From drought to deluge: how information overload saturated absorption capacity in a disrupted health sector

Mark Beesley,1 Giorgio Cometto2* and Enrico Pavignani3

1Independent, former Consultant on Human Resources Development, WHO Southern Sudan, 2Former Project Officer, WHO Southern Sudan and 3Independent, former Consultant WHO Southern Sudan

*Corresponding author. 44 rue de Versoix, Ferney Voltaire 01210, France. Tel: +41 783026017. E-mail: giorgiocometto@hotmail.com

Accepted 15 October 2010

Provision of technical assistance is a common form of support to health sectors emerging from prolonged conflicts. But what actions signal that the Ministry of Health (MoH) is, or is not, actively analysing and digesting the output of this assistance? Where are the boundaries between doing with and doing for?

This article presents a qualitative description of an early post-conflict policy process in southern Sudan, which represented an opportunity to test these boundaries. The methodology of provision of technical assistance to the MoH in the formulation of a human resource plan is reviewed. Initial objectives are compared with the results accomplished. Shortcomings are discussed and recommendations for technical assistance programmes in similar contexts are provided.

Between October 2005 and May 2006, World Health Organization advisers supported the MoH in conducting a human resources assessment to lay the grounds for a human resources development plan. The study employed three consultants, ten data collectors and entailed questionnaires, field visits, interviews and a review of literature.

The survey shed new important evidence on the human resources situation in southern Sudan, both in quantitative and qualitative terms, and formulated specific recommendations. The formulation of the human resources plan, however, took another direction, apparently unrelated to the findings of the survey. Various factors contributed to the scope and methodology of the survey being inappropriate to the reality of southern Sudan.

In the presence of systemic capacity gaps, including uncertain governance and precarious management systems, the benefit of one-off comprehensive surveys is likely to be negligible. Inaction is not always rooted in the lack of information, as too often assumed; this case study exposes the limits of a rationalistic approach to policy formulation and planning in the field of human resources for health. An alternative approach that entails incremental steps to institutional capacity building is suggested.

Keywords Technical assistance, human resources, health policy, southern Sudan, post-conflict
Introduction
Helping a disrupted health sector return to functionality after a prolonged period of conflict is universally acknowledged as worthy. How best to revitalize a crippled health system, or establish a performing one from scratch, is, in sharp contrast, a matter of debate. The published literature describes the processes in specific cases (Pavignani and Durao 1999; Tulloch et al. 2003; Strong et al. 2005) and indulges in the generic measures to be taken (Shuey et al. 2003), but often pays scarce attention to the modalities to be followed, and to the unintended effects of the interventions implemented during the transition (Jones et al. 2006; Newbrander 2007). Furthermore, the literature tends to focus on desirable approaches, while ignoring the wide gap usually separating those ideal prescriptions from feasible measures.

One established and widespread contribution of the international community is the supply of technical assistance to the Ministry of Health (MoH) to supplement any shortfall in expertise or experience (Pavignani and Colombo 2009a). The implicit assumption is that even if the development of guidelines, policies and plans are supported by expatriate technical legwork, national officials will still determine and guarantee their own sovereign policies.

Concomitantly, the establishment of a new health administration is perceived by outsiders as a window of opportunity to correct entrenched distortions and introduce innovations. External support, usually generously offered by international aid agencies, is often invoked by recently appointed health officials, who are eager to affirm their institution in the eyes of local and foreign stakeholders. Furthermore, swift action is perceived as mandatory by most stakeholders. A second assumption enjoying wide currency is that without policies interpreted as mandatory by most stakeholders. The impact of technical assistance, a mainstay of international development co-operation, is sometimes limited.

Context: the knowledge drought
Following decades of almost-continuous conflict (International Crisis Group 2007) and under the terms of the Comprehensive Peace Agreement of January 2005 (GoS and SPLM 2005), the Government of Southern Sudan (GoSS) was established in October of that year. It was endowed with significant political power and the mandate to provide basic social services, including health care, to the population.

The health status of the population was dismal, with life expectancy estimated at 42 years, maternal mortality at 1700/100 000, child mortality at 250/1000, skilled birth attendance at 6%, measles vaccination coverage at 25% (New Sudan Centre for Statistics and Evaluation and UNICEF 2004). Poor quality of care, inefficiency, heterogeneous standards, low and uneven coverage stood out as the defining features of a fragmented health space (SPLM Health Secretariat 2004). The formal end of the civil war seemed to offer a unique opportunity to address these flaws in a rational, comprehensive way.

Until 2005, health services in southern Sudan were being delivered by various actors: the Government of Sudan (GoS) based in Khartoum served the population in a dozen or so urban centres, the so-called ‘garrison towns’; the Sudan People’s Liberation Movement (SPLM) provided some limited services to civilians in areas under its control; while many non-governmental organizations (NGOs) and faith-based organizations (FBOs) provided services for the rest. The two main segments of the health sector were mutually segregated, and unaware of the health activities delivered in the other camp. GoS health officials in Khartoum ignored the health services provided by NGOs in the SPLM-controlled areas to the same degree that SPLM health officials overlooked services in the

KEY MESSAGES
- The impact of technical assistance, a mainstay of international development co-operation, is sometimes limited.
- In the presence of systemic capacity gaps, including uncertain governance and precarious management systems, the benefit of one-off comprehensive studies and surveys is likely to be negligible.
- Capacity could be strengthened more sustainably through a nurturing approach of progressively building core management systems and capabilities and a broader and longer-lasting engagement.
GoS-controlled towns. Consequently, both sides were unaware of and grossly under-estimated the total size of the health care network and of the health workforce that a peace settlement would create.

A single health sector would be created by merging the disconnected portions formed during the conflict. Formidable political, financial, administrative, cultural and technical hurdles stood in the way of such an endeavour. One of these hurdles was the inadequacy of the information, such as that for human resources, previously held by health officials on both sides of the political and military divide.

With the signing of the Comprehensive Peace Agreement, actors moved ahead with technical initiatives: a battery of situation analyses and development plans was designed. A post-conflict recovery strategy was formulated in 2004 (SPLM Health Secretariat 2004), while an interim health policy was prepared in 2005 (GoSS FMOH 2005). Both documents, written by international consultants with limited local inputs, were left in draft form by the new health authorities that had commissioned them, a shortcoming that proved recurrent.

The health workforce of those areas under the control of the SPLM was characterized in all situation analyses and planning documents until 2005 (Decaillet et al. 2003) as small, under-skilled, internally skewed and inequitably deployed; findings frequently encountered in countries affected by prolonged conflict (Pavignani and Colombo 2009b). While this profile referred only to SPLM-controlled areas, there was no reason to expect that human resources for health were significantly better in areas controlled by the GoS.

**Actors: a multiplicity of technical partners**

Sixty-four partners were listed in the 2005 southern Sudan health sector contacts directory, though the list was neither complete nor updated. Although there was a procedure for the voluntary registration of expatriate health staff, the Human Resources Directorate of the new MoH held no data on the composition or distribution of existing human resources: information was dispersed among multiple employers.

Although the overall strategy for health sector recovery revolved around the strategy of contracting out the bulk of service provision to non-state actors and faith-based organizations, the MoH would retain the core functions of stewardship and leadership, including identifying gaps, setting objectives, standards and norms. The human resources domain of southern Sudan had been identified as the greatest potential bottleneck in the reconstruction of the health sector. In the period we describe, it had not been decided yet whether the contracting model would entail that health workers would become (or in most cases remain) employees of non-state actors, or would eventually become civil servants. Having a comprehensive picture of the health workforce situation was therefore seen as a pre-condition for the MoH to provide evidence-informed stewardship of the health sector workforce, even in a context of outsourcing of service provision. The capacity of the Human Resources Directorate, however, was severely constrained. Hence, the human resource field looked an obvious target for external support.

The MoH was expected to be the key actor in the development of a plan to restructure and revamp the health workforce. It would own the plan, and eventually be empowered and provided with the necessary resources to implement it, directly or indirectly by outsourcing some of its components through contracts to service providers and training institutions. But other stakeholders had stronger capacity, a technical assistance mandate or an interest in the human resources for health domain. These included:

- the World Health Organization (WHO), which had just commenced a project providing comprehensive technical assistance aimed at the post-conflict recovery of the health sector, including the human resources for health area;
- the Capacity Project, a USAID-funded bilateral initiative with a specific mandate to provide technical, management and financial support for health workforce development and management;
- the African Medical and Research Foundation (AMREF), managing the only training school for clinical officers in the SPLA-controlled areas of southern Sudan, and with an established track record in the human resources domain in southern Sudan and in other countries in the region;
- other bilateral donors and NGOs, which, despite a less direct engagement, had a keen interest in the development of human resources plans for southern Sudan, as they would directly impact on their operations.

Other stakeholders, who might have been expected to have or covet a key role, such as the Ministry of Finance or the World Bank, had in reality a lesser involvement, in large part due to the fact that they were struggling with their own capacity constraints (Ministry of Finance), or were still in the process of establishing their presence in southern Sudan (World Bank).

**Processes: filling the information gap**

In order to guide the reconstruction process of the health workforce and produce recommendations for a human resources development plan, a working group chaired by the Human Resources Director of the nascent MoH developed terms of reference for a comprehensive assessment (SPLM Health Secretariat 2005). The delivery of the human resources survey and the formulation of the plan were the intended outcomes of this technical assistance programme. The implicit inability of the Human Resources Directorate to play its role in full was assumed as being largely due to lack of adequate information and strategic orientation, a gap that an intensive data-collection and planning exercise would address.

A multi-agency team, co-ordinated by WHO and which included the key agencies involved in the human resources for health area, conducted the human resources inventory starting in October 2005. Team members, including three consultants, 10 data collectors and an Information Technology (IT) specialist, were employed for a total of 35 person-months. Around 11 800 datasheets were completed at a cost of approximately US$160,000, or US$15 per datasheet. The vast opportunity costs of the time of NGO administrators and health workers in providing the data were not computed.
The expectation was the formulation by mid-2006 of a comprehensive Human Resources Development Plan for 2006–11, to be rationally developed and monitored over six stages:

(1) Data collection. Guidelines elaborated by WHO (Pavignani and Colombo 2009b) and Management Sciences for Health (MSH 2005) were used to identify the parameters of the study. Information was to be sought on a dozen variables for each health worker.

(2) Interpretation. This entailed processing the data, tabulating and interpreting the information, producing a written situation analysis and recommendations.

(3) Consultation. On approval of the document by the MoH, the Human Resources Directorate would organize a consultation process for the purposes of debate and discussion.

(4) Decision-making. The outcome of this would be either an agreed proposal or a number of alternative proposals that the MoH would review internally, and ultimately adopt as a formal strategy.

(5) Use. The plan of action would be distributed to MoH officials, who would directly implement it themselves or distribute it to counterparts for onward implementation.

(6) Updating. The results of the strategy would be monitored by further on-going data-collection and its impact analysed, generating a spiral of evidence-based policy making.

The team duly completed the survey, and the data collection and interpretation components of the plan were implemented according to the framework envisaged. Apart from quantitative data collection, the team members conducted structured interviews with NGO managers and other key informants to assess management procedures and manuals, salary scales, selection, career advancement and retirement schemes. After the data collection phase had been completed, the preliminary results of the survey were discussed in a consultative workshop with sector stakeholders.

The lack of any foundation documents by the MoH, in particular the absence of a job classification table to standardize categories and levels of staff, limited interpretation. Respondents placed themselves in over 250 self-defined job titles making agglomeration unreliable.

Summing up, a situation analysis (GoSS MoH 2006a) was delivered on budget and on schedule. The document was extensive in both scope and detail. The assessment depicted a grave situation and recommended realistic measures, clearly prioritized and sequenced.

Policy content: the information deluge and the ensuing saturation of absorption capacity

Satisfactorily, the survey did shed new light: whereas some views previously held were confirmed, several others were proved wrong. Notably, total numbers of health staff in the SPLA-held areas (11 800 according to the survey results) were almost double those anticipated, and the real distribution of staff within and between states was unexpected.

The most pressing measure identified would be the organization of existing human resources in a way that they could effectively be managed by the new health authorities. The recommendations originating from the situation analysis posited that only after 2 years of hard work directed at organizing human resources management would training programmes meant to expand and upgrade the health workforce be launched. Cautionary words questioned the appropriateness of drafting an expansionary human resources development plan (a recurring temptation in post-conflict settings), given the very low baseline capacity in the Human Resources Directorate for managing effectively the existing human resources.

Despite initial progress, the Ministry's work on its human resources development plan came to a halt: after the delivery and internal circulation of the situation analysis and draft recommendations, no further discussion took place and no documents were distributed by the MoH. Due seemingly to prolonged delays in the formal nomination of officials, the MoH found itself unable, as a body, to consider the documents produced by the human resources working group for approval, or arrange for their distribution and review. The MoH had no pre-existing written plan on human resources, which might have been used as a basis to be updated. No interim instructions or guidelines, in anticipation of a later more detailed plan, were issued to the health authorities at sub-national level.

The overall health sector co-ordination mechanism, the Health and Nutrition and Consultative Group, chaired by the MoH, served (temporarily) as a forum for debate, but was not formally empowered with approving strategic documents and plans. Moreover, there were dramatic fluctuations in capacity among key stakeholders, including WHO and the MoH itself: when key individuals left, the Health and Nutrition Consultative Group ceased to function, not to be revamped until many months later in 2007. Soon after its completion, therefore, the human resources assessment was left without an institutional body that could approve it, and without a forum that could maintain the momentum behind its findings and the ensuing recommendations.

By June 2006, all the data were at least 6 months old. A number of events—including widespread abandonment of posts by health workers, intermittent military recalls of reservists, staff transfers to previously inaccessible areas, the return from Khartoum of qualified southerners, and the end of funding and operations for some NGOs—meant that the detail of the survey was no longer accurate. No new procedures for updating or revising data were developed: developments could not be tracked. The recommendations stemming from the human resources assessment were not endorsed by the MoH.

Instead, a modified version of the situation analysis and recommendations, the centrepiece of which was the proposed development of a strategic human resources plan, was released in 2006 by the MoH (GoSS MoH 2006b). A strategic plan for human resources for health (HRH) 2007–17 was formulated only in 2007 (GoSS MoH 2007). Its most striking feature was the projection of a total workforce of about 23 000, i.e. twice the number of health workers found as active by the 2006 assessment. The dramatic projected growth of the southern Sudanese health workforce was premised on the expansion of...
Aspects | Recommendations of the human resources assessment | Objectives of the HRH Strategic Plan
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Time horizon | ● 3 years | ● 10 years
Prioritization approach adopted in the document | ● Develop management systems and consolidate existing skills in first 2 years. ● Expand workforce size only from third year onward. | ● None
Number of interventions recommended | ● 12 | ● 110
Projections on quantitative targets of the health workforce | ● Initial size (10,850) adequate in the short-term to operate a slim network of health care facilities. | ● Need to double health workforce size to 22,932 staff, based on staffing norms of health facilities, expected to expand in number in order to meet population ratios.
MoH Human Resources Directorate Capacity | ● Determine organigram, modus operandi of the MoH Human Resources Directorate and establish links with local government authorities and other sectors. ● Recruit 14 dedicated staff (4 at central level, 1 for each of the 10 states), procure long-term technical assistance. | ● Formulate terms of reference for Human Resources Directorate and advisory team. ● Develop HRH Strategic Plans at Central, State, County, health facility and training institutions levels. ● No concrete indications on staffing requirements.
Health workers accreditation and management | ● Design job classification table; accredit and re-designate existing health workers; develop and maintain personnel files; excise ghost workers and retire staff as appropriate. | ● Develop guidelines on planning, recruitment, deployment and performance management for health workforce at the Central, State, County and health facility levels and training institutions.

Source: authors.

Whereas the assessment recommended a discrete set of priority activities (12) to be conducted in a sequenced fashion over a 2–3 year period, the Strategic Plan was a comprehensive list of nearly all the activities (110 interventions overall) that the Human Resources Directorate of a MoH can do, lacking any indication on their relative importance or a logical order of priorities. Despite its ‘Strategic’ label, the Plan failed to provide decision-makers with practical guidance about implementation, or hard choices.

Discussion
The main limitation of this paper is that the two lead authors have been directly involved as advisers in the human resources assessment described, and as a result a certain degree of subjectivity was unavoidable. The involvement of the third author was sought in part to obtain a critical analysis of the viewpoint presented by the two lead authors, thereby mitigating the risk of a biased perspective. This article did not emerge from a structured research programme, but from the efforts of the authors to make sense of events after their unfolding. Given the incompleteness of the available information, our interpretation cannot always be backed by hard data.

Interviews with key informants who worked in the southern Sudanese health sector in the years following the events we described have confirmed the disappointing pace of health policy implementation in the human resources domain, to which
an over-ambitious Strategic Plan, lacking a focus on priority activities, might have contributed. For example, in a presentation delivered by the MoH in early 2009 at the Government of South Sudan Health Assembly, the ‘to do’ list included the establishment of payrolls for staff working in primary health care facilities, indicating a snail-pace progress since the human resources assessment was conducted in 2006 (GoSS 2009).

Efforts to obtain updated quantitative information about health facilities, human resources and health outputs were fruitless. Additionally, an attempt to obtain the perspectives of Government officials on the events described was made, but it was not successful. These limitations notwithstanding, we believe that this story deserves to be told, not only due to its intrinsic value, but primarily because its fundamental character tends to recur across crises.

Decision-makers engaged in a disrupted health sector emerging from a protracted period of violence frequently rely on ambitious, detailed field inventories of most aspects of health service delivery, which typically fail to inform decisions (Pavignani 2006). Factors behind this disappointing practice include the unstable environment that quickly makes the survey findings outdated, the inability of the concerned administration to make decisions based on evidence, the heavy political constraints faced by decision-makers, and the proliferation of external and internal agendas that compound decision-making. In the particularly challenging environment of southern Sudan, the usual constraints played an expanded role, thus magnifying the features that we described.

In the case of the human resources analysis and plan in southern Sudan, the rationally appealing progression in the completion of any task—i.e. assessment, planning, execution and evaluation, followed in turn by further assessment and so on—could not be sustained even in its first full cycle. What was thought to be achievable was misconceived in a number of areas. Multiple factors determined the lack of ownership and subsequent follow-up of the assessment: the scope of work was over-ambitious; the institutional environment of the Ministry of Health was not ready to absorb and use the findings of a large scale (or, perhaps, any) survey; the health sector co-ordination structures and the capacity of technical assistance providers, including WHO itself, were fragile, being exposed to dramatic fluctuations in capacity following turn-over of few key individuals.

The starting point was an ideal goal (a fully fledged human resources plan) conceived with the expectation that a non-ideal environment could be moulded to comply. Conversely, a proper reading of the actual environment (a disrupted health sector) might have instead revealed what goals were realistically achievable.

In the institutional sphere, the expectation of a fully-functioning MoH was over-optimistic. With hindsight, a more reasonable assumption would have been that the MoH’s capacity to absorb information and take decisions was likely to be limited, as could be expected from a nascent institution mandated to govern one of the most disadvantaged regions on earth (Stoddard and Harmer 2005). Its capacity in other areas had already been tested and found limited. The wide gap between policy development and adoption, with a recurrent hiatus between policy establishment and implementation, should have alerted committed parties. For example, several other technical documents, such as the Basic Package of Health Services (MoH GoSS 2006), remained unapproved drafts, endorsed by the Health and Nutrition Consultative Group from a technical standpoint, but not considered for formal approval by the MoH, and therefore lingering in a policy limbo that meant they were neither subjected to further debate or revision, nor approved and used as a basis for planning and programming.

The newly constituted MoH was acting as a new grouping and the phenomena associated with group dynamics applied. In early 2006 it had recently relocated from Nairobi to Juba, moved to temporary workstations, employed a mixture of new and old staff members, and it relied on uncodified operating procedures. Between ‘forming’ and ‘performing’, periods of ‘storming’ and ‘norming’ should have been expected (Tuckman 1965). In this transition phase, the attention of most MoH officials was likely to be attracted to issues internal to the institution at central level, such as power, funding, prestige, perks and working tools.

Regarding the intervention design, the action plan was one-sided. There was no Memorandum of Understanding stating the mutual obligations of the World Health Organization and the MoH as the two principal parties. Precisely what the MoH was agreeing to do at which stage was not spelt out. The MoH’s verbal commitments to specific tasks, agreed in the framework of the human resources working group, were not fully adhered to.

To compound matters, many recommendations looked unpalatable to stressed health officials, who were insecure about their tenure, status and performance. Unsurprisingly, they preferred to sanitize the original survey document of its most unorthodox recommendations, and switch instead to a planning process unconstrained by capacity bottlenecks, which relied instead on reassuring standards taken from the international literature. As a polished document not calling for immediate painful or risky decisions, and fixing the distant horizon of 2017, the HRH Strategic Plan looked certainly less threatening than the original recommendations stemming from the survey report.

Also, the size of the survey was over-ambitious. The viability of the system should have been tested before a sizeable expenditure was incurred. Having a more focused and realistic single objective might have revealed strengths and weaknesses at a lower cost. As an alternative strategy, a ‘test dose’ in a survey of more strictly limited aims could have identified most of the bottlenecks. Once one limited data package had achieved a full cycle, the scope of the next round of data fields could then be expanded. For instance, scarce capacity and energies could have been concentrated in the massive task of certifying existing health workers according to streamlined but recognized categories and careers, as done in Cambodia and Afghanistan (Smith 2005). This process would have dramatically improved the knowledge of health authorities about human resources numbers and skills, and would have been a requisite milestone for health workers’ inclusion in official payrolls. Additionally, human resources officials would have acquired hands-on management experience.

By adopting an incremental approach, bottlenecks would have been spotted early while they were manageable, and
solutions conceived. Indeed, bottlenecks were apparent at all stages: in the methodology (there were constraints to the helpfulness of informants, the usefulness of pilot studies and validation); in the procedure for review and re-drafting of the analysis; in the exact protocol regarding securing MoH approval of draft documents and their distribution; in the feasibility of consultation with stakeholders; and in the system for continuous updating of data.

The establishment of a tentative system for regularly communicating with collaborating NGOs to maintain and update key data would have allowed the information to remain relevant for longer. In late 2005, however, the MoH had no full or updated list of which organizations were working in its territory, nor any contact addresses.

The peculiar features of any health sector affected by protracted conflict warrant careful analysis before resource-intensive reconstruction processes are embarked on. In turn, however, the context in which such resource-intensive analysis has to take place must be carefully assessed. What actions indicate that the MoH is actively analysing and digesting the outputs of technical assistance? Signals should have included complementary or alternative ideas, the identification of missing or overlapping areas and errors, vigorous debates, concern for some ominous findings, the noting of conflicts between proposals and policy, and concrete suggestions on how to take the endeavour to the next stage. The absence of any of these was an ominous sign.

Another lesson learnt was that planning for a one-off spasm of activity to deliver a product incurs inherent shortcomings. In contrast, a continuous and nurturing approach would have been characterized by a much more widespread and longer-lasting engagement in order to progressively increase capacity.

When approaching the studying of the human resources (or, perhaps, any other) area of a disrupted health sector, the preliminary step should be analysing the absorption capacity of the relevant department of the government authorities. The actual decisions to be taken in the short-term should be discussed with concerned officials, and realistic terms of reference of the survey developed accordingly. A thorough reading of the political and administrative difficulties faced by MoH officials might have clarified their room for manoeuvring when operational decisions had to be contemplated.

In the case of southern Sudan, with hindsight, a more effective and efficient approach would have been to concentrate on a more limited number of information fields, to be gathered through a simplified methodology, and which could be regularly updated using existing capacity. Most importantly, the survey should have been conducted in the framework of a comprehensive assistance package to the human resources department of the MoH, reflecting its true capacity-building priorities (Potter and Brough 2004), which related to its core management systems rather than its strategy gaps. Such a package would have had to entail the establishment of a human resources management information system and the training of MoH staff (or, in their absence, the secondment of technical advisors), so as to make it sustainable.

One-off, intensive exercises often incur the fate described in this article. This sort of failure is rooted in the conceptual fallacy, well-grounded in Western thinking, that rational decisions emerge from reliable information and linear processes. Technical rationality provides only a partial explanation of policy formulation and planning for human resources for health (Murray and Dimick 1978). Instead of the logical progression towards appealing goals embodied in classical planning approaches, policy formulation, planning and management typically proceed by iterative loops, whose increasing difficulty and complexity are conditioned by feasibility and risk considerations, rather than cold logic, and negotiated with interested parties, whose interests must be explicitly taken into consideration (Robinson 1999). Competing goals, risk-avoidance and non-action, detours, trade-offs, reversals and the divergence between documents and actions are among the hallmarks of real-life health policy and planning processes. Policy makers and planners must master the science of ‘muddling through’ (Lindblom 1959).

Implementing the recommendations of the survey entailed some risk-taking, and a substantive shift in management strategy and practice on part of the MoH. Opportunities for change stem from iterative interactions between the analysis of problems, the identification of solutions and the pursuit of policy consensus around the latter; actual change occurs when these three processes converge (Kingdon 1984). In the formulation of recommendations for the human resources development plan in southern Sudan, inadequate attention was paid to the third pillar of policy change (generating consensus): unsurprisingly change did not happen.

Against its own objectively verifiable goals—the formulation of a situation analysis and a set of recommendations—the survey was successful. But as a component in the larger objective of strengthening the human resources field in southern Sudan, the survey was an unqualified failure, as the findings of the survey were not used as intended. Over US$160 000 was spent (and precious resources, including time and goodwill, consumed) to deliver, in effect, little impact. The expensive lesson was that in early 2006 the MoH had insufficient capacity or willingness to make use of the findings of a large-scale survey. A similar conclusion could have been reached earlier, and for less money, had the involved actors been willing to stare candidly at the whole picture and draw from it the obvious conclusions.

Funding
The technical assistance programme described was funded by the Italian Ministry of Foreign Affairs; no funding was received for the specific purpose of writing this article.

Conflict of interest
The first two authors (Beesely, Cometto) have been personally involved in the activities of the technical assistance programme described in the article, as former employees on short-term contract of the World Health Organization. At the time of writing this article, the authors were no longer under contract with the World Health Organization. The views expressed in the article are exclusively the authors’ and do not necessarily reflect the positions of the World Health Organization, the Ministry of
Health of the Government of Southern Sudan, nor the current employers (if different) of the authors.

References


