasible, and accusations of favouring trial districts would not have been possible.

Table 3. **Causes of intervention failure**

Lack of appropriate credible information on health needs and service costs
Resistance from politicians
Resistance from bureaucrats and health service mangers
Lack of clear and shared understanding and commitment to equity
Complex budget structures
Centralized decision-making processes and culture
Interventions from project external to government
Difficulty of reforming one public sector in isolation
Difficulty of using trial districts
Lack of appropriate budgeting skills
Lack of central guidelines

What lessons can be drawn?

- First, it is easy to underestimate the various sources and depth of resistance. Greater attention needs to be given to the political dimensions of such projects, to seek ownership of the process of change. While resource allocation may appear as a "technical" issue, it clearly is much more than that. Furthermore, the type of changes involved in a new resource allocation system may be viewed as technically challenging by staff with little management, let alone economic, training and as such resisted. Under such circumstances, projects need to recognize that the processes of change may need to be slower to develop a critical mass for change. This unfortunately, does not accord easily with the time horizons of most projects. Furthermore, a clear and strong champion is needed from *within* the system. However, one of the structural difficulties with donor projects is that they tend to operate in parallel with the mainstream government system. The SAP, which is designed as an integral part of government, does in theory provide greater opportunity for genuine ownership to be developed. It is possible that the degree of genuine commitment to equity objectives could have been explored further with an analysis of the

variations in health outcomes between districts (as opposed to inputs).

- Second, it needs to be recognized that, in decentralization projects, as much attention needs to be given to supporting the necessary changes at the centre as at the periphery. While the district staff embraced the technical proposals, the major resistance was encountered at the centre.
- Third, it is worth recognizing the difficulty of reforming one element of the public sector in isolation. Many of the problems faced by the health sector were shared by, or arose from, other sectors. It is certainly arguable that single-sector reform may not be feasible, though it can also be argued that a single-sector "lead" may be necessary to pilot new government-wide approaches. However, in these cases, central government support is assumed. Within the health sector itself, it may be that in areas such as resource allocation reform, changes need to be introduced simultaneously across the system rather than through trial districts.
- Fourth, while the attempt to improve the resource allocation system may appear as a failed intervention, it is important to recognize three positive outputs of the process. First, as a result of the project, technical capacity has improved in a number of areas. Health economics capacity, with practical costing skills, has been developed within the University of Balochistan. This has led to positive collaboration with benefits to all parties and has provided the Planning Cell with access to external technical resources. Second, the skills and interest of district managers has also shown notable qualitative improvement and there is a broader recognition amongst this group of the potentially important role of a district manager under an appropriate decentralized system. Third, the technical work that has been carried out will form the basis for change when there is greater political readiness to adopt genuine decentralization. ■

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Résumé

Allocation de ressources et mécanismes budgétaires pour des systèmes de santé décentralisés : expérience du Béloutchistan (Pakistan)

Le présent article décrit le travail accompli au Béloutchistan (Pakistan) dans le cadre du deuxième projet de santé familiale (composante Renforcement des systèmes de santé du Béloutchistan). Il s'agissait d'élaborer un système de santé publique permettant d'allouer des ressources et d'établir un budget, qui soit fondé sur les besoins et réalisable malgré les difficultés techniques locales, comme les lacunes du système d'information. Le système envisagé devait par ailleurs être conforme à la politique du Béloutchistan consistant à décentraliser le secteur de la santé publique. Le système actuel est basé sur une augmentation progressive des allocations budgétaires fixées précédemment et il n'est ni efficace ni équitable. Pour remédier à la situation, nous avons cerné les principales questions politiques et techniques qui entrent en ligne de compte dans l'élaboration d'un système plus approprié d'allocation de ressources et de budgétisation.

Nous avons commencé par exposer différentes méthodes d'allocation de ressources du niveau central à la périphérie et étudié les éléments techniques utilisés pour déterminer une formule applicable à un tel transfert. Nous avons présenté un modèle conceptuel d'allocation de ressources en fonction des besoins et examiné les conditions nécessaires à la mise en œuvre de ce modèle. Nous avons ensuite décrit le système de santé actuel du Béloutchistan, en mettant l'accent sur les mécanismes budgétaires. Ceux-ci sont complexes, car il y a plusieurs budgets qui sont tous contrôlés de manière différente. Les décisions sont souvent prises pour des raisons administratives plutôt que stratégiques et elles peuvent être influencées par des facteurs politiques. Il s'ensuit que les budgets sont inefficaces et inéquitables. Pour élaborer un système d'allocation plus rationnel, nous avons envisagé quatre options. Celles-ci sont décrites, ainsi que les critères retenus pour dégager un accord sur le système qui a finalement été choisi. Malgré cet accord, le système n'a pas été pleinement mis en œuvre et l'article tente d'analyser les raisons de cet échec partiel.

On peut tirer les leçons suivantes de l'expérience du Béloutchistan.

- Premièrement, il est facile de sous-estimer les sources et l'ampleur de la résistance. C'est là un obstacle majeur à l'application d'une nouvelle politique, car le processus de changement qui doit aboutir à son adoption exige un soutien à tous les niveaux. Cependant, plusieurs groupes voient dans ce processus une menace, et il est primordial de savoir si l'équité, principal élément moteur d'un système d'allocation de ressources fondé sur les besoins, bénéficie d'un réel et large soutien. En outre, l'habitude de la centralisation de la prise de décision et de la bureaucratie procédurière, combinée avec la mutation fréquente de personnel, fait que la

décentralisation met en danger la culture de l'organisation et de la gestion et qu'elle est considérée comme un grand risque. Il faut donc accorder une plus grande attention aux dimensions politiques des projets de décentralisation et reconnaître que les réformes doivent parfois être plus lentes afin de dégager une masse critique favorable au changement. De plus, on a besoin d'un chef de file incontestable et puissant qui soit issu du système. Toutefois, l'une des difficultés structurelles inhérentes aux projets des donateurs est qu'ils tendent à fonctionner parallèlement au système gouvernemental traditionnel.

- Deuxièmement, dans les projets de décentralisation, il faut appuyer les changements nécessaires avec autant de vigueur au niveau central qu'à la périphérie.
- Troisièmement, il convient de reconnaître la difficulté de réformer un seul élément du secteur public. Bon nombre des problèmes qui se posent dans le secteur de la santé sont communs à d'autres secteurs, ou proviennent de ceux-ci, et l'on peut soutenir que la réforme d'un seul secteur n'est pas réalisable.
- Quatrièmement, si la tentative d'améliorer le système d'allocation de ressources peut paraître un échec, il est important de relever les résultats positifs du processus. Grâce au projet, les capacités techniques ont été renforcées dans plusieurs domaines. On a constaté une nette amélioration qualitative des compétences et de l'intérêt des administrateurs de district, lesquels sont de plus en plus nombreux à reconnaître le rôle potentiellement important d'un administrateur de district dans un système convenablement décentralisé. Le travail technique qui a été accompli permettra d'opérer le changement lorsque la volonté politique de procéder à une véritable décentralisation sera plus grande.

Resumen

Asignación de recursos y mecanismos presupuestarios para sistemas de salud descentralizados: la experiencia del Baluchistán (Pakistán)

En este artículo se describe el trabajo llevado a cabo en el Baluchistán (Pakistán) como parte del Segundo Proyecto de Salud Familiar (Componente de Fortalecimiento de los Sistemas de Salud del Baluchistán). El objetivo consistía en desarrollar en el marco de la salud pública un sistema de asignación de recursos y elaboración presupuestos que estuviera basado en las necesidades y fuese realizable a pesar de las limitaciones técnicas existentes a nivel local, relacionadas, por ejemplo, con el sistema de información. El sistema tenía que ser también coherente con la política baluchistaní de descentralización del sector de la salud pública. Actualmente el sistema vigente en el Baluchistán se basa en un gradualismo histórico y no es ni eficiente ni equitativo. Para abordar esta cuestión hemos identificado diversas cuestiones políticas y técnicas fundamentales para el desarrollo de un sistema más apropiado de asignación de recursos y preparación de presupuestos.

Empezamos exponiendo a grandes rasgos distintos enfoques para asignar recursos de zonas centrales a zonas periféricas, examinando diversas cuestiones técnicas relacionadas con la elección de la fórmula idónea para determinar esas asignaciones. Se presenta un modelo conceptual para establecer una asignación de recursos basada en las necesidades, examinándose paralelamente los requisitos de aplicación de un sistema de esa naturaleza. A continuación se describe el actual sistema de salud del Baluchistán, prestando especial atención al sistema presupuestario. Es éste un sistema complejo, con varios presupuestos, controlados todos ellos de diferente manera. Las decisiones se adoptan a menudo con criterios administrativos antes que estratégicos, y pueden verse influidas por factores políticos. El resultado son unos presupuestos ineficientes y no equitativos. A fin de desarrollar un sistema de asignación más racional, consideramos cuatro opciones. Se describen dichas opciones, así como los criterios utilizados para llegar a un acuerdo respecto al sistema finalmente elegido. Pese al acuerdo logrado, el sistema no se ha llevado a la práctica en su totalidad, por razones que se intenta analizar en el artículo.

Nuestra experiencia en el Baluchistán nos ha enseñado varias lecciones, según se resume a continuación.

- En primer lugar, es fácil subestimar las causas y la magnitud de la resistencia a las medidas. Este factor dificulta sobremanera la aplicación de una nueva política, pues un cambio tal requiere apoyo a todos los niveles. Sin embargo, diversos grupos ven en el proceso de cambio una amenaza, y una cuestión decisiva es si existe o no un auténtico apoyo generalizado en favor de la equidad, concepto que constituye la principal fuerza impulsora de un sistema de asignación de recursos basado en las necesidades. Además, la existencia de una cultura de centralización de la adopción de decisiones y de una burocracia dependiente de procedimientos, unida a los frecuentes traslados de personal, hacen de la descentralización tanto un desafío para la cultura de la organización y la gestión como un proceso de alto riesgo. Así pues, es necesario prestar más atención a las dimensiones políticas de esos proyectos, y admitir que a veces hay que frenar el ritmo de las reformas para poder lograr una masa crítica favorable al cambio. Además, hay que disponer de un aliado inequívoco y firme *dentro* del sistema. Sin embargo, una de las dificultades estructurales que plantean los proyectos de los donantes es que tienden a funcionar paralelamente al sector principal de la Administración.
- Segundo, en los proyectos de descentralización hay que procurar apoyar tanto los cambios necesarios en el centro como los requeridos en la periferia.
- Tercero, conviene reconocer las dificultades que supone intentar reformar por separado un elemento del sector público. Muchos de los problemas afrontados por el sector de la salud afectaban

también a otros sectores, cuando no procedían de ellos, lo que respaldaría la idea de que la reforma de sectores aislados quizá no sea viable.

- Cuarto, si bien puede parecer que el intento de mejorar el sistema de asignación de recursos ha sido una intervención fallida, es importante reconocer los resultados positivos del proceso. Así, como consecuencia del proyecto, la capacidad técnica ha mejorado en varias áreas. Las aptitudes y los intereses de los administradores de distrito han experimentado mejoras cualitativas, y entre esas personas hay una mayor conciencia del importante papel que puede llegar a desempeñar un administrador de distrito en un sistema descentralizado. El trabajo técnico que se ha llevado a cabo sentará las bases para aplicar los cambios cuando exista una mayor voluntad política de proceder a una verdadera descentralización.

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