

WHO-EM/EHA/003/E/G  
Distribution: General

**RECONSTRUCTION OF THE AFGHANISTAN HEALTH SECTOR:  
A PRELIMINARY ASSESSMENT OF NEEDS AND OPPORTUNITIES**

**December 2001–January 2002**



World Health Organization  
Regional Office for the Eastern Mediterranean  
Cairo, Egypt  
2002

© World Health Organization 2002

This document is not a formal publication of the World Health Organization (WHO), and all rights are reserved by the Organization. The document may, however, be freely reviewed, abstracted, reproduced or translated, in part or in whole, but not for sale or for use in conjunction with commercial purposes.

The views expressed in documents by named authors are solely the responsibility of those authors.

Document WHO-EM/EHA/003/E/G/01.02

## CONTENTS

1.	INTRODUCTION .....	1
2.	OBJECTIVES .....	1
3.	ASSUMPTIONS.....	1
4.	SITUATION ANALYSIS .....	2
4.1	The current health profile of the Afghan population .....	2
4.2	Current human resources in the health sector .....	4
4.3	Health care delivery infrastructure .....	4
4.4	Institutional capacity.....	4
5.	RISKS AND OPPORTUNITIES EXTERNAL TO THE HEALTH SECTOR .....	5
5.1	Risks .....	5
5.2	Opportunities .....	5
6.	THE SHORT TERM: IMMEDIATE STEPS FOR RECOVERY.....	5
6.1	Goal for health sector recovery .....	5
6.2	Prerequisites.....	6
6.3	Activities for immediate recovery .....	6
7.	THE MEDIUM TO LONG TERM: RECONSTRUCTION .....	11
8.	CONCLUSION .....	13
9.	COST ESTIMATES .....	14
	REFERENCES .....	18



## **1. INTRODUCTION**

The Commission on Macroeconomics and Health, which presented its report to WHO in December 2001 (1), concluded that populations enjoying good health also have the capacity to reduce poverty levels and achieve sustainable economic and social development. This has fundamental implications for the future development policy of the Government of Afghanistan and for the donor community that is supporting it. Simultaneously, improved health of the Afghans can serve as a bridge to sustainable security, peace and development.

This document reflects the views of the Ministry of Public Health and WHO on the priorities in the health sector for the immediate and medium-term. It is based on the experience and institutional memory accumulated during the Organization's long presence and participation in humanitarian work in Afghanistan, and its regional strategy in the light of wider, global health initiatives. It has also been enriched by recent exchanges with the World Bank, Asian Development Bank and UNDP, as well as with national experts and UNICEF, and the invaluable input of national and international health partners in the context of the Needs Assessment for Afghanistan's Reconstruction. Additionally, the document uses extensively the outcomes of the International Conference on Reconstruction of Afghanistan, held in Islamabad in November 2001 and of the Health Sector Reconstruction workshop held in Peshawar in December 2001.

## **2. OBJECTIVES**

The overall aim is to point out the key health issues and public health priorities around which there is widespread consensus but which nevertheless need to be re-enforced as areas of technical intervention and concerted work during the transition and reconstruction phases. It is hoped that this will help the Afghan Ministry of Public Health (MOPH) to achieve the following:

- assume ownership of the recovery/reconstruction phase;
- improve its management and coordination of foreign aid;
- develop and sustain sector-specific national capacity;
- implement the national and regional health plans.

## **3. ASSUMPTIONS**

Analysis and conclusions in this document were based on the following general assumptions:

- Improved governance structures and mechanisms will be installed at the national and regional levels during the transition phase.
- Afghan ownership of and active participation in all health programmes will be ensured at the national, regional and local communities level.

## Reconstruction of the Afghanistan health sector

- Local human resources will be identified and deployed by the transition government.
- Improved security will lead to increased mobility and enable health teams to reach previously inaccessible parts of the country.
- Food security will be improved, through distribution of seeds and food aid.
- Crash programmes will be implemented in the housing, water and sanitation sectors to address humanitarian and recovery needs.
- Adequate, flexible and sustained international aid will be forthcoming to foster peace and stability.
- Lessons learned in relief and development in post-conflict countries during the past decade will be widely disseminated.
- The donor and aid community and the transition government will show strong commitment to strengthening technical and administrative expertise in the health sector.

### 4. SITUATION ANALYSIS

#### 4.1 The current health profile of the Afghan population

4.1.1 Decades of conflict and human displacement, compounded by 3 years of drought, have had a severe impact on Afghanistan's health sector. The health infrastructure was damaged throughout the country, health workers disappeared without being replaced, and demand for care increased at an exponential rate. High vulnerability to natural disasters, food deficit, limited safe water supply, poor standards of hygiene and sanitation, and restricted access to health care for women and girls have become important features of the situation in Afghanistan, exacerbated by difficulties of geographic access and by the limited delivery capacity of the existing health facilities. As might be expected, information is scarce but sufficient evidence exists to point to priorities in terms of burden of disease and local resources and capacity.

4.1.2 **Afghanistan has one of the worst health profiles in the world.** War, food insecurity, the drain of health personnel, destruction of the rural health infrastructure and severe drought have compounded the situation. The following indicate the magnitude of the major health problems in Afghanistan:

About 23% of the total population has access to safe water. Coverage by sanitation systems is about 12% overall.

- Life expectancy rates are among the lowest in the world: estimated at 47.2 years for women and 45.3 for men.
- In 1997, it was estimated that the **infant mortality** rate was 165 per 1000 live births (4), and that about 25% of children died before their fifth

Fifteen percent (15%) of districts have no immunization programme; immunization coverage has been only about 30%. In the winter of 1999–2000, more than 1000 deaths from measles were reported.

birthday (2); about 20% of deaths are due to three infectious causes: pneumonia, diarrhoea and vaccine-preventable diseases. Lack of basic health care and malnutrition contribute to the high death rates.

4.1.3 The **health of women and girls suffered greatly in the past two decades** due to the acute lack of female health personnel, gender segregation and restrictions placed on women and girls by the local traditions. The following indicators reflect the gravity of the health problems among the Afghan female population:

- Afghanistan has the second highest maternal mortality rate in the world. It is estimated that every day 45 women die of pregnancy-related causes resulting in over 16 000 maternal deaths annually.
- The majority of pregnant women have no health care during delivery. Fewer than 15% of deliveries are attended by trained health workers, mostly traditional birth attendants.
- Despite the lack of statistics on drug use among Afghan women, field evidence indicates that drug-addiction among women is increasing.

Only 35% of districts have any maternal and child health services and the country has only 30% of the traditional birth attendants that it needs.
---

4.1.4 **Malnutrition.** About half of children under 5 years of age are stunted due to chronic malnutrition and up to 10% have acute malnutrition<sup>1</sup>. In the 2000 Multiple Indicators Cluster Survey (MICS), 80% to 90% of women of child-bearing age were anaemic. Iodine deficiency is also serious, with only 2% of households using iodized salt and 7.5 per 1000 population showing visible goitre in the 1997 MICS (5).

4.1.5 **Communicable diseases continue to cause death and disability.** Diseases that have largely been controlled in most countries in the world continue to cause death and disability in Afghanistan. Nearly half of all premature deaths and disabilities in Afghanistan are due to measles, influenza, typhoid, cholera and meningitis. In addition, the burden of endemic diseases is daunting and increasing:

- *Tuberculosis:* about 72 000 new cases and more than 15 000 deaths per year; most cases are young adults, 70% women.
- *Malaria:* over 13 million people are at risk; cases caused by *P. falciparum* have shot up from 1% in 1978 to about 6% now.
- *Leishmaniasis:* more than 270 000 people have active leishmaniasis, up from 14 000 3 years ago.

---

<sup>1</sup> Chronic malnutrition (% H/A < -2 Z-score): 46.7%–65.9%. Global acute malnutrition (% W/H < -2 Z-score): 2.8%–23.0% according to nutrition surveys carried out by different nongovernmental organizations, 2000–2001, compiled by UNICEF.

## Reconstruction of the Afghanistan health sector

4.1.6 **Mental health is a major health concern.** Experts estimate that approximately 30%–50% of a population undergoing violent conflict develop some level of mental distress. Residual mental health problems that appear normally in any population have been unattended in Afghanistan for decades.

4.1.7 **The percentage of disabled in the population is large.** Armed conflict, landmines and deadly unexploded ordnance daily cause additional injuries as well as mental stress. Local surveys indicate that more than 4% of the Afghan population suffers from some form of disability (3).

Rehabilitation and socioeconomic re-integration services for the disabled so far cover only 60 out of 330 districts, and within those the needs are only partially met.
---

### 4.2 Current human resources in the health sector

4.2.1 Estimates of total human resources inside Afghanistan indicate that there are about 17 600 health care providers, comprised of 3906 physicians; 2564 mid-level professionals, 4993 nurses and technicians, and 6123 community health workers and birth attendants. However, there is an urban bias with one physician to 1700 population in Kabul, but one physician to 450 000 population in the next province.

4.2.2 If community health workers are excluded, the ratio of physicians to other categories is 1:2, which reflects the distortions in the workforce structure, where physicians are greater in numbers than support staff.

4.2.3 The International Organization for Migration database indicates that approximately 400 physicians and the same number of nurses and mid-level health workers have made applications to return to Afghanistan.

### 4.3 Health care delivery infrastructure

4.3.1 Afghanistan has 17 national, 9 regional, 34 provincial, and 41 district hospitals; the peripheral network consists of 365 basic health centres and 357 health posts. State development policies in the past were also heavily biased towards the urban setting. Approximately 50% of the 8333 hospital beds available in the country are in Kabul. The rest of the country has 0.34 beds per 1000 population, compared to an average 3 per 1000 in low-income countries, and 20% of districts have no health facilities.

4.3.2 There are few laboratories, and they perform a limited number of tests. All drugs are obtained from abroad by private traders or humanitarian agencies.

### 4.4 Institutional capacity

4.4.1 All social sectors in the country have suffered enormous losses in their capacity to deliver during the past two decades. However, the accumulated experience of health actors in Afghanistan indicates that, unlike the education sector, the health sector maintained its core capacity to deliver during all times of crisis, albeit at varying standards. Nationwide efforts, with external assistance, managed to maintain reasonable coverage in certain parts of the

country during the most severe circumstances. An excellent example is that of the poliomyelitis National Immunization Days carried out in November 2001, in the midst of military intervention, by national health workers.

- 4.4.2 A key health planning and follow-up forum that helped sustain service delivery in the health sector over recent years is the National Technical Coordination Committee (NTCC) composed of the MOPH and the assistance community. Regional health management teams and committees plan, supervise, monitor and evaluate health care delivery in coordination with the local authorities and other stakeholders.

## **5. RISKS AND OPPORTUNITIES EXTERNAL TO THE HEALTH SECTOR**

### **5.1 Risks**

Assuming that security and peace become the norm in the country, the following risks could negatively affect the rehabilitation and reconstruction of the health sector:

- a) insufficient absorptive capacity, due to a narrow base of skilled human resources;
- b) delay in the installation of a viable government payment system;
- c) difficulties and delays in re-establishing the formal education system.

### **5.2 Opportunities**

- a) The environment of optimism, which will encourage investment and return of professional skilled Afghan health workers to the country.
- b) The interest of the donors in establishing peace and contributing to the recovery, rehabilitation and development of the country.
- c) Mobilization of resources by communities that are direct beneficiaries to support reconstruction.
- d) Lessons learned from the accumulated experience of national and international nongovernmental organizations in the past two decades.

## **6. THE SHORT TERM: IMMEDIATE STEPS FOR RECOVERY**

### **6.1 Goal for health sector recovery**

The imperative is to reduce the unacceptably high levels of mortality, morbidity and disability in the shortest possible period of time. Given the limited human resources and financial constraints, it is crucial to focus the efforts of all health partners on the most effective interventions. At the same time, efforts should be made to improve the knowledge base to allow for policy development for longer-term goals.

## Reconstruction of the Afghanistan health sector

The present coverage of the health service is low and the immediate objective is to scale up activities that address the most important health needs.

### 6.2 Prerequisites

In order for immediate basic health services to be made available to a large proportion of the population the following conditions need to be met.

- **Sound systems of coordination, monitoring and financial management and control must be established that take into account the specific constraints in local capacity.** To avoid fragmentation of interventions and deter waste and cost inefficiencies, these necessary systems have to be set up at both the central and regional levels.
- **Consensus must be built among key partners in the health sector** with regard to the need to focus health interventions on areas that will have an impact on morbidity and mortality. That consensus needs to be translated into a common approach, reinforced by technical standards and practices.
- **A salary system must be established immediately for personnel working for MOPH,** based on agreed remuneration scales and in accordance with government employees in other sectors.
- **Financial incentives or fringe benefits (such as housing) need to be made available** for staff deployed in underserved areas, and to attract health workers who are currently abroad.

### 6.3 Activities for immediate recovery

#### 6.3.1 Public health programme priorities

Assuming that key interventions are implemented in the food security, water supply, shelter, transport, communications and de-mining sectors, it is feasible to reduce the mortality, morbidity and disability rates through the implementation of a number of essential interventions. This essential health package will build upon on-going programmes and streamline all available resources to deter the occurrence of illness and death. The basic health care package will focus on the following:

- a) control and prevention of communicable diseases
- b) reducing the high levels of maternal and neonatal mortality
- c) reducing high levels of malnutrition
- d) addressing the need for mental health services
- e) treatment and rehabilitation of trauma victims
- f) addressing the relationship between the environment and health needs

- g) supporting integrated community development

Public health care interventions addressing the above will be implanted at the grass roots level and supported by an integrated system of information management and coordination and capacity-building

- a) *Communicable diseases: surveillance, control and epidemic preparedness*

Priorities for prevention and control among major communicable diseases include diarrhoea, acute respiratory infections and vaccine-preventable diseases in children. It also includes endemic diseases, such as tuberculosis, malaria and leishmaniasis. There is a need for a coordinated approach focusing on selected interventions and support to MOPH from WHO, other UN agencies and nongovernmental organizations. These interventions will be based on the core functions of public health with country-wide reach, which includes health status monitoring, disease surveillance, investigation and control of disease, protection from environmental hazards, health education, outreach, public and professional mobilization. The Expanded Programme on Immunization will remain a major strategy for reduction of infant and child morbidity and mortality. Poliomyelitis eradication and measles campaigns will be a priority for the next 2 years.

Advantage should be taken of the existing WHO poliomyelitis surveillance system, which has established, decentralized staffing at regional and district levels, to include the surveillance of other target diseases, such as measles, neonatal tetanus, bacillary dysentery, cholera and meningococcal meningitis. Laboratory capacity to confirm suspected cases needs to be strengthened at central and regional levels also.

Secondary and tertiary care interventions will be complemented by a health promotion programme, which will be developed with the involvement of other sectors. In addition to communicable diseases, health education will address drug abuse, blood safety and other health problems.

- b) *Reproductive health*

The main goal of the Safe Motherhood Initiative is to ensure that pregnant women have access to quality maternal health services, which can detect and manage life-threatening complications. In the short term, priority interventions to prevent excess neonatal and maternal mortality and reproductive health morbidity consist of:

- providing simple clean delivery kits for use by mothers or birth attendants to promote clean home deliveries;
- providing delivery kits for midwives to facilitate clean and safe deliveries at the health facility; and
- activating a referral system to manage essential emergency obstetric care.

## **Reconstruction of the Afghanistan health sector**

### *c) Malnutrition*

The health sector has direct responsibilities for assessing and monitoring nutritional status, advocating for adequate food rations and providing health education regarding breast-feeding and weaning practices.

Selective interventions such as supplementary and therapeutic feeding programmes, integrated with primary health care, will be required in the immediate phase. Measures to prevent and control micronutrient deficiencies (mainly iodine, vitamin A and iron) are also required. Nutritional surveillance will be based in this initial phase on anthropometric surveys, since the still low utilization of services will not allow a facility-based growth monitoring system representative enough to provide a valid picture of the nutritional status.

### *d) Mental health*

In Afghanistan, as is the case in many other complex emergency situations, specialized mental health services are hugely insufficient, not only to handle the routine demand, but also to identify unexpressed mental health needs. It is mainly in the transition period, when refugees and internally displaced persons return to their homes, and livelihood resumes, that the inadequacy of mental health resources becomes most apparent.

Various models have been applied in post-conflict and transition settings, based on training of primary health care workers in mental health, mobilization of social networks, collaboration with practitioners of traditional medicine, etc. The only consensus existing among practitioners is that a cultural approach, specific to the context, is required to identify the prevalent mental health problems, to assess the magnitude of needs, to develop adequate psycho-social programmes and to train personnel accordingly. While policies will need to be formulated for long-term mental health programmes, the use by primary health care workers of available simple tools<sup>2</sup> and protocols to deal with psycho-social problems should be encouraged.

### *e) Treatment and rehabilitation of trauma victims*

Afghanistan is one of the countries in the world most affected by mines and unexploded ordnance. An accelerated demining programme will contribute to reducing the human toll, promoting return and resettlement of the population and restoring agricultural production. However, until demining activities have cleared mined areas, the health sector bears direct responsibilities in reducing trauma-related mortality and providing rehabilitation services to victims. Therefore, establishing and strengthening emergency health services and expanding them geographically are a priority. Emergency referral services and systems should address areas of transportation and communication, diagnostic facilities for referral, laboratory needs, and rehabilitative and surgical capacity to meet the growing need for such health services.

---

<sup>2</sup> Such as needs assessment, screening and counselling protocols.

### f) *Environmental health*

Contaminated drinking-water, unsafe food and unsanitary conditions are important determinants of illness and death. Special emphasis on environmental health is therefore required in order to achieve quick reductions in mortality and morbidity. Interventions include: ensuring safe drinking-water, safe food and adequate disposal of excreta and other waste; control of disease vectors; promoting domestic hygiene; and promoting safe handling of chemicals.

A key element for this strategy will be the establishment, with WHO support, of a strong Environmental Health Directorate within the MOPH at central and regional level. A rapid assessment of the environmental health situation should be carried out shortly, to develop a masterplan. Training and capacity-building in environmental health are crucial activities, as well as establishing regional water and food quality laboratories. Environmental health legislation will be required, as will the necessary institutional infrastructure for enforcement of such.

### g) *Integrated community development*

The interventions suggested above are health driven. However, in order to attain a better overall quality of life, it is imperative to broaden the scope of interventions by addressing all the determinants of health and supporting individuals and communities to assume greater responsibilities in defining their needs, identifying priorities, mobilizing local resources and developing the necessary local organizations. This process will help local communities to gain access to essential social services, appropriate technologies, information and financial credit. It will also serve the goal of achieving better health outcomes for the communities by reducing poverty, creating awareness, building capacities, enhancing literacy, ensuring adequate nutrition and providing essential health services. For over a decade, WHO has actively advocated integrated community development approaches among the member countries that have proved their effectiveness and sustainability under varying sociopolitical conditions.

### 6.3.2 *Enhancing the health information system*

Following a review of the existing information system, health surveillance and response activities should be integrated and streamlined at peripheral and intermediate levels. Common reporting channels and standardization of data collection tools will maximize existing resources for surveillance and disease control.

A full-scale needs assessment of the sector should be carried out in the next few months to create the basis for developing a masterplan, including rehabilitation and reconstruction of the health network, a human development plan, etc. The needs assessment should be targeted at the individual health facility level, covering the following main components: demography, staff, infrastructure, health activities and finances.

A countrywide demographic and health survey (DHS), aiming at estimating baseline indicators should be carried out, for planning and future monitoring purposes. The currently available indicators point to the severity of the humanitarian crisis, however, they are not sufficiently up-to-date or precise

## **Reconstruction of the Afghanistan health sector**

to allow for monitoring of the impact of health interventions and of the other determinants of health status.

### *6.3.3 Institutional support to MOPH*

It is likely that MOPH-Afghanistan will maintain the decentralized primary health care structure that was previously developed. Evidence from other countries moving towards a decentralized structure of health care delivery illustrates that there must be a balance between the policies and plans developed at the central level and the implementation ability of local health authorities in order to ensure people have access to health and quality care. Without managerial capacity at all levels, and without a clear definition of how the different levels operate, the risks of inequity in resource allocation and of fragmentation of the sector are high.

Institutional recovery should start simultaneously. Policy development, planning and management will be crucial functions of MOPH. It can be assumed that there will be a shortage of expertise in these key areas for some time to come, because of the outflow of top managers from the public sector. A group of professionals (e.g. health economists, financial system specialists, health planners, physical planners, human resource development specialists, procurement and supply experts, health educators) should be hired in an advisory and capacity-building role to support the MOPH. Similar technical assistance should be deployed at regional level, targeting key regions first and expanding subsequently to cover all regions.

The experience in both Kosovo and East Timor<sup>3</sup> shows that establishing a policy and planning unit has been an effective investment for the sector. An integrated and coordinated approach, under the leadership of the MOPH, will be needed with regard to: formulation of policies and operational mechanisms and procedures, development of terms of reference and reporting lines, standardized contractual arrangements, and phasing of technical assistance. This approach points to WHO taking responsibility for the coordination and management of technical assistance, with appropriate secondment mechanisms from other agencies.

### *6.3.4 Initial rehabilitation of infrastructure*

In the initial period, until the masterplan has been developed, only limited rehabilitation works (i.e. urgent fixing, including water supply and, where relevant, electricity) should be carried out. Basic equipment for health facilities must be procured, as well as transport and communication. A bulk procurement of vehicles and communication equipment is, therefore, needed to improve referral of urgent cases to the nearest health facility, where emergency obstetric and surgical services are available. The aim would be to make most health facilities operational, while major upgrading and reconstruction work will be carried out subsequently.

---

<sup>3</sup> It must be stressed, however, that in both of those countries a transitional UN administration was set up until the elections.

### 6.3.5 Management of drugs and medical supplies

In order to support the scaling up of interventions, the supply of drugs, vaccines and essential medical equipment must be ensured. Until a sub-sector policy has been developed in relation to a national formulary, regulation of import of medicines and of the private sector, modalities of procurement and a distribution system, an increased supply of essential drugs must be ensured to allow the expansion of health activities. An efficient central procurement system guarantees important savings<sup>4</sup>. Also in this critical area, optional arrangements, such as sub-contracting the procurement and distribution of drugs to an external agency, might be considered in this initial phase, until policies have been developed, government management and monitoring capacity has been created, and financing and logistical systems have been put in place.

### 6.3.6 Training

In the initial phase of reconstruction, training will be mainly of the in-service type: short courses, workshops and hands-on supervision. It will be focused on the main interventions of the package of essential services.

Until a human resource development plan has been developed on the basis of the needs assessment, and curricula have been revised, pre-service training of the categories in shortest supply, such as midwives and nurses, should start. Training institutions will be refurbished and basic teaching equipment and materials will be procured.

## 7. THE MEDIUM TO LONG TERM: RECONSTRUCTION

It is expected that at the end of the initial period characterized by relief and recovery activities, the most urgent humanitarian needs will have been addressed with a positive impact on mortality and morbidity, and that the health system capacity will have been expanded and enhanced to allow it to face the challenges of reconstruction.

During the reconstruction phase the demand for all types of health services will increase and the expansion of the network will be accompanied by the deployment of newly trained staff, who will improve both the quality and efficiency of health care. Health programmes will be expanded to include the control and management of prevalent, non-life-threatening diseases. Information and financial flows, and support systems are also expected to improve, stabilizing the sector.

The reconstruction phase will focus on: planning and implementation of *health policies and programmes*, development of *human resources* and *physical infrastructure* and addressing various forms of *community financing*.

---

<sup>4</sup> Due to the economies of scale of bulk procurement.

## **Reconstruction of the Afghanistan health sector**

### *a) Policy and programming*

Policies concerning the different components of the health sector will be developed in a national health plan to ensure a framework for optimal and equitable allocation of resources.

Priorities for training and reconstruction, the two major programme components for expanding service delivery, will be decided on the basis of needs and available resources. It is expected that the initial investment in institutional support at regional level, and capacity-building by nongovernmental organizations at sub-regional level, will have enabled local authorities and communities to participate in the formulation of the national plan and its implementation.

### *b) Human resources development*

The main challenges in the area of capacity-building during the reconstruction phase are the following:

- To design an integrated approach for human resource development aiming at meeting population health needs through coordination between MOPH and the Ministry of Education. Successful experiences of this kind of intersectoral coordination have been documented in Islamic Republic of Iran and Morocco.
- To redress the geographical imbalance of health workers between urban and rural areas. Decentralized training, both pre-service and in-service, is one of the strategies to allow local enrolment and future deployment at regional and provincial level. The provision of monetary incentives and other fringe benefits for those willing to work in the rural areas, career development prospects, local recruitment, etc. are other strategies that can be used.
- To correct the distorted structure among the different categories. Medical support staff, including nurses, midwives and other primary health care mid-level categories should represent target categories for an accelerated training programme.
- To increase the proportion of female health workers. Flexible enrolment policies, refresher training, and coordination with the education sector and other sectors are some of the options to redress this gap in the medium term.

In order to produce new generations of health support staff, training institutions must be rehabilitated, equipped and strengthened, and a substantial upgrading of training capacity must be put in place. The emphasis on university education must be reassessed since physicians are among the most expensive resources of the sector.

### *c) Physical infrastructure*

Rehabilitation and reconstruction of infrastructure will represent an important share of total expenditure for the sector's reconstruction. Additionally, it must be emphasized that the expansion of the health system will entail a substantial increase in recurrent costs. In order to avoid the risks of wasting precious resources or undermining future sustainability of the system, the rehabilitation and

expansion of the network should be gradual and guided by rational criteria, such as the size of the target population, the existing infrastructure, the availability of adequate communication systems (roads, telephones or radios), and the capacity of the referral system.

With regard to reproductive health, the minimum acceptable level of essential obstetric care services is one health centre for every 30 000 to 40 000 people; one operating theatre and staff, which can perform surgery and provide blood transfusions, for every 150 000 to 200 000 people; and skilled health care providers trained and functioning (one midwife for 20 000 to 30 000 people, one community health worker/traditional birth attendant for 2000 to 3000 people) (6).

Factors that will contribute to the slow expansion of the network in the rural areas will be the weakness of the overall infrastructure (poor roads and communications, less developed economies and services), competition from other sectors for construction workers, and the possible sharp increases in cost of construction materials.

Building health facilities in underdeveloped areas is more demanding, slower and much more expensive than it is in developed areas, and reconciling the search for greater equity with economic priorities is sometimes difficult. Therefore, priority should be placed on the primary level and the next immediate referral level, and pressures, both internal and external, to invest in tertiary health care should be resisted.

#### *d) Health care financing*

The development of policy options should include scenarios for health care financing, which will require affordable and sustainable financing policies. The difficult economic environment and limited public resources devoted to health will cause pressure on health care financing policies.

It can be expected that external aid will cover the total health expenditure in the first few years of reconstruction. In the medium and long terms, external aid will gradually scale down and other sources of domestic financing will be required in order to fill the gap. Regardless of the model that the government adopts for sustaining the sector (tax-based, health insurance or a mix), cost sharing will, sooner or later, represent an additional source of financing. It will take many years before the majority of Afghans will be able to afford to pay a significant share of service costs. However, as income improves, community-based projects or cost-recovery schemes might be considered and tested. Successful, even if small-scale examples of communities participating in the management and cost-sharing of health services have been reported by nongovernmental organizations.

## 8. CONCLUSION

The transition of a country from conflict to reconstruction is characterized by a substantial influx of aid and by a proliferation of actors: Cambodia, Mozambique, Kosovo, East Timor, to quote only a few, are all cases in point. It is in such conditions that effective coordination is crucial, not only to reduce inefficiencies, but to strengthen the national authorities and resist political agendas. The transition phase, moving from delivering humanitarian relief to development aid, should be seamless and the activities involved should be complementary.

## **Reconstruction of the Afghanistan health sector**

Recovery and rehabilitation of Afghanistan's health sector will consist of developing and implementing a number of key sector-wide strategies, followed by operational planning. Targeted areas that require immediate attention are the following:

1. Policy and strategic planning for the health sector
2. Coordination and aid management
3. Health sector capacity-building and human resources development
4. Institutional support to MOPH
5. Reconstruction of the physical infrastructure
6. Continuation and expansion of key public health programmes

The World Health Organization has a long history of presence and activity in supporting health sector development in Afghanistan. Additionally, its strong linkages with local health authorities, its partnership with other health actors, and its capacity to bring together technical capacity from different departments at regional and global level represent important assets of the Organization.

The international aid and donor community have immense responsibilities to ensure that the health needs of Afghans are being addressed, and met accordingly. Simultaneously, support must be given to MOPH to assume the leadership role in health sector development and regulation. WHO, in collaboration with health sector partners, can assist MOPH in the immediate time-frame to ensure that humanitarian needs are addressed by all partners according to a clear strategy; contribute to upholding health performance standards and increase accountability of partners engaged in the sector; and mobilize technical and financial resources to accomplish the recovery and rehabilitation process.

Table 1 attempts to summarize qualitatively the comparative advantage of WHO in relation to the priority activities outlined in the document and to the following main horizontal axes: coordination, policy development, planning, information system, monitoring and evaluation, technical assistance with respect to specific sub-areas, financing, implementation, and supply<sup>5</sup>. The table may be used as a tool to facilitate planning and to guide the MOPH in regard to coordination, and the donors in regard to decisions on financing. It may be developed further by other health partners and MOPH. Where applicable, WHO will support the MOPH in the seven areas, both at a national level and in the eight regions.

## **9. COST ESTIMATES**

Health resource information and financial data are patchy, outdated and incomplete, making the estimation of costs for reconstruction an extremely difficult exercise. Furthermore, most of the planning assumptions previously discussed may have important implications for budgeting health

---

<sup>5</sup> Institutional support was not included, because of overlapping with other categories.

## Reconstruction of the Afghanistan health sector

interventions. Additionally, this document presents a general framework of priority activities, whose implementation will finally depend on MOPH policy and strategy choices, which will have an impact on costs.

**Table 1. WHO contribution to the reconstruction of the health sector**

(priority scale: -, +, ++, +++)

Priority activities	Coordination	Needs assessments <sup>1</sup>	Policy formulation	Information system	Planning, monitoring and evaluation	Technical advice, good practice guidance	Supplies
1. <i>Package of essential services</i> <sup>2</sup>	+++	+++	+++	+++	+++	+++	++ <sup>3</sup>
2. <i>Health information management</i>	+++	+++	+++	+++	++	+++	+ <sup>4</sup>
3. <i>Infrastructure</i>	+++	+++	++	++	++	++	+ <sup>5</sup>
4. <i>Drugs and supplies</i>	+++	+++	++	++	++	+++	-
5. <i>Human resources development</i>	+++	+++	++	++	++	+++ <sup>6</sup>	++ <sup>7</sup>
6. <i>Financing</i> <sup>8</sup>	++	++	++	+	+	+++	-
7. <i>Health promotion</i>	++	++	+++	+	++	++	+

Notes:

<sup>1</sup> Includes health and nutrition surveys

<sup>2</sup> Communicable disease control (immunization, diarrhoea, acute respiratory infections, malaria, HIV/AIDS, blood-safety and tuberculosis), nutrition, reproductive health, mental health, injuries and trauma, supporting by community development initiatives

<sup>3</sup> Emergency health kits, other medical kits, emergency health library kits

<sup>4</sup> Includes computers and software

<sup>5</sup> Partial provision of equipment

<sup>6</sup> Mainly in-service training

<sup>7</sup> Teaching materials

<sup>8</sup> First year free-of-charge health services, possibly pilots for partial cost recovery

For many items and budget lines, only guess estimates are possible at this stage. The cost estimates presented here reflect in broad terms the result of the collaborative efforts that the World Bank, WHO and UNICEF have carried out during the preliminary sector needs assessment in Islamabad<sup>6</sup>. They represent an indicative and rough estimate of the financial resources the sector will require to achieve the stated goals. These cost estimates are not intended to guide resource allocations

---

<sup>6</sup> With regard to population, the following planning figures were utilized: present population: 23 million; growth rate: 3% per year; 3 million returned refugees

## Reconstruction of the Afghanistan health sector

or provide budgetary recommendations. However, even if imperfect, they can guide the donors in establishing their financial commitments for reconstruction of the health sector.

The cost estimates presented in Table 2 are expressed in US dollars, adjusted for inflation. Out-of-pocket expenditures in the private sector are not taken into account. Cost estimates are all-inclusive, i.e. including current health expenditure, which can be roughly estimated for this year in the range of US\$ 50 to 60 million.

Total expenditure for the sector, projected over the next 10-year period amounts to around US\$ 2 218 000 000<sup>7</sup>. Per capita annual expenditure throughout the period, assuming an average population of 30 million is US\$ 7.4 (Table 3). These figures are low, especially if related to the huge needs: according to the recent Report of the Commission on Macroeconomics and Health, as of 2007, essential health interventions could be provided in low-income and middle-income countries for an average cost of US\$ 34 per person per year. However, it can be expected that the absorption capacity will be inevitably low, particularly at the beginning. Other sources of funding, such as cost-sharing mechanisms or insurance schemes may be considered in the future by the government to raise additional financial resources for the sector.

A final word of caution is required: reconstructing a sector which has undergone more than two decades of destruction, degradation, limited support and neglect will not be cheap. The payoff, however, should be measured not only in terms of improvement of the health status and viability of the health system. Investing in health will contribute to making Afghanistan's transition to peace more solid, supporting stabilization and defusing tensions. It will also accelerate socioeconomic development, directly through its impact on health status, and indirectly through the injection of substantial resources into the economy of the country.

---

<sup>7</sup> This figure is somewhat lower than the estimate resulting from the needs assessment, mainly due to a different classification in the budget lines

**Table 2. Preliminary costing estimates (in US\$)**

Input/activity/budget line	First 2 years	3rd to 10th year	Total (10 years)
<b>1. Capital costs</b>			
• Vehicles, furniture, equipment for MOPH (central level)	5 700 000	7 600 000	13 300 000
• Rehabilitation/reconstruction of infrastructure (including equipment transport and communication)	146 200 000	356 595 00	502 795 000
• Rehabilitation of support infrastructure (warehouses, training institutions, offices, etc)	12 700 000	23 100 000	35 800 000
<i>Sub-total capital costs</i>	<i>164 600 000</i>	<i>387 295 000</i>	<i>551 895 000</i>
<b>2. Recurrent costs</b>			
• Salaries MOPH (central, regional, provincial level) management staff only	1 615 000	16 235 000	17 850 000
• Salaries/stipends for service providers (MOPH and NGOs)	49 280 000	377 000 000	426 280 000
• Technical assistance (institutional support and NGO service delivery)	92 000 000	215 450 000	307 450 000
<i>Sub-total salaries</i>	<i>142 895 000</i>	<i>608 685 000</i>	<i>751 580 000</i>
• Other recurrent costs (drugs, vaccines vehicle maintenance, etc.)	131 185 000	735 500 000	866 685 000
• Health policy development and system design (technical assistance, studies, capacity-building, information dissemination, etc.)	15 800 000	25 450 000	41 250 000
• Small grant schemes, community participation	850 000	5 500 000	6 350 000
<i>Non salary recurrent costs</i>	<i>147 835 000</i>	<i>766 450 000</i>	<i>914 285 000</i>
<i>Sub-total recurrent costs</i>	<i>290 730 000</i>	<i>1 375 135 000</i>	<i>1 665 865 000</i>
<b>3. GRAND TOTAL</b>	<b>455 330 000</b>	<b>1 762 430 000</b>	<b>2 217 760 000</b>
<i>Average annual expenditure</i>	<i>227 665 000</i>	<i>220 303 750</i>	<i>221 776 000</i>

**Table 3. Per capita annual expenditure over the 10-year period (average population of 30 million)**

	US\$
Capital	1.8
Recurrent	5.6
Total	7.4

## Reconstruction of the Afghanistan health sector

### REFERENCES

1. *Macroeconomics and health: investing in health for economic development*, Geneva, WHO, 2001
2. Report of the Health Planning Workshop, Kabul 1998
3. *The world health report 2001. Mental health: new understanding, new hope*. Geneva, WHO, 2001
4. *Indicators of child morbidity and mortality in three Afghan provinces*, RACA, 1996
5. Press release of Comprehensive Disabled Afghan Program, 2000
6. UNHCR/WHO/UNFPA. *Reproductive health in refugee situations. An interagency field manual*. Geneva, UNHCR, 1999.

### OTHER DOCUMENTS

- *Masterplan for rehabilitation and reconstruction of the health system in Afghanistan*. WHO, Government of the Republic of Afghanistan and the Afghanistan Interim Government, 1991.
- Minimum PHC framework, MOPH, UN agencies, EC, 1994.
- Report of the National Health Sector Planning Workshop and Detailed Regional Workshops (2001–2002), MOPH, WHO, UNICEF.
- *Health services delivery in Afghanistan, present and future perspectives*, World Bank, UNDP, WHO, UNICEF, SCA, ACBAR and IbnSina, 2000.
- *Reconstruction of the health sector of Afghanistan: a health system based on primary health care*, Cairo, WHO, 2001.
- *WHO strategy in the Afghan crisis, November 2001–March 2002*, Cairo, WHO, 2001.