

Afghanistan
Health Sector Profile
2002

A contribution to the debate on health sector recovery

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Note: Comments to this draft are welcome. Please, write to:

Enrico Pavignani enricopavignani@hotmail.com and
Sandro Colombo colombo@who.ch

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Introduction

The scope of this document is to present an overview of the health sector, which pays special attention to the issues considered crucial to the development of a reconstruction strategy. Documented facts, as well as knowledge gaps, opportunities and constraints, policy options and costs are discussed, so as to offer to stakeholders grounds for informed decisions. Furthermore, it is hoped that this profile proposes to old and new agencies operating in the health field a common information basis to achieve coordinated action.

Given the uncertain nature of a large part of the available information, its numerous and serious gaps, and the fast-moving situation, this document is necessarily work in progress. The reconstruction strategy to be eventually adopted for the health sector will evolve over time, as the environment stabilises, information becomes more complete and reliable, poorly-known issues are explored, policy issues are clarified and forward thinking is refined. It might take two-three years of hard work at all levels, to consolidate the understanding of the health sector and to finalise reconstruction plans. This should not imply paralysis (“by analysis”) of decision-making and implementation. In fact, the main health needs of the population, as well as a number of major shortcomings affecting the health sector and making it unable to address those needs, are already sufficiently understood (at least in qualitative terms) to allow for immediate and resolute corrective action.

The starting point of the analysis presented in this profile is the document “*Reconstruction of the Afghanistan Health Sector. A preliminary assessment of needs and opportunities* [WHO, 2002], which already singled out many of the relevant issues. To strengthen that review, additional, more detailed and updated data has been collected, checked and validated, so as to elaborate a stronger and better-documented analysis. As many of the issues under discussion can be better addressed by taking stock of the experience gained from other reconstruction processes, the aspects considered relevant to the Afghan situation are brought to the fore and commented in some detail.

A cautionary word about the data presented in this profile. As Dupree noted in 1980, statistics in Afghanistan are “wild guesses, based on inadequate data”. Matters have worsened since then. Thus, all available figures must be treated with extreme caution. While some of them can help to point to the magnitude of a given problem, most data are unsuitable for precise comparisons, such as to monitor trends over time. Throughout this report, a strenuous effort had been done to discard suspect data and to flag inconsistencies. Rounding has been used in many cases, to avoid conveying to the reader a misplaced sense of precision.

This profile is divided in three sections:

- 1) **Section One: The Picture**, which describes the situation prevailing in the health sector in 2002,
- 2) **Section Two: Discussion**, covering several crucial issues, and
- 3) **Section Three: Towards Recovery**, which proposes in broad terms a reconstruction scenario, based on the picture drawn in Section One and the issues discussed in Section Two.

Section One: The Picture

Country background

At the crossroads of Central Asia, peaceful periods have always been short lived in Afghanistan. The last such period ended in 1973, when king Zahir Shah was overthrown by a military coup. In 1979 Soviet troops invaded the country, installing a communist government. Western and Islamic countries provided substantial aid (mainly in the form of military support) to Mujaheddin, tribesmen who fought against Soviet troops first and, after their withdrawal from the country in 1989, the Soviet-backed government.

Sovereignty and security issues compounded the delivery of humanitarian assistance, limiting cross-border activities to Eastern Afghanistan. The ousting of the communist government in 1992 did not bring peace, as fighting among mujaheddin erupted in the struggle for power. The hostility among factions brought war destruction to cities, particularly in Kabul. As during the years of occupation, successive Kabul-based governments administered only parts of the country, leaving most territory under the control of local commanders. The civil war seemed ebbing with the emergence of the Taliban in 1994, an Islamist group able to gain control of most Afghanistan. Their rule, marked by the strict adherence to traditional practices, collapsed quickly at the end of 2001, under the combined attack of the US and of its Afghan allies.

The Taliban regime, with its suppression of women's rights and its lack of interest in social issues, confronted humanitarian agencies with acute dilemmas. While western countries tried successfully to isolate and de-legitimize the Taliban government, considered by them a "rogue" state, humanitarian agencies ended up assuming a surrogate role for politics, supporting what they perceived as a "failed" state. The contradiction between political and humanitarian actors, also within the UN operation [Duffield et al., 2001], resulted in aid being provided in the form of small-scale and short-term, purely relief-oriented, assistance programmes. Even if humanitarian aid stabilised in the second half of the 90s at around US\$ 200-300 million per year, a meagre amount considering the needs, it exceeded total licit export revenues. According to Pain & Goodhand [2002], NGOs alone contributed in 1998 with an estimated US\$ 90 million to the economy, employing 25,000 national staff.

The interim administration, negotiated by the many groups emerged to occupy the post-Taliban political space and headed by Hamid Karzai, has been recently endorsed (after reshuffling) by the *Loya Jirga* (traditional Grand Assembly) as the legitimate government of Afghanistan. Outside Kabul, its influence is still limited.

Aid Coordination (general)

According to an anonymous aid worker, "Simply coordinating the coordination groups was a problem in coordination." As in similar situations elsewhere in the world, the feeble success of coordination mechanisms resulted in their proliferation.

The UN Office for the Coordination of Humanitarian Affairs (UNOCHA) in Afghanistan has covered all UN interventions in the country until 1993, when its mandate was limited to humanitarian assistance, while UNDP was tasked to coordinate development aid. The existence of two separate coordination mechanisms led to tensions within the system. In the second half of 1990s, the UN formulated the Strategic Framework for Afghanistan, an attempt to provide a coherent frame for humanitarian, development and political agendas. As for humanitarian assistance, the Consolidated Approach Process (CAP) has been an instrument for UN - NGOs coordination. The Inter-Agency Steering Committee (IASC)

groups UN agencies and the NGOs that participate in the CAP. However, between 1992 and 1999, only 48% of the UN Consolidated Appeals' requirements were met by external assistance [Atmar, 2001].

A reform of the UN mission is in progress. The structure of the mission, chaired by the Special Representative of the Secretary General (SRSG), includes two "pillars", one for political affairs and the other for relief, recovery and reconstruction, sub-divided in sub-units. The United Nations Assistance Mission in Afghanistan (UNAMA), absorbing the functions of the former UNOCHA and UNSMA (United Nations Special Mission in Afghanistan), has an overall coordinating role for all UN activities in the country. The next, controversial step will be to integrate all the existing UN elements into a single mission in the country. However, some players, even within UNAMA, complain about the privileges in resources and weight accorded to the political pillar.

Outside the UN, the Afghan Support Group comprises the country's main donors, while the "6+2 Forum" encompasses neighbouring states, plus Russia and the United States. The Afghanistan Interim Administration has established the Afghan Aid Coordinating Authority (ACA), which has produced a National Development Framework (NDF), that should streamline coordination mechanisms between government and supporting agencies, while ensuring that aid is delivered rapidly. Within the NDF, line ministries are strengthened with the incorporation of external advisors (most likely Afghans from the Diaspora), and with the secondment of UN personnel to these bodies. Programme groups for some core areas have been identified, and ACA and UNAMA presently are in the process of designating the lead agencies in each field. To accelerate the execution of priority projects, *Planning (or Implementation) Cells* should be put in place to manage operations inside line ministries during the interim administration, in this way allowing these institutions time and learning space to create adequate capacity.

The Agency Coordination Body for Afghan Relief (ACBAR) covers many of the most important NGOs, maintaining a large database of their activities. The Islamic Coordination Committee (ICC) offers a coordination platform for Islamic national NGOs, while the Afghan NGO Coordination Body (ANCB) represents an additional mechanism. By far, the most important coordination body is ACBAR, which acts as a clearing house for NGOs (providing secretariat, venue for meetings, and a way of sharing information), while focusing its activities on advocacy issues.

From the above, partial description, it is clear that coordination mechanisms are changing very quickly, according to the relationships between players and the perceived complexities of project implementation. The slow pace at which reconstruction money is arriving - by mid April only US\$ 160 million out of the US\$ 1.1 billion pledged in Tokyo [Diamond 2002] - fuels criticism of the UN system as intermediary, and of donor governments as funding sources.

The evolution of the health sector over the last decades

Before the war started with the Soviet invasion in 1979, the Afghan health sector was characterised by a comparatively large hospital sub-sector, fairly high-quality services and reduced presence in rural areas (with the important exception of some disease control programmes, such as smallpox, malaria, leishmaniasis and tuberculosis). Inadequate financing, estimated at about US\$ 1.3 per head in 1975 [Management Science for Health, 1974], was already recognised as a major constraint to sector development. During the period 1952-1972, the share allocated to health oscillated between 1% and 4% of the state development budget [Rubin, 1995]. The Soviet occupation generated two diverging processes. On the one hand, the Ministry of Public Health (MoPH) based in Kabul adopted some elements of the Soviet model to health care delivery, thus strengthening urban hospital

capacity, expanding university-level training, introducing the *Feldschers* (a brand of mid-level clinical practitioners) and maintaining service delivery in the areas it controlled.

On the other hand, the millions of refugees in neighbouring Pakistan attracted the attention of Western donors and NGOs, which financed and implanted special health services near the border. This engagement later produced many (mainly small-scale) cross-border operations, which relied on a variety of community health workers (CHWs), volunteers and other cadres, specially trained for this purpose. Cross-border operations benefited mainly accessible and relatively secure areas. The interests of the political parties in exile also played a role in directing external assistance to areas of respective influence. The costs of cross-border operations were substantive, approaching US\$ 30 million at the end of the 80s [O'Connor, 1994]. The lack of communication between opposite parties implied that the MoPH authorities in Kabul, as well as donors and NGOs (based in Peshawar) run operations and developed initiatives in the health field without knowing the situation on the other side of the political and military divide. Some of the long-term effects of this split between two competing and difficult to integrate health delivery systems, such as the NGO overcrowding in the provinces near the Pakistani border, are visible to this day.

The withdrawal of the Soviet occupant and the ensuing civil war among hostile factions worsened and blurred the picture. As the US and its western allies disengaged from Afghanistan, aid decreased substantially. The effects of chronic under funding compounded war-induced destruction. Health services became almost totally dependent on the numerous NGOs for the resources they needed. The modest (both in content and volume) health activities carried out inside Afghanistan came to depend on the presence, mandate, preferences, willingness to take risks of NGOs. Several interesting efforts aimed at introducing rational planning criteria met serious implementation hurdles, generated by war disruption, political imperatives and fragmented decision-making.

The Taliban rulers, lacking health professional cadres, demonstrated scarce interest in health care, and with their heavy-handed control on women's life, they greatly reduced the offer and the consumption of services relevant to them. The Taliban carried out a progressive retrenchment of civil servants, by 2000 having laid off between 30% and 60% of them. Female redundancies were preponderant [Pain and Goodhand, 2002]. Meanwhile, some health services were provided with NGO support in the Northern areas controlled by the Taliban opponents.

High turn-over of the MoPH top management, often politically-led, as well as of international staff, due to the difficult environment, further constrained the policy debate and added to the fragmentation of the sector. The policies conceived during this period of instability and uncertainty were never implemented.

The health planning challenge which faced Afghanistan in 1990 was considerable: historically poor health statistics had become the worst in the world; physical and administrative infrastructures had been largely destroyed in many parts of the country and seriously damaged in much of the remainder; a large pool of health staff had been created, primarily through international assistance, but without coordinated planning; some 75 to 90 percent of the cost of rural health services was being financed directly or indirectly through external assistance; and medium-term prospects for a public revenue base were quite limited. Afghan and international humanitarian assistance and donor organizations were gradually making the transition from a relief-oriented, wartime perspective to a long-term orientation towards health systems development. Finally, the potential for a large infusion of further donor assistance during the reconstruction period raised the very real possibility of rebuilding a health system which would be unaffordable for Afghanistan in the long term.

in: O'Connor, 1994

The health sector emerging from more than two decades of conflict is small, used only by a minority of the population, aid dependent, fragmented along vertical lines and across country, biased towards cities and underfinanced. The health network is in poor shape. The distorted workforce needs restructuring and redeployment. Anecdotal evidence suggests that quality of care is poor in most instances. Private providers have grown in an unregulated way, mainly in large cities. The health sector has limped along during many years without relying on an explicit vision or direction. The present picture results from uncountable ad-hoc decisions, taken under pressure by a multitude of actors inside and outside Afghanistan. The box above offers a vivid sketch of the sector in 1990, which suggests that little has changed twelve years later, if not in that the same problems have worsened. Additionally, it serves as a grim reminder of how reconstruction hopes have been frustrated before.

"In terms of aid practices, action has always been ahead of understanding" [Pain and Goodhand, 2002]. The first step to sector recovery is to understand better the situation, by now partially known even to insiders, across the whole country. The second step is to choose the direction to be followed during the reconstruction process, so as to address the main problems, which jeopardise health service delivery in Afghanistan. Given the large number of participants, the dispersion of power and the multiple, often diverging interests at stake, to clarify issues, to choose the right priorities and to stick to them will not be easy.

Main health problems and health status

- ***Health status***

In Afghanistan, malnutrition and communicable diseases remain among the most important causes of morbidity and mortality. The appalling health indicators shown below, albeit *largely the result of guesswork*, single out Afghanistan as one of the countries in the world with the worst health status.

Selected Indicators, 2001

Maternal Mortality Rate	1700 / 100,000 live births
Infant Mortality Rate	165 / 1,000 live births
Under Five Mortality Rate	250 / 1,000 live births
Life Expectancy at Birth	42.5 years
Total Fertility Rate	6.9 children for child-bearing woman
Crude Birth Rate	48 / 1,000 habitants
Annual Growth Rate	2.5%

Source: WHO Afghanistan. Annual report 2001

According to the UNDP, for more than one decade Afghanistan has invariably been among the 10 least developed countries in the world.

- ***Main endemic diseases:***

- **Tuberculosis** seems an important health problem in Afghanistan. With an Annual Risk of Infection estimated at 3%, the number of annual deaths attributable to TB may exceed 20,000. Both cases and deaths seem to be more prevalent in women (over 60% of all reported cases). This gender bias may be due to the unequal access

to health services, as well as to different lifestyles.

- Although the number of reported cases of **Malaria** amounted to over 350,000 during 2001, the annual caseload is estimated near 3 million. According to HealthNet International [2001], there has been a 5-fold increase in the overall number of cases in recent years, and a 100-fold increase in *P. Falciparum* malaria, which now accounts for almost 15% of all microscopically diagnosed cases. The cause of this increase is unclear. Around three-quarters of all cases were recorded in the North-eastern and Eastern regions.
- Cutaneous **Leishmaniasis** is widespread, with 200,000 new cases projected for 2002 only in Kabul. The disease affects also Parwan, Herat and Kandahar, and it is rapidly spreading to the North-eastern provinces of Badakhshan and Takhar. The epidemic is expected to accelerate with the resettlement of hundreds of thousands of refugees and internally displaced people (IDPs). However, the number of cases diagnosed and reported is much lower than those estimated, only 5,000 in Kabul in 2001. The difficulty of gaining access to therapy and its high cost (from US\$ 1-4 for local treatment, to US\$ 13-90 for systemic treatment in patients with multiple lesions) limit dramatically the number of treated people.
- It is commonly stated that no case of **HIV (+)** has ever been diagnosed in Afghanistan. In fact, according to data provided by the International Committee of the Red Cross (ICRC), that supports some blood banks in the country, only one case was diagnosed in Kandahar in 1999. Also, four (or five) more cases have been diagnosed since 1998 among foreigners. However, with an increasing number of intravenous drug users and widespread use of recycled syringes, needles and lancets, the prevalence of HIV is likely to increase in the future.
- Screening blood tests performed by ICRC labs have shown that **Hepatitis B** is endemic in Afghanistan, with prevalence ranging from 10% in Kabul to 15-20% in Ghazni, and increasing. There is little information about the North of the country.
- **Main epidemics in recent years**

Year	Disease	Province(s)	Cases	Deaths
2000	Congo-Crimea Haemorrhagic Fever	Herat	25	15
	Cholera	Saripul, Badghis	1,000	110
	Typhoid	Samangan, Panshir	1,646	50
	Measles	All country	10,000	982
	Falciparum malaria	Bamyan	615	15
	Meningitis	Ghor	139	3
2001	Congo-Crimea Haemorrhagic Fever	Herat	5	2
	Cholera	Northern region	6,130	114
	Falciparum malaria	Eastern region	4,882	52
	Measles	All country	8,104	400
	Meningitis	Kandahar	30	2
	Scurvy	Faryab, Herat	208	7
2002	Scurvy	Ghor	280	20

Source: WHO Afghanistan, 2002

In the first months of 2002, reports of outbreaks of unknown diseases, as well as of meningitis and measles, with hundreds of deaths, have reached MoPH and international health agencies. Most of them proved false.

- **Mother and Child Health.** The Multiple Indicators Cluster Survey (MICS2), carried out in 2000 in Eastern Afghanistan, estimated that under-five children suffered on average 13 episodes of diarrhoea per year, a remarkably high figure. The same study found that 18% of children had an acute respiratory infection during the two weeks prior to the survey. Prevalence of anaemia in women of child-bearing age was extremely high. Data on maternal and neonatal mortality show indicators consistently worse than those for Afghan refugees in Pakistan.
- **Nutrition.** 41% of the children surveyed by the MICS2 were underweight and 14% were severely underweight. 25% of children were severely stunted and 10% wasted. Problems of limited sample size and uncertain age made the measures of underweight and stunting not very reliable. The most recent UNICEF compilation of surveys characterises the nutritional situation as showing relatively low levels of acute malnutrition, 6-12% of under 5, with extreme geographic variations (3.5% in Kabul, 17% in Samangan), and exceptionally high levels of stunting, 45-59%. To explain this finding, the survival bias has been invoked. In this case, excess mortality in severely wasted young children would have altered the nutritional status of the sampled population.
- **Physical and Mental effects of trauma and violence.** ICRC, the largest single provider of physiotherapy services, has recorded over 26,000 amputees since 1988, more than 20,000 of which are mine victims. By mid 2001, according to WHO, about 10-12 persons per day were maimed or killed by mines and unexploded ordnance (UXO).

Emergency operations in the health field

Afghanistan is a disaster-prone country. The country suffered in recent years a combination of natural disasters, in the form of earthquakes, floods, and the worst drought in living memory, which highlight the extreme vulnerability acquired after years of war and political unrest. By December 2001, Afghanistan had the largest number of refugees in the world, an estimated 4 million people, mostly residing in Pakistan and Iran. Internally Displaced People (IDPs) amounted to over 1.2 million. The voluntary repatriation, especially from Pakistan, has exceeded all expectations, as more than one million refugees have returned in three months. Dramatically short of resources, United Nations High Commissioner for Refugees (UNHCR) is not promoting return to Afghanistan, due to the security situation. The agency is not a major player in health care provision, relying on NGOs to guarantee assistance to newly returned refugees / IDPs.

Coordination in the emergency response is inadequate. ICRC has been appointed focal point for disaster response but, allegedly due to lack of previous consultation, does not feel committed to this role. ICRC and Médecins Sans Frontières (MSF), combine pure emergency interventions with support to service delivery. They coordinate on an ad-hoc basis, including other NGOs active in the area. ICRC, MSF and WHO keep stocks of emergency drugs, which are distributed to other health care providers, when needed. Recently, the MoPH has appointed a head for the Department for Emergency Preparedness and Response, whose first initiatives were directed to endow Kabul with some sort of ambulance and medical emergency service. To coordinate surveillance and response to disasters in the whole country remains a daunting challenge for all involved players.

Main actors in the health sector

- ***The Ministry of Public Health***

The MoPH emerging from the Taliban years is a weak, if large in size (on paper, over 1,000 workers at Kabul HQ alone), body. The change of key civil servants has produced a gap between the previous administration and the current one. Mandates and responsibilities need to be clarified. A new structure recently proposed divides the MoPH in two main directorates, preventive and curative, which may find difficult to coordinate between themselves. Existing capacity is stronger on service provision than on financing, commissioning, and monitoring the myriad of providers active in the health sector.

The MoPH does not manage any substantial amount of funds, at any level. As there is no experience of formulating a health budget, allocative criteria need to be introduced. The only expenditure incurred by the government is salaries, which are paid by the Ministry of Finance according to payroll projections provided by the MoPH. For all other expenses, the MoPH depends on its partners. Priority programmes, such as EPI and Tuberculosis Control, are funded by UN agencies. At facility level, NGOs and MoPH sign memoranda of understanding, stating the support the NGO is going to provide. The facility is then removed from the list of units to be supplied through the MoPH channels.

- ***Donors***

Information about actual commitments by sector is weak and incomplete, showing many inconsistencies among sources. According to the last update of the UN Financial Tracking System, the breakdown of contributions by major donors to the health sector is as follows. *The figures presented in the next table, as well as the tables related to UN agencies and NGOs, should not be added together, due to the risk of multiple counting of funds provided by donors to agencies and then often passed to NGOs.*

Donor	Contribution (US\$)
United States	12,617,504
Japan	11,546,656
Private funds	9,566,607
United Kingdom	8,453,946
Sweden	5,872,907
Italy	4,722,996
Luxembourg	4,500,000
The Netherlands	2,689,486
European Commission	2,356,450
Norway	1,737,899
Germany	785,791
Denmark	734,985
Canada	457,727
Australia	255,100
Others	2,520,127
TOTAL	68,818,181

This information, provided voluntarily by the donor agency, includes only projects funded through the Immediate and Transitional Assistance Programme (ITAP), equivalent to the

Consolidated Appeal Programme. Clearly, a substantive portion of actual financial contributions has not been captured by the reports. Information about the timeframe during which the amounts should be spent, although it is assumed that the projects included into the ITAP should be started before the end of 2002 is not available.

In addition to these resources, the Afghanistan Reconstruction Trust Fund (ARTF), promoted and administered by the World Bank, covers three categories of expenditure: a) running costs, including salaries and non-project technical assistance (TA); b) investment; and c) costs of hiring Afghan experts resident abroad. The ARTF, supposed to become operational by July 2002, should become the source of funding for the government's budget (all sectors). The biggest donor to the Trust Fund to date is the Netherlands, with a commitment of US\$ 32 million, out of the total US\$ 56 million pledged to the fund. By the end of May, out of the US\$ 400 requested, only US\$ 90 million had been made available to the ARTF. Domestic sources of revenue are expected to contribute with US\$ 80 million to the government budget. There is no indication on how to fill the US\$ 230 million gap to fund the recurrent budget. According to the Deputy SRSG, the budget for the MoPH, to be funded through the ARTF, will be of around US\$ 25 million for the fiscal year ending in March 2003.

- **Multilateral agencies**

The information about these agencies is even more inconsistent than for donors, due to the difficulty of disentangling regular and extra-budgetary funds, appeals and commitments etc. The following table reflects only partially the amount of resources managed by these agencies. In addition to that, some (UNICEF, UNHCR, World Bank) have a multi-sectoral mandate, which makes difficult to estimate the share of resources devoted to health. Some organisations, such as the ICRC, do not provide financial information to *Afghanistan Information Management System* (AIMS). Finally, the contributions of the development banks to the health sector are under discussion, therefore not included in this review.

Agency	Resources (US\$)
UNFPA	7,500,000
UNICEF	24,862,136
WHO	13,332,059
TOTAL	45,694,195

Source: Financial Tracking System

UNHCR has requested US\$ 2,782,500 for health interventions inside Afghanistan, against US\$ 13 million for assistance to refugees in neighbouring countries, but no information is available about pledges or commitments.

Important as these resources may seem, they are mostly spent in covering the running costs of the most important health programmes, such as EPI and Nutrition (UNICEF), Polio Eradication, Stop Tuberculosis, Roll Back Malaria, Emergency kits (WHO), or Reproductive Health Services (UNFPA), leaving little room for investment.

- **NGOs**

The NGO community in Afghanistan is extremely large, as shown in the impressive ACBAR database for 2000. Not all NGOs, however, adhere to ACBAR. The following information has been obtained from several sources, often inconsistent among them. In any case, several NGOs run conspicuous operations, at least in financial terms. The return on their resources is likely to be uneven, with performing agencies working

alongside very inefficient ones. As it is always the case with NGOs, to generalise patterns may be misleading. Competition among NGOs for funds, space, visibility and capacity, as vividly sketched by Fritsche [2001a], seems fierce.

Main NGOs active in 2002, by volume of financial resources

NGO	Resources (US\$)
Médecins Sans Frontières (MSF)	12,000,000
International Medical Corps (IMC)	7,760,210
Swedish Committee for Afghanistan (SCA)	5,289,723
Aide Médicale Internationale (AMI)	4,505,000
Health Net International (HNI)	2,237,400
Ibn Sina	1,442,867
Médecins du Monde (Mdm)	1,325,990
Action Contre la Faim (ACF)	1,260,350
Afghan Humanitarian and Development Services (AHDS)	1,223,010
Medical Refresher Courses for Afghanistan	640,250
Save the Children Fund-UK	465,200
Save the Children Fund-USA	346,488
International Assistance Mission (IAM)	317,070
Medair	176,000
TOTAL	38,989,558

Source: Financial Tracking System. Data for MSF provided by the NGO. Data for AMI and Mdm from AIMS, corresponding to budget, not available. An informant puts the AMI annual budget at US\$ 2.5 million.

The volume of activity and the technical capacity shown by the NGO confers to some of them a degree of influence not related to the money spent. Thus, the two NGOs with the highest profile in the health field are the Swedish Committee for Afghanistan, that manages 168 clinics, and IbnSina, with 45 clinics of its own in addition to a number of mobile teams. Comparatively minor NGOs in terms of resources, such as Medair and IAM, play an important role in specific areas, having been appointed as focal points for tuberculosis control and eye care, respectively. HNI, regarded as one of the most active and performing organisations in the country, has been chosen as focal point for malaria control. HNI is the only NGO involved in the management of health systems, supporting a cluster of districts and referral units, up to university hospitals.

Other important players are MSF, supporting around 40 health facilities, AMI (3 provincial hospitals and 21 clinics), Coordination of Humanitarian Assistance (15 clinics), the Islamic Relief Agency - ISRA (14 facilities), and AHDS (45 facilities). Some of the newcomers have grown very quickly; for example, IMC was supporting around 30 facilities in April 2002, up from 6 clinics in February of the same year. The Red Cross and Red Crescent system as a whole (ICRC, IFRC, ARCS) supports more than 50 clinics and hospitals, also sustaining specific interventions, such as physiotherapy and blood banks, and surgical wards in referral units.

Four NGOs facilities (SCA, IbnSina, AHDS and CHA) manage their own clinics, hiring their own staff and being responsible for supplies and other running costs. Overall, this

private non-for-profit sub-sector may represent around 50% of all PHC facilities. All remaining organisations support MoPH units, however with different degrees of autonomy. In addition, many NGO-run health facilities work in former MoPH or community-donated buildings of unclear ownership, which contributes to blur the picture.

While NGO support to a small facility covers in most cases all delivered services, it is not uncommon that larger units are supported by two or more NGOs. Division rather than coordination seems to be the norm. Some NGOs pay incentives to MoPH staff, provide supplies, and run certain services (e.g., within Ghazni Hospital, ICRC supports surgical activities, MSF general and paediatric wards, IbnSina MCH services, UNICEF EPI activities and WHO tuberculosis control) with little involvement of the hospital general management. Finding separate pharmacies, with different supply systems, is also frequent.

Provinces located near the borders (particularly that with Pakistan) get the lion's share of NGO support. Main cities too (Kabul, Jalalabad, Mazar-i-Sharif, Kandahar, Herat) are comparatively privileged. Of course, security concerns combined to easier logistics have played a role in shaping this situation, which nonetheless needs correction, as soon as access to rural areas and to neglected provinces improves.

- ***Private for-profit providers***

The weakness and in many instances the absence of the state, as regulator as well as service provider, and the low salaries paid in the public sector, have encouraged the emergence of a multitude of private for-profit providers. This poorly-known, poorly-delimited area is composed of:

- Formally established private clinics, pharmacies, laboratories, often staffed by part-time health workers nominally belonging to the public sector;
- Private transactions taking place inside public health facilities, openly or under the table, or at home, but involving public health workers;
- Community health workers, especially those not supported by a NGO, selling services and drugs in remote areas.

The information about this vast grey area is largely anecdotal, scattered across many reports, mainly written by NGOs. Clearly, to study such an unregulated and fragmented field presents formidable difficulties. Nevertheless, the very ignorance about this area prevents the formulation of a sound policy aimed at regulating it. For the time being, some concerns are legitimate:

- The quality of the care delivered by many of these operators is questionable. For instance, an assessment of laboratory practice, carried out in Nangarhar in 2001 by Health Net International, found that only seven facilities, out of the 30 surveyed met minimum quality criteria. Also, over-prescription of drugs seems widespread.
- Value for money of the delivered care.
- Economic and geographical accessibility to these services.
- Absenteeism of health workers from public facilities.
- Embezzlement of scarce equipment and drugs from public facilities.

Coordination in the health sector

The prevailing feeling among players is that national as well as peripheral efforts to

coordinate activities have met with limited success. This is hardly surprising, given the overcrowding of the field, the difficult communications, the unclear mandate of many actors, the quick turnover of managers, the under resourcing of health authorities.

The MoPH has established the National Technical Coordination Committee (NTCC) to provide a venue for discussion and for information sharing to all agencies working at national level, as well as to donors, and to which all other coordination bodies should be accountable.

The Coordination Task Force is composed of representatives of the MoPH, UN agencies, national and international NGOs, ICRC, and donors. Its mandate is operational, including information gathering and analysis, as well as advising partners on priorities and on resource allocation. Its role has been strengthened by the recommendations of the recent joint donor-UN mission. The Task Force is increasingly becoming the venue to discuss general policy issues (such as the basic package of services, incentives, population estimates, etc) that are later on submitted to the MoPH leadership. A discussion about sharing the results of the deliberations with all relevant partners, is currently under way.

A recently-created smaller group, the Advisory Committee, recommends the MoPH on proposed large projects (over US\$ 1 million) on the basis of quality, adequacy, feasibility, and efficiency.

Sector coordination bodies, 2002

Name	Membership	Tasks
National Technical Coordination Committee	All agencies working in the health field (MoPH, donors, UN agencies, and NGOs)	General coordination and information sharing
Health Coordination Task Force	MoPH, WHO, UNICEF, UNFPA, IbnSina, Swedish Committee, ICRC, Management Sciences for Health, USAID, European Commission	Policy development, evaluation of external partners, advise on resource allocation, establish a code of conduct
Advisory Committee	MoPH, UNICEF (Public Health), WHO (Policy), UNFPA (Evaluation), MSH (Financing)	Advise the MoPH on the approval of projects exceeding US\$ 1,000,000

At sub-sector level, the MoPH appointed agencies and NGOs to act as focal points for different areas, as shown below. No clear guidelines have been provided to date. Some resent the fact that no discussion was held before being appointed, and simply do not acknowledge their position. In practice, task forces and focal points replace the MoPH in elaborating policies, with almost no involvement from the few MoPH skilled people, kept busy by daily management duties.

Agency	Focal point for
WHO	Policy formulation and planning Training and research
UNICEF	Nutrition Safe Motherhood Initiative (Emergency Obstetric Care) Expanded Programme on Immunisation (EPI)

Agency	Focal point for
UNFPA	Reproductive Health (Family Planning)
HNI	Malaria and Leishmaniasis Control
Medair	Tuberculosis Control
ICRC	Disaster Preparedness and Response

At more peripheral level, some regional bodies have been created, sometimes formally, with variable degrees of effectiveness, depending on the agency, or even the people in charge in each place.

Obviously, all these mechanisms can become outdated very quickly if the National Development Framework strategy becomes operational. WHO has recently been asked by the MoPH to expand its supporting role, in areas such as organisation, management, policy formulation, information, analysis, coordination and capacity building. The first task commissioned to WHO is to assist the ministry in formulating a budget.

The health sector in 2002

MANAGEMENT STRUCTURE AND CAPACITY

- The formal administrative structure is composed of national, provincial and district management levels. An additional level, introduced (by the UN agencies) to cluster neighbour provinces into regions, has not been recognised by the state administration. The next table summarises the picture, adding average areas and populations (estimate for 2001).

Administrative units	Number	Average Area	Average Population
Country		636,265 km ²	21,643,389
<i>Regions</i>	7	90,985 km ²	3,200,000
Provinces	32	19,883 km ²	690,000
Districts	≈ 330	1,928 km ²	66,000

The regional level has been introduced to address a real problem, i.e., the difficulty met by central authorities in interacting directly with so many provinces. However, regions are a contentious matter for the central government, because of their political implications. Yet, the existing 32 provinces and a number of districts varying between 330 and 380 look rather small, in territorial and population terms, to become viable, self-contained service delivery units. Therefore, some sort of concentration will be necessary for managing the operations in a more efficient and effective way. This restructuring would exceed the mandate of the MoPH, being the concern of the whole government.

The existing management structure is rather theoretical. With little capacity and no resources, provincial and regional health directorates usually consist of a small team of people with unclear responsibilities, accumulating the task of managing the provincial

hospital.

- **The Health Information System** or (HIS) consists of monthly reports produced by health facilities, listing more than 50 health conditions attended in the outpatient department. No data on inpatient care or immunisations are included. It was introduced in 1999 after reaching a difficult consensus among MoPH, NGOs and agencies, although it has never been applied countrywide. As the collected figures are not analysed, nor used for planning, there is little incentive to fill the forms properly.

A summary analysis of the data available for 2001 produced poor results. Reports were available for less than half the health facilities, with some provinces and even regions not represented. For the 250 facilities that provided information, only half monthly reports were available. The number of abortions exceeded the number of deliveries, an unlikely pattern. Also, the maternal mortality rate obtained from the reports approached 20%; a review of some forms revealed that some facilities reported up to 50 maternal deaths in one month, without any delivery assisted. It is clear that the current HIS does not provide usable information, and that hard work on quality control is necessary before any analysis is attempted.

Other information sources include the District Health Profiles, a database of health facilities listing services, equipment and personnel, updated twice a year by WHO with the assistance of NGOs and the MoPH. However, lack of standardisation in definitions and data collection, incomplete reporting and delayed analysis make it unreliable. A comparison between the 2001 and 2002 updates exposed discrepancies of up to 50% in the number of doctors, 40% in the number of hospital beds, unlikely increases in the number of health centres (from 384 to 530). Reports referring to the same district / province often show inconsistencies, depending on the person in charge of collecting the information. The differences may be partly due to the methodology of data collection, by district in 2001 and by health facility in 2002.

The surveillance system is based on more than 300 sentinel sites, set up to report on acute flaccid paralysis, but providing information also related to cases of measles and neonatal tetanus.

Within the UN System, the AIMS has been created to assist all stakeholders in gathering, processing, and disseminating information. The unit produces elegant maps with a variety of indicators that, however, may be misleading, given the poor quality of the source data.

RESOURCES

- **Finances**

Little information is available about the scarce financial resources flowing into the system. The MoPH has no formal budget, whereas external resources are fragmented into uncountable projects. The size of user contributions is unknown, but could be substantive, at least in the main cities, given the growth enjoyed by private (formal and informal) health providers, very visible in Kabul.

Most of the state financing is absorbed by salaries paid to a workforce deployed in a grossly distorted way. External financing is split between NGOs, with uneven distribution across the country, and special control programmes of national scope. The proportion of total financial resources absorbed by hospitals is unknown. A reasonable guess is that

hospitals are financed by the state (as salaries) and by direct user payments, whereas PHC services largely depend on external funding for their functioning. Investment is totally shouldered by donors.

Even if to gain some insight about patterns of expenditure is clearly a precondition to any serious policy discussion, it might take some time before the prevailing situation is understood, even in very broad terms.

- **The Health Network**

- *General patterns.* With maybe 700, mainly small, facilities reported as functioning and about 8,000 beds, the health network is indisputably inadequate for a country with the size and the population of Afghanistan. Access to health services is impaired by difficult communications by land. Worse, existing facilities are unevenly distributed across the country. In functional terms, this network seems even thinner: a survey of 489 (mainly PHC) facilities carried out in 2001 found that only 211 (43%) of them offered MCH care and 299 (61%) had a refrigerator. Laboratories, according to the malaria control programme, were 143 in the whole country. Even this grim picture could overestimate the actual services provided in the field. Out of 168 clinics supported by the SCA, only 54 have MCH services and 101 a EPI fixed centre. The number of beds, even in Kabul, is inflated, as space is notified instead of actual beds.
- *PHC facilities.* The PHC network is composed of 500-600 facilities, whose classification is unclear. In addition to health centres and sub-centres, health facilities are listed as MCH units, TB or Malaria clinics, and even EPI outreach centres. The posts, not included in this count, are very basic units, usually staffed by a CHW, who provides limited curative care. The 500 health centres (HCs) compose a fairly heterogeneous set, as shown already above. Only a portion of them offers the whole package of basic health services. In any case, 500 HCs, or one for about 40-50,000 people, are clearly insufficient. Additionally, their distribution across the country is very uneven. Using the inventory of basic health centres collected in 2001 (and adding hospitals to reduce problems of classification and to include all substantial facilities) and population data by province, the following table has been assembled.

Coverage of Hospitals and Health Centres in 2001, by region

<i>Region</i>	<i>Population per Health Facility</i>	<i>Province</i>	
		<i>Worst Ratio</i>	<i>Best Ratio</i>
Eastern	26,000	Laghman (33,000)	Nangarhar (24,000)
Central	59,000	Bamyan (96,000)	Logar (39,000)
South-Eastern	37,000	Paktya (49,000)	Paktika (28,000)
Southern	55,000	Oruzgan (235,000)	Kandahar (34,000)

Region	Population per Health Facility	Province	
		Worst Ratio	Best Ratio
North-Eastern	42,000	Kunduz (50,000)	Baghlan (35,000)
Northern	47,000	Saripul (88,000)	Balkh (33,000)
Western	53,000	Ghor (109,000)	Farah (41,000)
National Average	45,000		

Only the Eastern region shows a satisfactory coverage of PHC services. The Central, Northern, North-Eastern, Southern and Western regions present very high ratios (all above 40,000 people per health facility). To infer that in these regions a large (perhaps the majority) part of the population has no access to health services is quite legitimate. The situation is likely to be worse in the Southern and Western regions, due to the dispersion of the population, and in parts of the Central region (eg, Bamyan province), due to harsh geographical conditions. The table shows also conspicuous differences within regions, fact which suggests that planning the correction of these gaps should be province-, rather than region-based.

- *Hospitals.* According to the scarce information available, the hospital network is composed of about one hundred facilities, classified into *National* (17), *Regional* (9), *Provincial* (34) and *District* (40) hospitals. This network, which on paper looks quite respectable, deserves several remarks:
 - District hospitals are mainly small and deprived of certain services typical of a hospital, such as major surgery. Functionally, they do not seem very different from health centres, with a few beds added. For the time being and until they are strengthened both in physical and functional terms, they should not be counted as fully-fledged referral facilities.
 - Provincial hospitals are quite small, suggesting modest referral responsibilities. For the few hospitals for which the number of admissions is known, the patient load seems minimal. For instance, utilisation figures for Mehterlam (Laghman province), Baraki (Logar) and Asadabad (Kunar) in 2001 were uniformly low: *bed occupancy rates* between 34% and 62%; *average length of stay* between 1.8 and 3.5 days. Taking into account their total bedding (50 beds for the first and second, and 40 beds for the third hospital), the under use of these facilities, in terms of patient turnout as well as of complexity of the provided care, is obvious. The comparison with data for 1999 and 2000 shows rather stable patterns. Data from HNI-supported hospitals show higher occupancy rates and positive trends.
 - Kabul has 28 facilities with inpatient wards, totalling about 3,400 beds. Twelve of these 28 facilities have more than 100 beds. A recent assessment considered 13 out of 28 in poor conditions. This hospital network seems totally disproportionate to the population of Kabul City and Province. And the difficult communications make unlikely (in Afghanistan as in many other countries) that Kabul's hospitals offer referral services to users living far away from them.
 - The classification of hospitals does not seem very descriptive of their functions. Therefore, some regions do host more than one regional hospital, while some

provinces do not have any provincial hospital. Likewise, “national” hospitals do not always offer, as the term would suggest, high-level referral services for the whole country. A more descriptive classification would make the functions of each facility clearer.

- **Human Resources**

- **Workforce structure.** Data about health workers show even more inconsistencies than those for health facilities. Comparing figures reported by district to those by health facility, the discrepancies amount to thousands. Major differences are recorded in Kabul, possibly due to absenteeism and ghost workers. Since there is no registry of health personnel, data by health facility were taken as the most reliable.

Excluding private providers, the health sector employs about 2,300 medical doctors and 6,000 other health professionals, plus 5,000-6,000 additional workers with some health training, such as CHWs and traditional birth attendants (TBAs). Inventories of active human resources are in a state of flux, as staff dismissed by the Taliban rulers are being hired again. Counts taken at different points in time show quite dramatic differences. At a glance, it is clear that health workers form a pyramid only in name. The most striking feature of the workforce structure is the over-representation of doctors, particularly when the reduced size of the network and the modest activity are considered.

Given the blurred definition of many categories, to evaluate the adequacy of the existing workforce to both network and current workload is difficult. For instance, the number of midwives has decreased from about 900 in 2001 to fewer than 200 in 2002, without any increase in the number of nurses. The same workers may have been counted in both categories. Anecdotal reports suggest that skilled midwives are in fact in short supply. Anyway, the combined number of nurses and midwives is only slightly higher than the number of doctors (or even lower if data from last year are accepted), a pattern suggesting grossly dysfunctional services. Given the uncertainty related to the number of hospital beds and the lack of information about inpatient workloads, to calculate the present needs of nurses is impossible.

- **Staff deployment.** The unbalanced distribution of the workforce is stunning, with 68% of doctors and 63% of other health professionals concentrated in Kabul province. However, most of those may be working in the private sector. At the other end of the spectrum, Uruzgan province, with a population of around 800,000 people, has only 7 doctors and 32 other professionals. To correct this situation is key to the restructuring of the health sector, both on equity and efficiency grounds. Some measures to help health workers to move to rural areas, including a combination of incentives and regulation, have started to be discussed.
- **Staffing patterns and workloads.** The MoPH acknowledges that many health facilities, especially in Kabul, are overstaffed. Reportedly, staffing of doctors is planned according to a formula that projects 8 doctors for every 20 inpatient beds, regardless of the workload. With virtually no data on inpatient activity, it is not possible to evaluate the extent of the personnel excess.
- **Gender.** With women barred from attending even basic education in the past few years and serious limitations during the last decades, it is not surprising that female health workers are a minority. According to the latest estimates, female doctors are only 26% of the total, while female nurses account for 30%. In other categories, the gender bias is even more pronounced. The inability to deploy female health workers, especially in rural areas, has extremely harmful effects, putting health services

beyond access for most women.

- **Categories, job descriptions and careers.** The workforce is composed of many categories, some officially recognised by health authorities, many (mostly resulting from short courses) introduced by NGOs. Even among official categories, the clarification of certain roles is in order. The main problem exists in relation to health workers trained by NGOs, as length, content and patterns of training vary dramatically and are not always documented. The most contentious category is the so called Mid Level Health Worker (MLHW), trained by some NGOs for a period never exceeding one year (after a variable number of years of schooling), whereas all true mid-level cadres go through at least 9 years of schooling and 2.5-3 years of training. Not all these workers will be incorporated in the formal workforce. A dedicated programme to screen them, assess their skills, identify those workers suitable for upgrading to professional status and design adequate courses, will be needed.

"..training and use of female staff in rural health work, whether at the health center level or as a village worker in cooperation with health center activities, is perhaps the single most important step in bringing realistic and practical rural health services to the people."

Management Sciences for Health, 1974

Community Health Workers are also controversial. There is no standardisation on job description or training, which ranges from 4 weeks to 6 months. Given the high number of CHWs (up to 3,000 in the country), and the ongoing training of new ones, to reach consensus will prove difficult.

- **Salaries and incentives.** Salary levels in the Afghanistan public sector are derisory. The average monthly amount paid (usually late if at all) does not exceed US\$ 25, of which US\$ 20 corresponds to food allowance. Even with these very low figures, the government has been unable to pay salaries for most of the last months. Only recently, financed through the UNDP-managed Trust Fund, public sector workers of some provinces (but not all) have started to receive salaries in arrears. The extremely low salary scale compares negatively with the US\$ 94 estimated as the minimum requirement to guarantee a basic food basket for an average family.

Salaries in the NGO sector are obviously higher, at an average US\$ 230 monthly salary for a doctor (range US\$ 140-326), usually in addition to food and transport allowances, and medical insurance. To keep workers in place, and to increase their performance, most NGOs pay incentives to MoPH staff working in NGO-supported facilities. The incentives paid vary according to category and hardship. In general, NGOs tend to pay higher incentives to staff deployed in rural areas (eg, US\$ 73 for a doctor against US\$ 41 in urban areas). However, all NGOs pay incentives even in Kabul, on the grounds that they are necessary to guarantee performance and quality. This position is not accepted by the MoPH, which wants all incentives removed from urban areas.

- **Training capacity (pre-service and in-service).** Poor general education levels (particularly in the case of young women) affect health training activities to such a degree, to impose the introduction of specific measures, such as remedial training in basic disciplines (maths, biology etc.), longer duration of training courses, looser enrolment requirements.

The abundance of medical doctors results from the proliferation of training venues which took place during the 80s and 90s [Ghazanfar, 1994], due to the limited capacity of the central government to control decisions made by local authorities. Although the MoPH acknowledges that medical training exceeds demand and some rationalisation has started (merging the Faizabad Medical School into Albiruni University), the Ministry of Higher Education wants to keep medical schools in Kabul,

Jalalabad, Herat, Mazar-I-Sharif, and Kandahar, arguably reflecting political pressures rather than actual needs.

Medical Schools, 2002

Name	Location	Opened in	Students
Kabul	Kabul	1932	2,862
Nangarhar	Jalalabad	1963	1,261
Balkh	Mazar-I-Sharif	1986	1,300
Herat	Herat		502
Kandahar	Kandahar	1992	403
Albiruni University	Gulbarhar		500
Afghan University	Peshawar	<i>Reopened in 1999</i>	1,700

All medical schools are reportedly overcrowded (with a total number of students exceeding 8,000) and under resourced since many years. Female students represent less than 20% of the total, mostly concentrated in the first two years. The overproduction of doctors is worrisome, as it endangers the long-term sustainability of the health sector. The alternative outcomes of it, in fact, are widespread intellectual unemployment, or an unbearable salary bill (if most graduates are hired), or derisory salaries (with the subsequent customary moonlighting and informal private practice of underpaid doctors). Clearly, none of these prospects is desirable. The optimal scenario is to reduce the number of admissions to a medical training of high quality, while at the same time salary levels are increased substantially, which in turn should encourage redeployment and higher productivity.

Intermediate Medical Schools (IMs)

Information about IMs is even scarcer than the one existing about medical schools. Reportedly, eight IMs offer a range of courses that require at least 9 years of schooling and an admission exam. However, little standardisation seems to exist among schools in relation to training contents. IMs are supported by newly arrived organisations, such as the Agha Khan Foundation, the International Medical Corps and IAM. Little coordination seems to exist, hampering the current efforts to revise and standardise curricula. The number of trainees is clearly inferior to that of the medical schools, contributing to exacerbate the imbalance already affecting the workforce.

Intermediate Medical Schools

Name	Location	Students
Kabul	Kabul	758
Nangarhar	Jalalabad	209
Balkh	Mazar-I-Sharif	240
Herat	Herat	NA

Name	Location	Students
Kandahar	Kandahar	171
Badakhshan	Faizabad	40
Kunduz	Kunduz	97
Helmand	Helmand	NA

In-service training

Most NGOs list in-service training among their activities. Yet, the adequacy and the content of this training are poorly studied; serious doubts about its quality and impact seem legitimate. As in many other settings, most activities seem to focus on EPI and MCH. Virtually all graduates during the last twenty years need substantial upgrading of their skills: for some, to fill gaps in their training background; for others, to update their health knowledge; for many, to revive skills gone lost by practising in very poor conditions.

- ***Drugs and Equipment***

The pharmaceutical area has been recently reviewed by a WHO team [Baghdadi et al., 2002]. The resulting picture is grim. All the basic functions of the sub-sector (purchasing, production, regulation, quality control, warehousing, distribution, use) have badly suffered. Drug shortages are very common. Drug quality and prescribing practice are described as poor. The capital stock of the sub-sector (production plant, warehouses, laboratory, offices, vehicles) is dilapidated. Cadres need refresh training.

- *Access to drugs is very limited* because of inadequate imports and negligible local production, compounded by high wastage (due to poor warehousing) and poor distribution.
- *The quality of available drugs is questionable*, because of almost absent quality controls, import or donations of inappropriate, ineffective and dangerous drugs, and poor storage.
- *Irrational drug use is reportedly widespread*, hence denying health benefits even to the patients able to obtain drugs.

A survey carried out in 2000 by the ICRC found that expenditure for drugs totalled about US\$ 5 million (half of which absorbed by hospitals) or US\$ 0.25 per head. This amount is absolutely inadequate, even considering the present low consumption of health services. Indeed, this drug shortage is likely to be one of the main causes of low consumption.

Drugs are imported by NGOs and private businesses. Drug donations received by the Avicenna Pharmaceutical Institute during 2001 amounted to almost US\$ 900,000. For the same period, drug purchases with domestic resources (Ministry of Finance) totalled US\$ 100,000. No attempt has been made to create a Centralised Supply Unit, which would allow economies of scale.

An Essential Drugs Committee has recently been created to review the National List of Essential Drugs, elaborated in 1995 and never introduced into widespread use. The committee is also in charge of enforcing the newly-adopted Drug Donation Guidelines.

The MoPH has manifested interest in the rehabilitation of the manufacturing plant belonging to the Avicenna Pharmaceutical Institute, so as to restart local drug production. Before a decision is taken, however, a thorough study of the economic viability of such a factory should be carried out. In fact, to import essential drugs in huge amounts (from India, for instance, whose well-developed drug industry offers very competitive prices) could allow for significant gains, at least in the mid-term. And it would enable MoPH managers and experts to concentrate on other more pressing issues within the pharmaceutical field, such as those mentioned above.

OUTPUTS

- **Inpatient days.** Data on a sample of NGO-supported hospitals in the Central and Eastern Regions show short lengths of staying (between 2-4 days) and occupancy rates ranging from 40-70%, depending on the hospitals. Less systematic data provided by MSF for hospitals in Southern, Northern and Western regions suggest higher levels of utilisation. 10 admissions per 1,000 inhabitants per year, in the fairly well served eastern region, confirm low utilisation patterns.
- **Outpatient contacts.** A summary analysis of the HIS database for 2001 provides partial data on outpatient activity for almost 250 health facilities, although no information is available for the whole western region and for the northern province of Faryab. Extrapolating the existing figures, each facility (mostly health centres) would attend, on average, almost 10,000 contacts per year, although this includes antenatal/postnatal care and dental visits. Activity seems higher in HNI-supported facilities in Nangarhar province, with an average in PHC facilities of over 15,000 consultations per year. Projecting this workload to all formal health facilities, a total of 5-6 million consultations, or 0.25 per head, would have been carried out in 2001.
- **Deliveries.** The activity reported as the output of the clinics included in the HIS amounts to only 2,500 deliveries. Data from a sample of hospitals show higher volumes of activity. Ghazni Provincial Hospital reported 1,500 deliveries in 2001, Mehterlam Hospital (Laghman) 1,400, and Jalalabad University Hospital (Nangarhar) 5,800. However, even with this remarkable volume of activity at hospital level, the coverage of institutional deliveries remains very low, estimated at less than 5% countrywide, and 8% in the cluster of districts supported by HNI, in an area of relatively high population density.
- **Immunisations.** "Current EPI services in Afghanistan have limited effects, are expensive and will be hard to sustain" [WHO, UNICEF, 1998]. This blunt statement seems confirmed in at least one aspect by the results of the MICS2, which in 2000 studied Eastern Afghanistan. Children with complete immunisation were 47% in the Eastern Region and 19% in the South-Eastern region. Considering that the Eastern region exhibits the best PHC coverage of the whole country, the reported result is somewhat alarming. The EPI Review [WHO, UNICEF, 1998] found a worrisome proportion of missed opportunities, ranging from 41% in Ghazni to 16% in Herat.

Routine data for the whole country estimated coverage as low as 32% for DPT3 and 37% for measles in 2000. The most recent estimates show increasing coverages countrywide. However, large imbalances in coverages remain, with the highest figures in the Eastern region and the lowest ones in North-eastern region.

Coverage of routine immunisations, by region. 2001

Region	BCG	OPV3	DPT3	Measles
Central	54%	47%	45%	44%
Eastern	78%	84%	84%	79%
Western	65%	49%	49%	52%
Northern	51%	43%	42%	43%
North Eastern	31%	17%	16%	25%
Southern	48%	33%	33%	35%
South Eastern	62%	55%	55%	57%
Country	54%	45%	44%	46%

Source: UNICEF

In addition, repeated rounds of vaccination against poliomyelitis, the National Immunisation Days, take place during spring and fall. More than 20 million doses of OPV were distributed.

Section Two: Discussion

Issues for discussion and further study

- **Addressing the fragmentation prevailing in the health sector.** The picture described so far is the result of multiple actions, implemented by central and local health authorities, donors, humanitarian and development agencies, NGOs. Additionally, the proliferation of vertical programmes has compounded the prevailing fragmentation. Virtually every actor in the health sector agrees that coordination is needed. To implant effective coordination mechanisms, however, has proved difficult.

Coordination is needed on several counts. First, the health sector needs to expand its outputs, given the scarce available resources. To reduce fragmentation is one of the main ways to achieve efficiency gains. Second, the health sector needs to grow according to shared models. Multiple players acting in isolation cannot clearly achieve anything in this direction. The scope for standardisation is immense, from the layout of health facilities, to training curricula, to therapeutic guidelines, to staffing patterns, to budgeting criteria, just to mention a few. Third, the fragmented settings prevailing in the health sector make difficult a proper analysis of patterns and trends, as well as the comparison of different situations across country. Thus, actors cannot make informed decisions, which affects the development of a coherent reconstruction strategy. Fourth, to avoid the dispersion of efforts over too many fronts, agreement about the overall development direction and the priorities to be addressed in the first phase of reconstruction is needed. It might be relatively easy, at least in principle, to reach consensus about the direction towards which the recovering health sector should proceed. But, given the multiplicity of agendas, supported by powerful and aggressive agencies, to agree on a few concrete priorities will be much more difficult. As many of the actors enjoy a fair degree of autonomy, coordinated behaviour cannot be enforced, but has to be encouraged through patient negotiations around policy issues perceived to be crucial by partners, and robust strategies reckoned as able to address the problems on the agenda.

Concluding that coordination is a badly needed component of sector recovery does not remove the obstacles which make it such an elusive target. Unfortunately, there is not available blueprint for effective coordination. A few remarks, based on documented experience in other settings [Pavignani and Durão, 1999], can be of some interest:

- In a very fragmented environment, informal coordination mechanisms are often more effective than formal ones.
- Experimentation is in order, to test what works and to adjust settings accordingly. No scheme will be successful from inception.
- Given the diversity and the number of the partners, to reach consensus on certain issues can be impossible. A group of agencies (ideally lead by the MoPH), reaching an agreement on a specific joint action, could move forward without waiting for universal participation, later absorbing other partners when they are willing or able to join.
- Coordinated action is more likely to materialise around discrete, concrete, pressing issues, such as drug purchasing, or incentives. Successful small schemes can be later enlarged to encompass broader fields.
- Coordination is a labour-intensive, expensive endeavour, with high opportunity costs, which needs dedicated resources. Beyond a certain level (difficult to ascertain), by absorbing players to such a degree that implementation suffers, it can become counter-productive.

- Documenting and disseminating hard-won experience is key. Given the high turnover of decision-makers, memory is constantly endangered. To save from oblivion what had been learned is as important as to learn new things.

In the concrete Afghan settings, which steps would encourage coordinated effective action? A tentative, sequential approach could be the following:

1. Allocate adequate resources to health authorities (central and peripheral), so as to make them able to play their coordinating role in full.
2. Improve the information basis and make it accessible to as many partners as possible.
3. Clarify the main elements of the national health policy and of the reconstruction strategy; advocate for partners to follow them.
4. Choose a few specific issues, relevant to reconstruction and where major inefficiencies are prevailing, and encourage donors and NGOs to join efforts and resources. Suitable fields, to start with, could be drug purchasing, training and civil works.
5. Follow up closely these pilot schemes, so as to learn from them and to transfer lessons learned to other areas.
6. In the mid-term, try to expand existing schemes to incorporate areas not yet covered; also, merge arrangements sharing certain features or targets, if possible and desirable. For instance, a budget support scheme for provincial / district expenditure could expand to cover all recurrent costs.

- ***Distortions in the allocation of available resources.*** The current biases in service offer are due to historical and political reasons, hence not easy to deal with on mere technical grounds. Most NGOs work at local level, thus lacking a national perspective. The MoPH lacks the information and the resources needed to redress the resulting inequalities, through a rational allocative process. Thus, services are concentrated in urban areas, in zones of relative high population density, and along the borders with Pakistan and Iran. Meanwhile, in the whole central region (with the exception of Kabul), with low population density, health services are virtually inaccessible to most people.

Correcting these imbalances requires reliable information, and a particular concern about equity. To redistribute NGO interventions across the country can turn out to be a very slow process, as many NGOs have developed special relationships with particular settings and will be reluctant to move. But newcomer NGOs and new projects implemented by established NGOs should be resolutely directed to underprivileged areas.

- ***Contracting out service delivery.*** While at least part of the MoPH leadership would prefer to build a big public health sector, directly involved in service delivery at all levels, they acknowledge the capacity gap deterring the ministry to do so. The second Joint Donor-UN Mission on Health, Nutrition and Population, carried out in March 2002, produced a set of recommendations, the most important of which is the split between the functions of purchaser and provider of health services. Using the Cambodia experience in contracting out health services to NGOs, the mission suggested that such mechanism could be used to expand services in Afghanistan.

Although unfamiliar with the method and the terminology, the MoPH pointed out the obvious, i.e. that health authorities lack the skills needed to manage such complex tool. They include pricing activities, according to different working conditions and level of care,

drafting contracts, managing the bidding process, and establishing and using benchmarks to monitoring the performance of the NGOs in the field. The MoPH also warned about the absence of competition, especially in the areas where new services should be set up. Equally important is the almost absolute lack of experience of most NGOs, about managing relatively complex systems, such as referral, supervision and supply functions. The MoPH has accepted to try the so-called Performance-based Partnership Agreements (PPAs) as a pilot experience in priority unserved and underserved areas. The World Bank volunteered to provide the funding. An Essential Package of Health Services, to be used to draft the contracts, has been formulated and provisionally approved; its costing in per capita terms is under way. The proposed timeframe, with the bidding process starting by July 2002, is certainly unrealistic.

NGOs diverge in relation to the the PPA mechanism. Some are favourable because, while guaranteeing funds for their operations, it contributes to keep the MoPH small and away from service provision. Others, realising the scale of the challenge, the additional skills required, and the need for a stronger MoPH able to negotiate in a fair, transparent and evidence-based way, are highly critical and reluctant to espouse the WB's proposal. If the approach expands beyond the discussed pilots, national and international NGOs will see their responsibilities as health care providers to grow. Ways to make this variety of providers more efficient, reducing the present fragmentation and making economies of scale possible, should be found.

- ***Sustainability in the long term of the health sector.*** The rapid growth of private for-profit providers is an indirect sign of the willingness (and ability) to pay for services that are perceived of higher quality. Reportedly, the access to those services is biased towards male patients living in urban settings.

Some NGOs apply cost-sharing mechanisms, charging 40% of the cost of drugs (excluded transportation to Kabul, storage, and distribution) and between 1,000 and 5,000 Afghanis for consultation and lab tests. Reportedly, some of them apply exemption criteria. Given widespread poverty, increasing user contribution is unlikely, at least in the short term.

- ***Decentralisation in the present context.*** As everywhere else in the world, decentralisation is energetically advocated, particularly by donor agencies, as essential component of a reform package to be introduced to revamp public sectors, be they belonging to rich or poor countries, to peaceful or war-torn ones. In the unique settings of Afghanistan, this prescription looks particularly arguable. The country is fragmented, the grip of the central government over peripheral (legitimate or not) authorities feeble, most financial resources are controlled by non-state parties. What remains to be devolved to the periphery by the central government is thus unclear.

Perhaps, the main argument is that Afghanistan is not in the condition of reforming its administration, before it has built a functioning one in the first place. The first priority is therefore to build management capacity at all levels and functioning links between them. Without this capacity in place, no decentralised set-up is likely to deliver on its promises. And some of the major distortions affecting the health sector, such as uneven coverages and the proliferation of training venues, require a strong central leadership to be addressed.

The balance of power between centre and periphery is a political and highly contentious process (particularly in present Afghanistan), not decided on technical grounds and by a single sector. Whatever the outcome of this struggle, the future health sector will need performing management systems to function properly. And the ultimate mix between centralised and decentralised mandates should be arrived at according to feasibility,

equity, effectiveness, efficiency, simplicity and common sense, rather than to ideological considerations.

- ***Distribution patterns of the population.*** According to available demographic data (of course to be revisited once a proper census is carried out), the distribution of the population varies dramatically across country. In 2001, the 77 districts with a population density below 20 inhabitants per square kilometre hosted 13% of the country population, scattered over 55% of the country area. In the 120 districts with a density inferior to 30, totalling 70% of the country area, lived 24% of the country population. 34% of the total population lived in the 71 districts with density above 100 inhabitants. These different settling patterns should be taken into account when planning health services.

Providing health services to the more densely populated areas in Afghanistan is considerably easier than to the remote areas. However, ignoring the remote and sparsely populated districts is not only unethical but dangerous to the more populated areas when communicable diseases spread without control in neighbouring districts. Past years have seen cholera outbreaks in Ghoryan, Spin Boldak and Kamdesh; measles outbreaks in Shegnan, Eshkashim and Warsaj; hemorrhagic fever in Gulran; and influenza in Darwaz – all districts with population density less than 20. A two-pronged approach, combining comprehensive and mainly static basic services in densely populated districts with a leaner, agile package explicitly designed to serve sparsely populated areas in an affordable way, is needed.

Where the population is concentrated, health facilities should be fairly large in size, so as to provide a comprehensive set of services. If properly exploited, the ensuing economy of scale should ensure acceptable unit costs for these services, hence adequate returns on investment. In these settings, the long-term role of CHWs is clearly limited, as formal health services can be expanded to cover most of the resident population. At the other end of the density spectrum, health service delivery cannot rely on heavy infrastructure, but rather on a mix of small but numerous health facilities, multipurpose (mainly female) health professionals, outreach activities and community health workers. The cost of delivering a minimal package of services to dispersed populations is high, fact to be taken into account during the budgeting process.

- ***The potential role of Community Health Workers.*** These providers of basic health services are considered in several policy documents as the foundations of the health system, perspective which worldwide has enjoyed enormous popularity during the 80s. However, as experience from different settings and countries accumulated, the original expectations were progressively downscaled to more modest levels. From decades of international experience, a few conclusions can be regarded as fairly firm:
 - Whereas small-scale schemes have been often successful, few, if any, national programmes have established themselves as unqualified success stories.
 - Even successful schemes have resulted difficult to sustain, due to the high operational costs which they are prone to incur.
 - CHWs are more effective and sustainable when collaborating closely with performing formal health services, able to provide supervision, drugs, in-service training, referral. CHWs should be conceived as complementing and extending well-established formal health services, rather than replacing them, at least in the long run.
 - In situations where no formal health services can be implanted (such as in war-affected areas), CHWs can provide a temporary and partial answer to some of the existing health problems, but their role should not be unnecessarily inflated. The internationally widespread delusion about these providers is generated by unrealistic

expectations, rather than by their inadequate performance.

In the Afghan context, CHWs have reportedly played a crucial role in delivering services in very difficult conditions, often where no alternatives were available. However, actors are hardly unanimous regarding the relevance of the CHWs in the past, and the role they should have in the immediate future. For some NGOs, CHWs should limit their activities to prevention, without any involvement in curative medicine. For other players, that would imply denying life-saving treatment to a huge fraction of the population. Nevertheless, all agree that, as the situation normalises and formal health services expand their coverage, their scope is likely to be accordingly reduced, to operate mainly in low-density, poorly-accessible areas.

- **Lessons learned in other post-war reconstruction processes** [Pavignani and Colombo, 2001]:
 - The “return to the pre-war situation” approach is enticing, but flawed.
 - The rehabilitation phase presents risks, but also opportunities to correct the pre-war distortions of the health system.
 - To seize those opportunities, forward planning is critical. In fast-moving environments, detailed plans become quickly outdated, hence useless. Rather, plans should be genuinely *strategic*, i.e., showing the broad direction of sector development. *Plans should aim at inspiring reconstruction, rather than at controlling it.*
 - When reconstruction is highly dependent on external assistance, its coordination is essential.
 - Investment in information and intelligence is crucial to promote consistency of initiatives. To support sound decision-making, approximate (but relevant and updated) information takes precedence over precise one (which is likely to take time to become available).
 - Costing projections, elaborated during the war or in its immediate aftermath, tend to underestimate actual needs.
 - *Laissez-faire* (particularly on the government side) rarely pays off. Risk taking, aimed at anticipating events and future constraints, is crucial. Conversely, donor activism in the absence of a comprehensive, locally-owned strategy is likely to generate inconsistent, short-lived and counterproductive outcomes.
 - There are no quick fixes to the disruption caused by decades of war: “extraordinary” operational standards and vertical approaches may be justified in wartime, but are inefficient, disruptive and unsustainable during the rehabilitation period.

- **Formulating a National Health Policy: value, constraints and limitations.** In more than two decades of disruption, repeated efforts to articulate a comprehensive national policy (or discrete components of it) have taken place, as shown by several documents, some of which included in the *References*. Political instability, inadequate resources, limited access to the field, have all frustrated the aspirations of policy makers. In fact, no field evaluation of the results of implemented policies has been found. Hence, to assess the merits of policies proposed but not field tested is of limited value. For the same reason, to formulate a new relevant and realistic health policy in the absence of implementing experience, while relying on such a weak information basis, is largely an abstract exercise, where ideology can overcome common sense. The future political settings, still to be defined, add further hurdles to sound policy making. It seems unlikely,

therefore, that radical policies can be conceived and introduced in the immediate future.

Recently, the MoPH, assisted by the WHO, has produced a National Health Policy (NHP), which reflects the constraints facing policy makers in today's Afghanistan. It focuses on technical matters (on which consensus is more easily attainable) rather than on actual policy issues. Thus, while there is a substantial level of detail on EPI or DOTS strategies, very little is said on critical subjects such as health sector financing, size and functions of the MoPH, decentralisation, or approach to service delivery.

Given this picture, a realistic, experimental and incremental approach to policy making seems in order. Identifying a reduced set of serious structural problems and approaching them without preconceptions should provide opportunities and stimuli for learning by doing, in personal as well as organisational terms. Thus, discrete policies would materialise at sub-sector level, to be integrated later, when capacity and knowledge have significantly expanded, into a consistent whole. Some elements of the future national policy will address the dilemmas of equity, efficiency, effectiveness, sustainability, relevance, roles etc., sketched in this discussion. Conversely, some other elements cannot be immediately apparent, given the present state of affairs.

Despite the obvious need for collective learning, it is far from granted that health authorities will be offered the time and the space for it. Rather, multiple pressures converge to demand to health authorities clear policies, quick implementation, and solid results. Inevitably, these proposals (often conflicting, always over ambitious) smack of imported blueprints, some of which lacking a successful record even abroad.

The next section suggests that some structural problems need to be addressed anyway, whatsoever is the policy eventually chosen. In this sense, these problems take operational precedence over other even more important issues, but which cannot be tackled in the absence of, say, a competent and balanced workforce, or a performing supply system.

Section Three: Towards Recovery

Financing the health sector (macro estimates and forecasts)

To estimate the financial envelope likely to be available during the next 5-10 years is crucial to set a clear resource constraint to health sector development, to force decision-makers to choose among several competing priorities and to discourage the formulation of unrealistic plans. As government revenues are presently considered negligible, the health sector mainly depends on external support, estimated to be in the order of US\$ 50-60 million per year [WHO, 2002], or US\$ 2-3 per head, for its financing. With the improvement of the situation and the recovery of the government capacity to raise taxes, a small if increasing share of health sector expenditure should be shouldered by the public purse. Assuming (optimistically) that in the mid-term the GDP increases to US\$ 250 per head, that tax revenues attain 10% of GDP and that the proportion of public expenditure allocated to health is 10%, public internal financing to the health sector could reach US\$ 2.5 per head within 5 years, to increase to US\$ 3-3.5 within 10 years. By no means an impressive figure by international standards and in relation to needs (although a tremendous improvement in relation to the baseline). Reportedly, the allocation to health in the first government budget will be 6% of the total.

To forecast how external financing will evolve over the next year is problematic, as donor behaviour and preferences have varied dramatically over time and in relation to different countries, in ways not always understandable on rational grounds. The starting point is that the present level of US\$ 2-3 per head of external financing seems one of the lowest in the world, and vastly inadequate considering the magnitude of the health problems and the costs induced by the reconstruction of Afghanistan. The latter are presently estimated (on a preliminary basis) at US\$ 7.4 per head per year over a decade [WHO, 2002], and even this figure seems very conservative, considering the level of destruction, the additional cost of operating on rugged terrain, the dispersion of a significant part of the population, the backlog of unmet health problems, the increased expectations of millions of refugees living abroad since many years. The present US\$ 2-3 per head looks even meagre when considering the extreme fragmentation characterising the sector and the inefficiencies induced by it, as well as the extra operational cost incurred because of mandatory security measures. In short, not much health care can be delivered with this resource package. Considering the extreme poverty of the population, no significant increase in the already existing cost-sharing mechanisms is anticipated in the short term.

Any perspective of reconstruction depends on the response of the international community. This will be certainly conditioned by developments external to the health sector, such as the effective end of the hostilities, the implantation of an effective and democratic government, its compliance with the demands of the international community. Additionally, events external to the country, such as the occurrence of other crises, may divert donor attention elsewhere. Nonetheless, the health sector must find ways to win additional donor support. This can be achieved by the MoPH only by developing clear and realistic approaches to reconstruction, by implementing the chosen plans effectively and consistently, by making difficult decisions, particularly those which address equity and sustainability concerns. Further, these positive developments need to be documented and disseminated, so as to obtain further support.

If the next years see (along with an improvement of the general situation) a better performing health sector, firmly steered by the MoPH, external financing could increase 2- or 3-folds, thus approaching the US\$ 7.4 considered as the level where reconstruction could become reality. The commitments already known have a very short timeframe, usually one year, reflecting the concerns of the international community about the future stability of the country

and the possibilities of actually implementing reconstruction activities. Some recent donor pledges seem to signal increasing confidence in the peace process, which could herald higher levels of support. In the next few years, the health sector is likely to operate within tight financial constraints. The inadequacy of this level of financing will be magnified if peace takes roots and inaccessible areas open up. The consequence of the resource shortage is that, whatever the priorities chosen for the health sector are, to attain major efficiency gains in the health sector is mandatory.

Priority actions for health sector recovery

The priority actions referred to in this chapter are those aimed at strengthening the health sector in a holistic way, so as to enable it to play its role in full. Hence, reference is made to *hardware* (facilities and human resources) and *software* (management systems). The basic assumption is that performing health services are necessary means to attain the desired, high-order outcomes, such as improvements in mother and child health, control of the main communicable diseases etc. These outcomes are not discussed here in any detail.

- **Strengthening management systems**, so as to reduce major inefficiencies (including fragmentation). This implies addressing the following components, both at central regional / provincial levels
 - *Information systems*
 - *Financial management*
 - *Human resources management*
 - *Asset management*
 - *Supply management*
 - *Referral systems*

- **Investing in underserved areas**. To open new facilities, as well as rehabilitating those performing below acceptable standards in underserved areas, seems the most obvious priority for the health sector. Unfortunately, physical reconstruction seems to rank low in the agenda of donor agencies. Additionally, expertise in this field seems scarce. Staffing new health units, as well as the upgraded ones, should not be a major constraint, once adequate incentives to move are provided to the health workers, who are now crowding existing facilities. The main constraint could be logistical and managerial, as the difficulty of administering, supplying, supervising an expanded network should not be downplayed.
 - *PHC-Network*. The health sector needs to expand access to and content of basic health services. This implies the design of a two-pronged approach:
 - On the one hand, existing health facilities should be upgraded, so as to deliver the whole package of basic services. This means to add maternal care, tuberculosis control, small laboratories etc. where they are still missing, as well as to expand and stabilise drug supply. For many facilities, this functional upgrading entails physical interventions, to expand or adapt the infrastructure.
 - On the other hand, there is a need to open new facilities where they are not available. Considering the magnitude of the gap to be filled, it will take many years of investment to reach acceptable levels of coverage. Thus, it seems sensible to proceed by phases, starting with only some of the least served

provinces, so as to concentrate efforts and attention and hopefully to reduce the cost of these interventions (which will be in any case substantial). While this first batch of investment goes on, thorough studies need to be carried out about the situation of the second batch of provinces to be benefited. As mentioned above, to integrate into a comprehensive provincial plan (which should be completed by support components, such as warehouses) the recovery of the different levels of care should provide significant advantages, in terms of balance, coherence and cost reduction.

Meanwhile, the building of new PHC facilities in the best-endowed provinces should be discouraged. This could prove difficult, particularly in areas where many NGOs are active, and local imperatives can overrule equity concerns at national level.

Standard layouts for PHC facilities should be refined and widely adopted. A mandatory component of any investment plan should be the provision of adequate housing to key staff. In other reconstruction processes this policy has proved to play a decisive role in achieving a successful redeployment of health cadres.

- *Referral Hospitals.* Despite the priority accorded to PHC in the context of reconstruction, hospitals should not be neglected, because of their visibility, their referral role, their capacity to attract huge internal resources and, last but not least, because without proper planning, tertiary hospitals will grow on ad-hoc basis, i.e., irrationally. And once facing *faits accomplis*, even the most PHC-oriented decision-makers will have to allocate the resources demanded by hospitals, at the price of starving peripheral facilities. It is more sensible, therefore, to link the development of referral hospitals to the expansion of the PHC network into comprehensive territorial plans, so as to place a clear and not negotiable constraint to hospital growth.

The new hospital network should be different from the old one in relation to the links among different referral levels. Given the demanding geography of the country, referral capacity, relying in fairly high-tech services, should be as much as possible deconcentrated, so as to take these services nearer to the users. In the first phase of reconstruction, this mainly means to strengthen regional hospitals. The target of the second phase would be the provincial hospitals which are more distant from regional ones. This strategy would reduce the role and the weight of Kabul hospitals within the whole network.

The derelict conditions of about half of Kabul hospitals offer to planners a golden opportunity to reconsider the city's network (within the framework of regional development) and to rationalise it. This entails the closure of few hospitals, the merging of others and the clarification of roles between true referral hospitals and inpatient services dedicated to Kabul residents. The total number of beds should be accordingly reduced to more modest levels. This is the price to pay for the strengthening of other tertiary hospitals localised in underserved regions, which should progressively grow to approach the level of the high-tech services offered in Kabul (once these have recovered full functionality).

- **Investing in Human Resource Development.** The restructuring of the Afghan health workforce is a major, long-term endeavour, which should be carefully planned and adequately resourced. Given the main weaknesses discussed above, the central feature of human resource development needs to be the pursuit of better and more appropriate competences for present and future health workers. This approach implies a resolute move away from the tradition of under resourced, emergency training which has prevailed in the past. Quality training, both initial and in-service, should be offered to students and health workers alike. This will take time and need a large collaborative effort. The overstaffing prevalent in many facilities, both in relation to the level of care

expected from them and to their workload, offers a precious opportunity to launch an ambitious training programme, without disrupting ongoing service delivery.

The main components of human resource development should be the following:

- Review existing categories and clarify respective job descriptions, reducing them if possible. Update and strengthen training curricula for all existing categories.
- Restructure and strengthen training institutions, both universities and intermediate schools. The qualitative overhaul of faculties is crucial. Competent teachers should be attracted (exploiting opportunities within the Afghan Diaspora) by offering competitive contracts. New teachers should be trained, if necessary abroad (for instance, medical schools in Iran enjoy an excellent reputation; and the almost common language is an additional huge advantage) until internal capacity recovers.

One or two medical schools (possibly the oldest, established ones) would continue with the training of new doctors, in dramatically reduced numbers. Two of the remaining medical schools should concentrate on providing refresher courses to active health workers. These institutions should be located outside Kabul, so as to encourage health workers to leave the capital. The enrolment in a refreshing course would become then the transitional step to take up a position in an understaffed area. The remaining medical schools should be converted into intermediate health training institutions. This restructuring should not be understood as downgrading. Adequate resources should be allocated to intermediate schools, to allow them to play their role in full.

- Reduce the supply of medical doctors, strengthening post-graduate training. Conversely the training of intermediate-level health cadres must be expanded. Special attention needs to be paid to making the nursing and midwifery professions attractive to prospective students, so as to redress the gap expected to materialise when the expansion of hospital and maternity care take place.
 - Design an in-service training programme for practicing health workers. It should include a component devoted to the conversion of suitable health workers holding unofficial qualifications into fully qualified cadres, through qualifying examinations and the provision of specifically designed bridging courses. To upgrade the workforce will be a huge effort to be sustained over many years, needing thorough preparation. The first step to start such a programme is to assemble an inventory of active health workers, complete with data about their initial training, their professional experience, participation in in-service training etc.
 - Introduce a package of incentives to encourage health workers to move from overcrowded urban areas to rural ones. Incentives would include a hardship salary bonus, decent housing, the use of vehicles appropriate to the level and the location of the health facility, a professionally gratifying working environment, career opportunities, adequate supply of drugs and other medical implements. Again, these incentives will be expensive; without their introduction, however, staff redeployment will remain elusive, hence denying substantive returns to the proposed investment in the network and human resource development.
- **Restructuring the pharmaceutical area.** The MoPH has proposed an annual funding level of US\$ 25 million for the sub-sector, which, besides drug purchases, would cover investment and operational costs. Given the present situation and the size of the health network to supply, this figure appears as realistic, even conservative. Without introducing huge efficiency gains in the field, however, even this level of funding would fail to guarantee universal access to drugs. Adequate financing needs to be backed by several measures, including the following:

- Centralised bulk purchasing of generics, belonging to the National List of Essential Drugs, through aggressive competitive bidding. This system, to be financed by the ARTF or alternatively by a pool of concerned donors, would become the main drug supplier to health authorities and to NGOs (particularly if the contracting out approach takes off).
- Rationalisation of the warehousing network and of the supply chain. This could include the introduction of a Central Supply Unit, whose services would be used by health authorities and NGOs alike.
- Revamping quality control functions, initially relying on foreign laboratories and later on national capacity, once its performance has reached acceptable levels.
- Transition from drug donations in kind to direct donor funding of the central purchasing body.
- Training of health staff in rational drug use.

The described urgent actions do not exhaust the agenda, which includes also the development of a national drug policy, the introduction of the updated National List of Essential Drugs in all facilities, the establishment of effective regulatory capacity, etc. An additional action, to estimate the drug requirements of the health sector so as to formulate rational import plans, is fraught with difficulties, given the paucity of the available information, the fast-moving situation and the uncertainty about the patterns of the future health sector.

Given the extremely low prices obtained by the bulk purchasing of generic essential drugs, to achieve widespread availability of them should not absorb excessive financial resources. In this respect, the dollar per head proposed by the MoPH looks adequate. Conversely, the functional recovery of tertiary hospitals, if not properly controlled, is prone to induce dramatic increases in drug expenditure. A performing central purchasing system has the potential to provide to the public cheap essential drugs, in this way effectively outpricing private importers, hence exercising an indirect regulatory effect on these agents (who in this case are likely to abandon the area of essential drugs to concentrate on upmarket drugs for the wealthy).

Elements of a realistic strategy for reconstruction

- ***Basic assumptions***

- Peace
- Consolidation of a legitimate and effective government, at central and peripheral levels
- Economic recovery
- Progressive improvement of state financing
- Expansion and consolidation of external assistance
- Continuity of policy direction

- ***Policy implications***

- Flexible and effective coordination mechanisms are implanted
- The stated commitment to PHC and to equity is backed by hard decisions

- Central and peripheral health authorities interact effectively
 - Major donor agencies support the reconstruction strategy formulated by the government
 - The efforts of collaborating partners are concentrated on few, agreed priorities
 - A robust information basis is put in place and continuously updated, so as to encourage evidence-based decision-making
 - Major efficiency gains are achieved
- **Attainable targets and cost estimates.** *[according to low-, intermediate-, high-case scenarios, for preliminary funding levels of US\$ 4, 6, 8, respectively. Try to estimate what coverage of basic services could be attained with the network paid for by each level of funding..]*
- **Timeframe; phasing reconstruction.** For the time being, the envisaged reconstruction programme might take place over about 15-20 years, split into three phases:
 - *Recovery (5-7 years):*
 - Strengthening information and management systems. Start rationalising operations, so as to reduce inefficiencies. Starting the redistribution of resources across country.
 - Implanting a centralised, efficient drug purchasing system.
 - Revamping the training system and starting the massive restructuring and redeployment of the workforce.
 - Completing the existing PHC network with basic functions and maybe expanding it in 2-3 of the least-covered and more populated provinces.
 - Strengthening existing secondary hospitals and add a few ones in the provinces mentioned above, if needed.
 - Completing the review of tertiary hospitals and rehabilitating one or two of them.
 - *Expansion (5-7 years):*
 - Expanding the PHC network to underserved areas, so as to increase coverage and reduce gaps.
 - Upgrading all tertiary hospitals.
 - Expanding access to first-referral (secondary) hospitals.
 - Completing the restructuring and the redeployment of the workforce.
 - Introducing a comprehensive quality-of-care programme.
 - Closing gaps in resource allocation.
 - *Consolidation (4-6 years):*
 - Completing the referral network
 - Expanding access to health services to low-density areas
 - Improving the quality of the provided care

- **Monitoring the reconstruction process.** The approach to monitoring to be eventually chosen will depend on the strategic direction of the reconstruction plan, and to which developments it considers as priorities. Monitoring is likely to rely mainly on routine data gathering, complemented by ad hoc surveys. To strengthen the routine information system will be a precondition of a successful reconstruction. For the time being, it seems that to monitor the reconstruction process, the following (conservative) list of indicators will be needed at central level:
 - Financing levels, by internal / external / private, by investment / recurrent, by rural / urban, by level of care, by class of supported expenditure (salaries, drugs, other expenditure), by region.
 - Structure of the health network.
 - Structure of the workforce, by level of training, by gender, by major categories.
 - Deployment of human resources, by level of care, by rural / urban, by region.
 - Workloads and other estimates of operational efficiency.
 - Outputs and coverages of the most important services.
 - Differentials in service consumption across country, pointing to existing inequalities of access.
 - Content of the offered services and quality of care.
 - Health status indicators

All indicators should be monitored over time, so as to spot trends and verify whether the health sector is moving in the desired direction.

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