

Pakistan floods 2010

Early recovery plan for the health sector

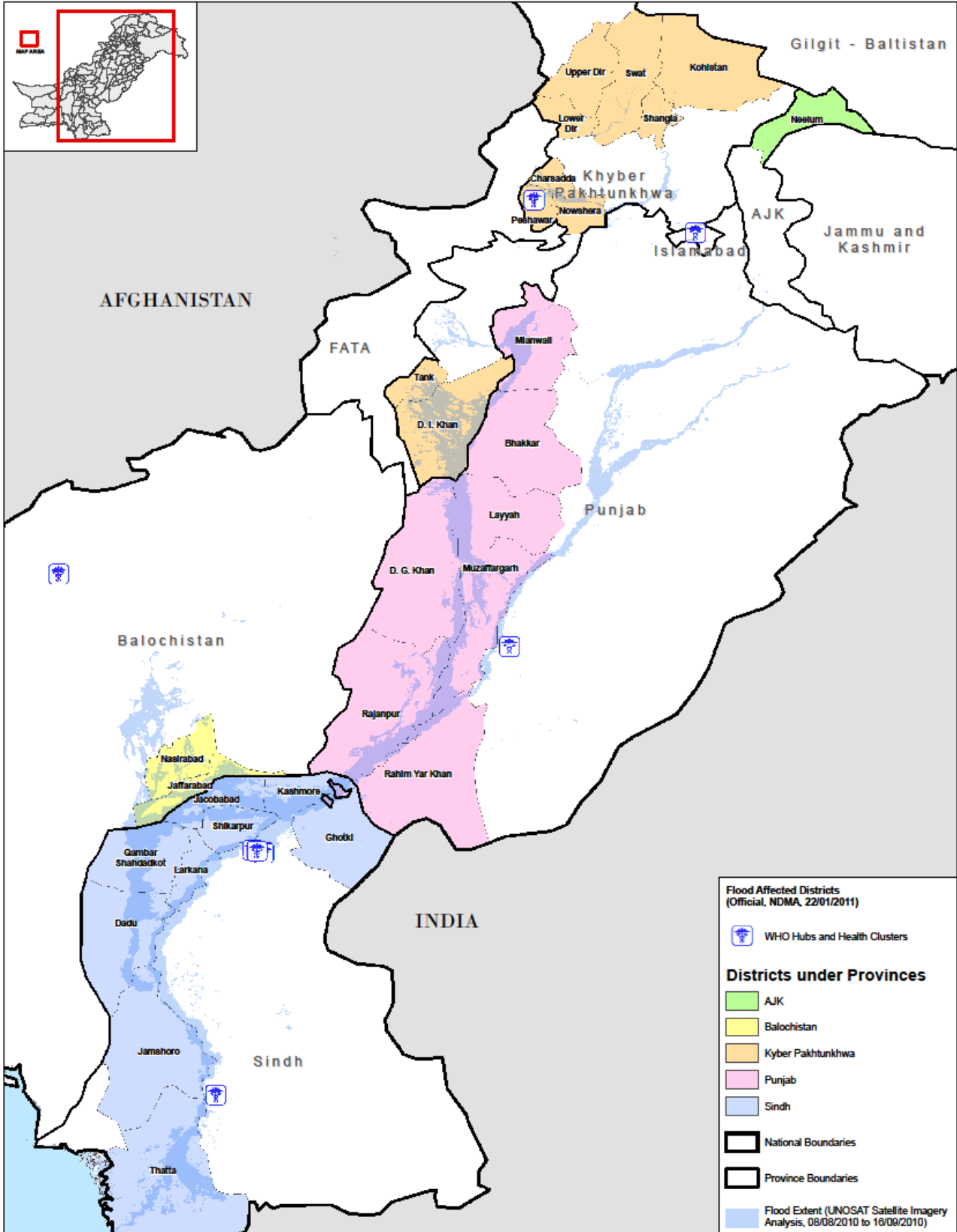
12 February 2011

Health Cluster– Pakistan



Table of Contents

Executive Summary.....	5
Introduction and purpose of this document	10
Impact of the floods.....	12
Determinants of health/health profile	16
Critical health issues	20
Problem statement, goal, specific objectives and expected results of the health recovery plan	25
Comparative advantage of WHO and the Health Cluster partners and main inputs required for the Early Recovery Plan.....	27
Priority actions for six building blocks in the recovery phase.....	29
Gender considerations.....	38
Summary of budget (details of costing in attached file).....	39
Monitoring and evaluation of Early Recovery programme	42
Risk Analysis	47
Annex 1: Summary of health sector reform objectives	49
Annex 2: the six building blocks.....	50
Annex 3: what should the six building blocks look like? (principles and goals).....	50
Annex 4: Effect of floods on progress towards MDGs 4,5 and 6	52
Annex 5: burden of disease, causes of maternal deaths and under five deaths.....	55
Annex 6: human resources, public expenditure spent on health and structure of health care management levels.....	57
Annex 7: Understanding the role of the Government and interaction with the private sector.....	59
Annex 8: Overall generic plan for Disaster Risk Management within the Health sector.....	60
Annex 9: Generic indicators for health services (health cluster guide 2009).....	62



Executive Summary

In July 2010, following abnormally heavy monsoon rains, the Indus River rose above its banks and flooded the surrounding areas. With the rains continuing for a further two months, large areas of Pakistan were affected in various degrees. As of mid August, the heaviest flooding had moved southward along the Indus River from already severely affected Northern districts in Khyber Pakhtunkhwa to densely populated areas of Western Punjab and the Southern province of Sindh.

Urgently needed relief assistance was delivered by a large group of UN agencies, Governmental and non Governmental organisations. Initial scaling up issues involved logistic and security problems in the provinces of Sindh, Baluchistan and Punjab. By December, a large relief operation ensured the provision of basic humanitarian assistance to most affected areas covering the majority of the needs.

The revised Pakistan Floods Emergency Response Plan (launched in September 2010 and appealing for close to two billion US dollars) is about 56 % funded to date (20 Jan 2011).

The aim of this document is to describe the main actions to be undertaken in the health sector from early 2011 on, to facilitate early recovery activities and as a follow up to the emergency interventions currently underway. It will concentrate on what can realistically be done in the first 12 months ⁽¹⁾ but will take on board critical health issues (see further) in Pakistan and priority actions for the global health reform.

The document is meant to be a **health cluster roadmap** for all partners and stakeholders in the health sector to guide the Early Recovery process in the flood affected districts. It outlines the main aspects to be taken into account when Provincial or District Early Recovery plans are designed or implemented as a **cooperative effort between Ministry of Health (provincial and district), UN agencies, international and national partners and private sector**. While it is targeting the most severely flood affected districts in 4 provinces, it can also be applied to other districts such as those affected by conflict in KPK province as long as they enter into the early recovery phase.

The goal of the health recovery plan outlined in this document is to **support the reactivation of the health care system in areas affected by the floods with special emphasis on maximizing access for the returning and resident population to a basic package of quality essential health services**.

The expected results of the health early recovery plan are:

¹ It should be understood that these first 12 months may be seen as a first phase in a longer term multi-annual recovery or development plan of the health system which should take on board the health reform objectives and priority actions.

- Improved access to an essential package of public health services for the affected and returning population with a reasonable degree of contact (above 0.5 New Cases/person/year) between the population in the catchment area and the public health delivery system in each of the priority districts
- The concept of “District Health planning” is promoted and universally applied as the main cornerstone for health planning and management.
- Quality technical assistance is available at provincial and district level (in view of the 18th Constitutional Amendment).
- A well functioning surveillance system (DEWS), guaranteeing early detection of health alerts and timely response
- Improved articulation of the DEWS system with a functioning broader District Health Information System
- A pathway is outlined for a more efficient role and a more effective regulation and registration of the private and public sector in curative as well as preventive services delivery and the role of outsourcing of services is clarified and better regulated and its institutional framework improved.
- Priority actions for the health reform process are taken into account in the early recovery process.

The Health Early Recovery Plan includes **ten priority actions in the areas of Health Information, Leadership and Governance, Health Workforce, Health Financing and Medical Products, Vaccines and Technology, health services**. The 10 priority actions follow the main priority actions for the Pakistan health reform as defined by the Federal Ministry of Health in the **National Health Policy 2010**. In all building blocks, relevant components of the **Disaster Risk Management** will be included (see

<p>Health information</p> <p>Action 1 Ensure that the <u>surveillance for epidemic prone diseases (DEWS)</u> is maintained and expanded in a cost efficient and sustainable way and that rapid investigation and response is following every alert immediately.</p> <p>Action 2 Support the establishment of the <u>District Health Information System (DHIS)</u> replacing the Health Management Information System (HMIS) which was mainly concentrating on the primary health care facilities and the OPD of THQ hospitals.</p>
<p>Leadership and governance</p> <p>Action 3 Apply the concept of “<u>District Health Planning</u>” as the cornerstone for more efficient use of resources and increasing access for the population to the public health delivery system and for meaningful community engagement and participation.</p>

Action 4

Examine in depth how the private – public partnership can be improved and what role the outsourcing of services (privatization of provision of services using still public finances) can play (see annex 7); examine how to involve donors and civil society (provincial, district and union council level) in the overall provincial health management; examine how the different health providers can work together in a more constructive way, what their comparative advantages are and how known weaknesses of the institutional framework can be tackled.

Health workforce

Action 5: in the short term

- Rationalization of which services are to be delivered where and by whom (as defined in the “Essential Package of health services”
- Develop staff retention strategies to retain in particular female health workers:
- Re-examine the role of the Lady Health Workers and their link to the communities and BHU’s (social mobilization, communication for Behavioral Impact, IEC, surveillance)

Action 6: preparing for the long term

- To provide technical assistance to the 4 Provincial Ministries to draft a comprehensive plan for human resources development for the coming decade.

Health financing

Action 7

- In the short term (recovery phase) ensure capital and recurrent costs for restoration and re-equipping/restocking of critical damaged facilities

Action 8: in the longer term

- Advocacy for more adequate budget allocations for health (aiming at a minimum of 4% of GDP by 2017) taking into account the cost estimates for the Essential Package of Health Services

Action 9: in the longer term

- Advocacy for increased external resources (ODA) to support critical aspects of the health sector reform on provincial level and promotion of coordinated approaches and effective use in view of the devolution process
- In the longer term: examine potential of introducing safety nets and social security schemes, partial cost recovery, etc

Medical products, vaccines and technology

Action 10

- Clearly define and cost which medical supplies, drugs, diagnostics and reagents are needed per level of service in the Essential Health Services Package taking into account catchment population and level of utilization
- Promote and supervise (district and province) rational use of drugs, supplies and equipment and better quality of services provided with attention to the development of provincial capacity to manage, re-distribute, maintain and repair more hi-tech assets
- Introduce effective supply management (supply system coupled on performance and epidemiological reports)
- Repair and re-construct physically critical damaged facilities (keeping in mind the safe hospital concept to increase resilience during future disasters)

Health services

All the previous building blocks are brought together to provide a balanced and integrated service package with optimal balance between preventive and curative services, between public and private sector and between vertical and horizontal programmes

Main inputs required for the Early Recovery Plan

In practical terms, the main inputs that will be required for the Early Recovery Plan comprise the following elements:

1. Intensive and engaged support to the health district authorities to re-plan the health district and establish a capacity on the level of the district to supervise the peripheral health facilities (training of supervisors)
2. Technical assistance to the provincial level for developing an improved private-public partnership
3. Technical assistance to train health practitioners in rational use of drugs and medical supplies and better quality of services
4. Technical assistance to establish on the district level a solid drugs and medical supplies management system (rolling out of the LSS = Logistic Support System) and improved management for maintenance and repair of medical equipment (databank)
5. Technical assistance to maintain and consolidate the DEWS (Disease Early Warning System) and ensure the roll out of the DHIS. Link the two systems.
6. Technical assistance to the 4 provincial Ministries to draft a comprehensive plan for human resources development for the coming decade
7. Technical assistance to propose ways for improved private – public partnership and outsourcing of selected services
8. Repair and reconstruction of damaged primary health care facilities
9. Re-equipment of primary health care facilities
10. Drug seed stock for 6 months for rehabilitated health facilities
11. Support and equipment for selected secondary health care facilities

12. Maintenance for the DEWS system and making the link to the DHIS
13. Training and refresher courses
14. Temporary incentives to promote the status and availability of female health workers
15. Support to the Provincial MOH and empower the district health offices

The total cost of this comprehensive Early Recovery Plan is **US \$41.6 million**. This is approximately 2% of the revised humanitarian appeal for the flooding emergency in Pakistan.

Introduction and purpose of this document

In July 2010, following abnormally heavy monsoon rains, the Indus River rose above its banks and flooded the surrounding areas. With the rains continuing for a further two months, large areas of Pakistan were affected in various degrees. As of mid August, the heaviest flooding had moved southward along the Indus River from already severely affected Northern districts in Khyber Pakhtunkhwa to densely populated areas of Western Punjab and the Southern province of Sindh.

Urgently needed relief assistance was delivered by a large group of UN agencies, Governmental and non Governmental organisations. Initial scaling up issues involved logistic and security problems in the provinces of Sindh, Baluchistan and Punjab. By December, a large relief operation ensured the provision of basic humanitarian assistance to most affected areas covering the majority of the needs.

The revised Pakistan Floods Emergency Response Plan (launched in September 2010 and appealing for close to two billion US dollars) is about 56 % funded to date (20 Jan 2011).

The aim of this document is to describe the main actions to be undertaken in the health sector from early 2011 on, to facilitate early recovery activities and as a follow up to the emergency interventions currently underway. It will concentrate on what can realistically be done in the first 12 months (²) but will take on board critical health issues (see further) in Pakistan and priority actions for the global health reform.

The document is meant to be a **health cluster roadmap** for all partners and stakeholders in the health sector to guide the Early Recovery process in the flood affected districts. It outlines the main aspects to be taken into account when Provincial or District Early Recovery plans are designed or implemented as a **cooperative effort between Ministry of Health (provincial and district), UN agencies, international and national partners and private sector**. While it is targeting the most severely flood affected districts in 4 provinces, it can also be applied to other districts such as those affected by conflict in KPK province as long as they enter into the early recovery phase.

There is a great need in Pakistan to embark on a **solid health reform** and the general features of this reform have been identified repeatedly in the past and recently described in the National Health Policy 2010. They are summarised in annex 1. The practical application of these measures have however been delayed so far for different reasons of practical and

² It should be understood that these first 12 months may be seen as a first phase in a longer term multi-annual recovery or development plan of the health system which should take on board the health reform objectives and priority actions.

political nature. This early recovery plan takes these measures into account, while realising that the reform process is a multi-annual endeavour and therefore reaches beyond the scope of this early recovery plan. The analysis and concrete action plan will follow the health system framework with its six building blocks (see annex 2 and 3) which is also used in the National Health policy 2010. Priority actions will be proposed for each building block.

Recovery refers to the process of *'restoration of the capacity of the government and communities to rebuild and recover from crisis and prevent relapses'*. Recovery does not only seek catalyzing sustainable development interventions but also builds upon earlier humanitarian programmes to ensure that their inputs become assets for development ⁽³⁾.

In the recovery phase there will be a need to assure a balance between two strategies (1) *humanitarian actions*, where still needed, aimed at protecting lives and reducing disease, malnutrition and disabilities among the vulnerable populations in the affected areas, and (2) to set the *foundations for the developmental actions* designed to strengthen the institutional capacity to pursue longer term health development goals within a context of good governance, to assure human security and extend social protection in health.

Early recovery includes efforts to be activated in all sectors from the initial phases of relief so that the necessary foundations for fully fledged recovery work are laid. Early recovery continues during the prolonged periods of protracted emergencies and the long transition that follow both the aftermath of natural disasters and the post conflict situations. There is no clear-cut boundary but rather a **contiguum between the relief and the recovery periods**. It is important to emphasize that the disaster-management cycle is an unbroken chain of human actions whose phases overlap.

The early recovery plan has been drafted in consultation with the MOH (Federal and Provincial) and a large number of health partners. UN agencies with a specific health focus (such as UNICEF, UNFPA and UNAIDS) have been particularly involved. The health cluster and its members have been consulted as well as a cross section of medical NGO's and the ICRC. Special attention has also been given to the opinion of the donor organisations with a particular interest in the health sector (USAID, DFID, ECHO, AusAid, Norway, JICA, CIDA, ADB, WB, GTZ/KFW, ...).

The health cluster and WHO want to thank all these health partners for their input and interest in the early recovery process. It only regrets that due to time constraints the consultation process had to be limited. As this is a dynamic document which will have to be adapted to the changing reality over the next months, further suggestions and comments are highly appreciated.

³ Adapted from UNDP (DP/2001/14, Paragraph 48), Health Cluster Guidance Note on Health Recovery, 2008

Impact of the floods

- Excessive Monsoon rains started on 21/22 July leading to flash floods and landslides from late July on. Early August, the worst impact was first concentrated in the North of the country but progressively moved down following the Indus River to affect the South.
 - Estimations of affected population were gradually increasing to reach more than 20 million in September, more than 10 % of the Pakistani population.
 - However, current estimations of directly and indirectly affected population is set at 18 Million (see table below)
 - The latest reports show still 150.000 flood displaced families in need of urgent humanitarian assistance mainly in Sindh and about 350.000 people still residing in camps.
- A total of 1.8 M households are estimated to be destroyed or damaged leading to the erection of thousands of makeshift camps.
- Many dikes, embankments and other infrastructure were destroyed (water channels, link roads, schools, health facilities and rural infrastructure). Access to safe drinking water was highly impeded and together with damage to sanitation infrastructure led to a high incidence of skin infections and water born diseases. Agricultural losses have been reported to be high for a population which is approximately 80% dependant for their livelihood on agriculture (damage to watering canals, loss of harvests and cropland, livestock, fisheries and forestry) ⁽⁴⁾
- A total of 78 districts were affected initially but by early November, the National Disaster Management Authority (NDMA) presented during the launch of their Floods Relief and Early Recovery Response Plan a selection of **29 priority districts**. (see table below). Population figures in these selected districts show the proportionally most affected provinces to be Sindh (approximately 18% of the total provincial population), followed by KPK (15%), Balochistan (9%) and Punjab and AJ&K (each 6%).

WHO's own assessments (via the decentralized hubs in Hyderabad, Sukkur, Multan, Quetta and Peshawar) show a similar geographic distribution of most affected (23) districts as follows:

- **North Sindh:** Jacobabad, Kashmore, Shikarpur, Gotki and Qambar Shahdad Kot
- **South Sindh:** Dadu, Jamshoro and Thatta
- **Balochistan:** Jaffarabad, Nasirabad, Sibi (as potential operations base)
- **KPK:** Nowshera, Charsada, Swat, Kohistan and Shangla
- **Punjab:** Muzaffargarh, DG Khan, Rahim Yar Khan, Layyah, Rajanpur, Bhakkar and Mianwali

The above list is indicative only and will be adapted after further analysis of the HeRAMS (see further) results. The budget is calculated based on this list of 23 most affected districts in 4 provinces.

⁴ Adapted from Pakistan revised floods emergency response plan (September 2010)

Province	Selected 29 priority districts (Nov - NDMA)	Official population figures from census 2010	Total population in selected affected districts in each province	Estimated population affected in province (1 Nov)	Percent affected over total population in the province
Punjab		99.440.760	15.874.470	6.000.000	6
	Muzzafargarh		3560329		
	Rajanpur		1490665		
	Mianwali		1427181		
	R. Y. Khan		4242641		
	Layyah		1514073		
	D.G. Khan		2219373		
	Bhakkar		1420208		
Sindh		40.220.547	10.577.924	7.274.250	18
	Kashmore		*		
	Shikarpur		1163329		
	Jacobabad		1883623		
	Larkana		2546257		
	Shahdad Kot		*		
	Thatta		1470875		
	Dadu		2231448		
	Jamshoro		*		
	Ghotki		1282392		
KPK		24.721.365	11.805.084	3.800.000	15
	Tank		331893		
	D.I. Khan		1188432		
	Kohistan		658415		
	Peshawar		2823914		
	Charsada		1424408		
	Nowshera		1218222		
	Dir Lower		999864		
	Dir Upper		802317		
	Shangla		605464		
	Swat		1752155		
Balochistan		7.513.735	776.697	700.000	9
	Naseerabad		281396		
	Jaffarabad		495301		
AJ&K		3.165.110		200.000	6
	Neelum		*		

*Note: Districts of Shahdad-Kot, Kashmore and Jamshoro in Sindh and Neelum in AJ&K are new districts since the census and their population is included in other districts in the province.

- The overall recovery and reconstruction cost associated with the floods is estimated at approximately U\$ 8.74 to 10.85 billion, which includes estimated costs for relief, early recovery, and medium- to long-term reconstruction (Damage Needs Assessment DNA final report November).

Pakistan flood losses (as of 1 Nov 2010) – source NDMA, PDMAs, GBDMA

Province	Deaths	Injured	Houses Damaged	Population Affected
Balochistan	54	104	75,596	700,000
Khyber Pakhtunkhwa	1,156	1,198	284,990	3,800,000
Punjab	110	262	497,700	6,000,000
Sindh	410	1,235	876,249	7,274,250
AJ&K	71	87	7,106	200,000
Gilgit Baltistan	183	60	2,830	100,000
Total	1,984	2,946	1,744,471	18,074,250

Note: The degree of severity to which people have been affected by the floods varies depending on their particular losses and damages. UN assessments have been launched in at least three provinces to identify severely affected families who require life-saving humanitarian assistance. The UN experts have identified 2.7 million people in Khyber Pakhtunkhwa, 5.3 million in Punjab and over 6 million in Sindh that are affected. (OCHA)

Damage in the health sector infrastructure (DNA and preliminary results from the HeRAMS assessment)

- According to the DNA, out of 9,721 health facilities across the country, a total of 515 (5.3 %) have been partially damaged or completely destroyed, the largest number being BHUs.
- Compared to other sectors (e.g. shelter and agriculture) the floods resulted in **mild to moderate damage** to the country's public health infrastructure, including basic health units and dispensaries, which suffered the most damage. However, most of the secondary health care facilities were unaffected (with exceptions in each province) (DNA report November 2010). Many damaged or destroyed BHUs and RHCs (and some hospitals) lost the bulk of their equipment and furniture.
- The **total damage** to the public health facilities has been estimated at M U\$ **18.37 (not including indirect losses)**. This estimate takes into account a depreciation factor of **50% of the replacement cost** (see below) based on the assumption that the affected health facilities were generally older than fifteen years.
- **The reconstruction cost for the fully and partially damaged health facilities have been estimated at approximately M U\$ 36.7** (taking into account depreciation). This

estimation should be carefully used because, as of today, many facilities have already been partially rehabilitated by governmental or non governmental entities or are already integrated in different action plans. Further detailed verification of individual health facilities is currently under way.

- In the **two worst affected provinces, KP and Sindh, about 11 % of total health facilities in the affected districts were damaged or destroyed, followed by 8 % in FATA and AJ&K at 6%** (both however with less than 40 facilities damaged). Damage to health facilities in the rest of the country's floods-affected areas total approximately 2 % (or less) of the total available.
- Preliminary results of the recently carried out HeRAMS ⁽⁵⁾ survey (assessing individual primary health care facilities for services delivered, functionality, damage, etc) show slightly different results but similar trends with highest level of damage in Sindh and KPK. Below are the estimations from the Damage Needs Assessment, which are not always corresponding entirely with other sources of information.

Damage Needs Assessment - health facilities damage estimation

Table-Annex-7.2: Health - Overview of Damaged Health Facilities

Province/Region	Total health facilities of all categories	Number of damaged health facilities			Affected facilities as % of province total
		Completely damaged	Partially damaged	Total	
Azad J. Kashmir	616	6	33	39	6.3
Balochistan	2,075	26	19	45	2.10
FATA	364	0	30	30	8.24
Gilgit-Baltistan	731	2	1	3	0.41
Khyber Pakhtunkhwa	1,739	40	150	190	10.9
Punjab	2,891	9	48	57	2
Sindh	1,305	103	48	151	11.65
Pakistan	9,721	186	329	515	5.29

Impact on health

⁵ Health Resources Availability Mapping System: The standard Health Cluster tool that should be used as soon as possible and throughout the duration of a crisis for the collection, collation and analysis of health sector information for each facility, mobile clinic or site with community-based interventions in order to monitor the availability of resources. These are: key characteristics of the points of delivery (urban/rural area, IDP/refugee camp) and of the facilities (functioning/non functioning, temporary/permanent, active health partner(s), management, other), number of staff (by type) and availability of services as per the list of 62 services. See: http://www.iawg.net/resources/Graph_RAMMS_5aug09.pdf

- Direct health effects:
 - 1984 fatal casualties (mostly in KPK and Sindh)
 - 2946 injured (mostly in Sindh and KPK)
- Indirect effects on service delivery and the health system
 - Interruption of health provision due to damaged facilities and displacement of health work force: out of 2957 facilities in affected area, 515 (17%) facilities are damaged. According to preliminary results from HeRAMS, approximately 75% of facilities are functional, 25% are partially or not functioning at all.
 - Increased burden on the secondary health facilities which are often used now as first contact facility due to the proportional greater damage and disruption of the primary health care facilities (BHUs in particular).
 - Increased burden of disease and mortality : in particular due to Communicable diseases, some of them vaccine preventable, some caused by disrupted clean water supply...(391 alerts via DEWS up to 12/12/10): e.g. Cholera, Malaria, Dengue, Measles, Diphtheria, Polio, CCHF
 - Displacement and resettlement (approximately 10% of the total population at the peak of the crisis) has a negative effect on the health conditions of concerned population. Displaced people are cut off from their normal habitat and their normal health seeking behavior is disrupted.
 - Information systems were interrupted
 - Limitations on access to some areas due to logistic or security constraints
 - Disrupted management of chronic diseases
 - Increased levels of mental stress
 - Decreased access to food resources with malnutrition and food insecurity
 - Effect on the progress towards health related MDG 4,5 and 6 ⁽⁶⁾ (see annex 4)

Determinants of health/health profile

See annex 5

The overall health in Pakistan has improved since 1990 albeit much slower than in neighbouring countries. The average life expectancy at birth, which was 34 years in 1951 and 59 years in 1990, has increased to 65 years in 2005; and without gender disparity. The current maternal mortality ratio is 276 per 100,000 live births down by half over the past decade. Skilled birth attendance (SBA) has improved from 18% in late 1990s' to 38% in 2006 as have institutional deliveries to 34%. ⁽⁷⁾

⁶ See for further details the full FIMA report: The Human Cost Impact of floods in Pakistan: a framework for the recovery of human development (October 2010)

⁷ Adapted from the National Health Policy 2010, Ministry of Health (document not yet endorsed however)

While the health of the population in Pakistan progressed in a positive direction over the past decades, the level of improvement has been unsatisfactory and many challenges remain, including the divide in health outcomes between rich and poor, between different provinces and districts and between rural and urban areas. Contributing factors include poverty, gender inequality, low levels of literacy and lack of public service facilities such as proper sanitation and water, food safety regulations and environmental health action ⁽⁸⁾. Pakistan's under-five mortality is the highest in South Asia, except Afghanistan. Although a decrease happened from 150 in the 50s to 94/1000 live births, this decrease is however not matched by a decrease in neonatal mortality, which constitutes more than half of the infant mortality.

Nearly 11,000 women and girls die annually while giving birth – among the highest rates in the region. Malnutrition remains widespread and outcomes have not changed significantly over the last two decades. All of these are rendered worse by an increasing population. Pakistan's population growth rate has declined from 3% per annum in the late 1980's to the present estimated level of 1.9% per annum. However, it remains high enough that Pakistan, which is now the sixth most populous country, with a population of over 170 million people, is projected to have a population of 210 million by 2025. Unless effectively stabilized, this population growth is likely to further constrain already scarce resources, infrastructure, and social services, and the recent shortages of water, energy and food will only worsen. ⁽⁹⁾

Moreover, there are important weaknesses in the service delivery system such as insufficient focus on prevention, gender imbalance, weak human resources management and planning and insufficient funds.

Health determinants/health profile	
Demographic transition	<ul style="list-style-type: none"> • High number of youth, 37% < 15 year • Females of child bearing age as particularly vulnerable group
Poor maternal and child health profile	<ul style="list-style-type: none"> • High maternal mortality ratio (276/100,000 live births), low antenatal care coverage, frequent complications of pregnancy and child birth, low FP coverage: Haemorrhages and sepsis are the major causes for maternal deaths. 61% of pregnant women receive antenatal care from a skilled provider. Globally 62% of deliveries take place at home. Only 39% of deliveries are assisted by skilled health personnel (mostly in private setup). Only 27% of women who give birth receive postnatal care. Complications of pregnancy and childbirth emerge as the outstanding cause of death in the reproductive years, accounting for 20%. Although most women in Pakistan know about at least one method of family planning, overall current use of family planning is only 30%. ⁽¹⁰⁾

⁸ Including provision of clean water, sanitation, hygiene improvement and waste management

⁹ Adapted from "National Health Policy 2010" draft 2010, Ministry of Health

¹⁰ A.F. Shadoul, F. Akhtar and K.M. Bile, EMHJ, Volume 16, 2010

- **High under five, infant and neonatal mortality (94, 78 and 54/1000 live births resp.):** sepsis, pneumonia, diarrhea, meningitis and prematurity are the main causes for under five and neonatal deaths
- **Low exclusive breast feeding rate** under 6 months (37% of children) ⁽¹¹⁾
- **Low vaccination coverage:** PDHS 2006/7, shows that according to mothers' recall and the vaccination records 80% of children aged 12-23 months have received a BCG vaccination, 75% have received the first dose of DPT, and 93% have received the first dose of polio vaccine. However only 59 % and 83 % of children received the third doses of DPT and polio respectively, with drop rates between the first and third doses of DPT of 22 % and that of polio of 11 %. On the other hand 60 % of children aged 12-23 months have received measles vaccination.

Double burden of disease (beginning of the epidemiological transition)

Pakistan's epidemiological profile is dominated by a burden of communicable diseases that could be prevented and treated at a reasonable cost: ARI, Diarrhoea, polio, TBC, Hepatitis B and C, measles, vector borne diseases such as Malaria, Leishmaniasis, Dengue and Crimean-Congo Hemorrhagic Fever (CCHF) have been reported in many areas (Punjab, Baluchistan, Sindh, K.P.K and FATA) ⁽¹²⁾.

Malaria is endemic in Pakistan (both *P. Falciparum* and *Vivax* occur). It ranks the second most frequently suspected disease following ARIs. Baluchistan, Sindh, KPK and FATA hold the highest burden. ⁽¹³⁾ The prevalence of malaria is higher in rural areas. The use of long lasting treated mosquito nets is very low with only 6 % of households having a net ⁽¹⁴⁾. The mortality related to malaria is unknown in the country.

Pakistan is one of the 4 remaining countries with endemic polio and TBC remains one of the major health problems in Pakistan. Although Sub-Saharan Africa has the highest rate of TBC, Pakistan is among five countries that constitutes 50% of the global TBC burden. The estimated 297,000 cases of TBC in 2008, is likely an underestimate of the real incidence.⁽¹⁵⁾

Pakistan is the second country (after India) in South East Asia that is progressing towards a concentrated HIV/AIDS epidemic stage amongst

¹¹ Demographic and Health survey 2006-07

¹² H.R. Rathor, A.Mnfaza, K.MBile, A.Hafeez and S.Zamana, EMJH, //vol.16 supplement 2010

¹³ Q. Kakar, M.A.Khan & K.M. Bile, Malaria control in Pakistan: new tools at hand and challenging epidemiological realities, EMJH, //vol.16 supplement 2010

¹⁴ PDHS 2006/7

¹⁵ P. Metzger, N.A. Baloch, G.N.Kazi & K.M.Bile "Tuberculosis in Pakistan: reviewing a decade of success and challenges, EMJH, //vol.16 supplement 2010

	<p>groups like Injecting Drug Users (IDU's) and Male Sex Workers (MSWs) (prevalence above 5% in high risk groups) (¹⁶).</p> <p>The existence of a solid disease surveillance and rapid response system (such as DEWS) for epidemic prone diseases and monitoring of the endemic diseases is crucial. (¹⁷)</p> <p>Non- communicable diseases (NCDs) such as cardiovascular problems, diabetes, cancer and mental disorders are also rising. More than 24.3% of people above 18 year have high blood pressure, 25% of people over 40 years have coronary heart diseases, 10% of adults suffer diabetes and 34% suffer from depressive disorders, while 2.5% are labelled as disabled (¹⁸). Pakistan has a high prevalence of blindness of 0.9% (1 out of 100 people is blind by WHO criteria for visual impairment – mainly cataract). Disability from blindness profoundly effects poverty, education and quality of life (¹⁹).</p>
<p>Access to safe water and sanitation</p>	<p>Water and sanitation is one of the major determinants of communicable diseases. In urban areas 66% of households have an improved source for drinking water. On the other hand, only 24 % of rural households have access to piped water. The major source of improved drinking water in rural areas is a tube well, borehole, or hand pump. Even in major cities, only 37 % of the households treat drinking water appropriately. Thirty percent (30%) of Pakistani households do not have any toilet facility. This is considerably higher among rural households (43 %) than urban households (4 %). (²⁰)</p>
<p>Nutritional status</p>	<p>Prior to the floods child malnutrition rates have been significantly high, with the last (pre-flood) national nutrition survey indicating 13% prevalence of acute malnutrition. The Multiple Indicators Cluster Survey (MICS 2007) completed in Federally Administered Tribal Areas (FATA) in 2007 also documented acute malnutrition of 13%, with severe acute malnutrition rate of 7%. The exclusive breastfeeding rate was 39%.</p> <p>The most recent preliminary figures obtained during the FANS (Flood Affected Nutritional Survey - 29 Oct to 4 Nov 2010) show an increase in malnutrition rates as follows:</p> <ul style="list-style-type: none"> • North Sindh: GAM = 23.1% and SAM = 6.1% (WHO reference criteria) and GAM = 21% and SAM = 2.1% (NCHS reference criteria) • South Sindh: GAM = 21.2% and SAM = 2.9% (WHO reference criteria) and GAM = 20.4% and SAM = 1.3% (NCHS reference criteria) <p>The emergency situation had serious implications on the nutritional status of</p>

¹⁶ WHO Pakistan biennial report 2008

¹⁷ DEWS was introduced following the earthquake crisis of 2005 to timely predict and promptly control outbreaks. It was further strengthened during the subsequent floods and IDPs crisis. DEWS technology is decentralized to be part of the districts health system as a sustainable diseases surveillance system.

¹⁸ Health indicators of Pakistan, heartfile, WHO and MOH, 2005

¹⁹ National health policy, 2010

²⁰ PDHS 2006/7

	the children under five years, pregnant and lactating women due to the contaminated water, poor sanitation/hygiene, interruption in caring practices and limited food availability and diversity at household level. One-fifth of newborns are of low birth weight and 38% of under-five children are underweight.
Socio-economic variation	According to PDHS 2006/7, the distribution by wealth quintile varies significantly by urban and rural residence. 46% of the population in urban areas is in the highest wealth quintile in contrast to only 7 % of the rural population. While more than a quarter (29 %) of the rural population fall in the lowest quintile, only 3% of the urban population falls in the lowest quintile. The wealth quintile distribution by province shows large variation, with a relatively higher percentage of the population in Sindh and Punjab provinces being in the higher wealth quintiles and a higher percentage of the population in Baluchistan falling in the lower wealth quintiles.
Other health determinants	Illiteracy, unemployment, gender inequality, social exclusion, rapid urbanization, environmental degradation, natural disasters

Critical health issues

See annex 6

Critical health issues	
Low health expenditures and low investment in the health sector; low focus on prevention; main expenditures for salaries	<p>Of the total 18 U\$ per capita spent on health (recommended is 34 to 50 U\$ per capita in developing countries):</p> <ul style="list-style-type: none"> • 6U\$/capita (< 1% of GNP) public expenditures: compared with % of GDP Iran (7.9%), Sri Lanka (4.8%), Thailand (7.4%), Philippines (4.2%), Bangladesh (4.8%) and Nepal (4.7%) ⁽²¹⁾ • Relatively low external (ODA) contribution (1 U\$/capita) mainly on vertical programmes • High reliance on Out of Pocket expenditures (approximately 11 U\$), burdening relatively more the most vulnerable and the poorest and leading to catastrophic health spending; the poor are using relatively more the public sector than the private sector • Over 80% of health spending is on curative health with only 16% on preventative services • A large proportion (80%) of the first level care facilities budget is allocated for salaries and operational costs, while the allowance for medicines does not exceed 6%. ⁽²²⁾

²¹ PC-1, National Maternal Newborn and Child Health (MNCH) program, 2006-2011, Ministry of Health, March 2006

<p>Low utilization rates in public system and inadequate institutional frameworks for outsourcing of services</p>	<ul style="list-style-type: none"> • Only 0.12 to 0.2 New cases/person/year in public system • Only 20 to 30% of primary health care delivered by public system <p>This utilization rate was increased to 1 to 1.5 NC/pers/yr during the flood emergency when heavy external investment and increased burden of disease.</p> <p>Insufficient contact with the catchment population (e.g. measured by a utilization rate of the public system below 0.5 NC/pers/year) would indicate that there is no credibility and faith in the public system due to e.g. absenteeism or unprofessional behavior of medical personnel, lack of drugs or medical supplies, poor medical practice, lack of female health workers, etc</p> <p>The outsourcing of the primary health care services by the provincial and district health authorities to semi public systems like the People’s Primary Health Care Initiative (PPHI) (see box below and annex 7) or the PRSP (Punjab Rural Support Programme), is an appealing and at the same time contentious design. On the one hand, services through PPHI seem to be delivered in a more consistent way leading to a doubling of the utilization rates. On the other hand, the institutional framework with the district and provincial health authorities is insufficiently developed ⁽²³⁾ with lack of adequate regulation and supervision from health authorities on federal and provincial/district level.</p>
<p>Heavy reliance on private sector and insufficient regulation and certification systems</p>	<p>The commercial private for profit sector is currently covering the bulk of primary curative health services but because of higher fees is less accessible for the poorest part of the population. There is however a lack of regulation and certification of this sector and no supervision from a regulatory body on provincial or district level. Public servants often partially work both as public and private health practitioner and confound their two jobs and the resources that come with it.</p>
<p>Inequity in allocation of resources</p>	<p>Between rural and urban settings (majority of medical doctors are found in cities)</p> <p>Between provinces (e.g. yearly unit costs of a BHU and RHC vary between provinces, ranging from U\$ 23.000 to U\$ 65.000 with RHCs allocations being 1.7. to 2.7 times higher than the budget allocated for basic health units) ⁽²⁴⁾</p> <p>Between gender</p> <p>Between socio economic classes</p>
<p>Health referral pyramid not respected</p>	<p>RHC and hospitals are often used as first contact health facility, which leads to duplication of services provided and wastage of resources. Health personnel is often assigned to facilities where they are less needed (e.g. MDs on BHU level), task descriptions are often disrespected.</p>

²² *Implementing the district health system in the framework of primary health care in Pakistan: can the evolving reforms enhance the pace towards the Millennium Development Goals?*, F. Sabih, K.M. Bile, W. Buehler, A. Hafeez, S. Nishtar and S.Siddiq, EMHJ, vol 16 supplement 2010

²³ Although there is an MOU signed with the Provincial MOH and a contractual agreement with the district, there is insufficient supervisory or regulatory function executed by these authorities.

²⁴ *Implementing the district health system in the framework of primary health care in Pakistan: can the evolving reforms enhance the pace towards the Millennium Development Goals?*, F. Sabih, K.M. Bile, W. Buehler, A. Hafeez, S. Nishtar and S.Siddiq, EMHJ, vol 16 supplement 2010

	<p>Referral pathways from the primary to the secondary level are often not well defined and mostly disrespected and logistic means to execute them are ill-equipped.</p>
<p>Insufficient health district mapping and planning</p>	<p>The concept of “health district planning” is not universally applied, although plans exist in many districts. Choosing the district as the basic unit where the detailed planning is happening, would promote careful and efficient use of resources, avoidance of wastage and duplication of service delivery and more accurate identification of the specific health problems in the district, the deficiencies in health services and the particular health problems the communities have to face. It would also open the door for more meaningful engagement and participation of the communities in the district planning.</p>
<p>Inadequately planned human resources for health</p>	<p>The human resources available in the different health facilities is skewed in the direction of too many doctors and a relative shortage of nurses and paramedicals.</p> <p>The health care provider ratio stands at 1 doctor/1300 patients and 1 nurse/4600 patients ⁽²⁵⁾ (= ratio of MD/nurses of 3.5/1)</p> <p>MDs are often assigned on BHU level where they are not always needed and often underutilized. MDs prefer to be in urban areas where the opportunities for private practice are higher.</p> <p>On the other hand, the number of paramedical and nursing personnel and cleaners, dispensers etc is seriously disproportionate to the heavy work load in hospitals and RHCs, leading to insufficient nursing care and untidy secondary health care facilities.</p> <p>There is also a lack of female MDs, qualified midwives and lady health visitors.</p> <p>TORs of staff are often disrespected. Absenteeism of key staff undermines the credibility of the health facility and blurring of the lines between the private for profit and the public health sector often leads to confusion and a potential for abuse of resources. There is low accountability for performance and duty of care (to the government and to the people) and for efficient and appropriate use of funds for provision of services. ⁽²⁶⁾ Certification of health staff according to standardized TORs and competencies is weak and should be reinforced.</p> <p>There is also a lack of professional training, supervision and development opportunities for medical and in particular para-medical personnel in peripheral areas for the provision of medical care at the primary health facilities.</p> <p>Curricula for health professionals at the medical, para-medical and nursing colleges are outdated and need to be adapted.</p>
<p>Transfer of critical responsibilities from federal to provincial level (see slide further)</p>	<p>While health in Pakistan is already a provincial subject, whereby all decisions related to implementation, management and administration are carried out by the provincial departments of health; the 18th Constitutional Amendment is expected to transfer additional responsibilities from the Federal to the Provincial level.</p>

²⁵ Government of Pakistan 2007, Pakistan economic survey 2006-07

²⁶ Khyber Pakhtunkhwa health sector strategy (draft) 2010-2017 – November 2010

The MOH's role is policy development, coordination and technical assistance, monitoring, evaluation and research, collaboration with international agencies and provision of services through Federal health institutions and National Health regulations.

Provincial DoH role is more in translating policy into planning, intra-provincial coordination, monitoring and evaluation of policy implementation, medical and nursing education and tertiary care service delivery, oversee primary and secondary health services.

District DoH's role is related to provision of primary and secondary health services, monitoring and supervision, and implementation of National Priority Programs at the district level, Public health programmes. ⁽²⁷⁾

What exactly the further **devolution** in the framework of the 18th amendment will entail is not yet clear however. Provincial and district health authorities will likely be empowered with additional responsibilities and may be in need of additional technical assistance.

Note on PPHI: ⁽²⁸⁾

To improve the quality of service provision in rural settings, the federal and provincial governments opted to outsource a large number of basic health units on a nationwide basis to a nongovernmental organization, the People's Primary Healthcare Initiative (PPHI), introducing substantive changes in the management of these facilities. The scheme was initially launched in 2006 under the government's new initiative sponsored by the Ministry of Industries and Special Initiatives and currently coordinated by the Cabinet Division of the Federal Government. PPHI, a subsidiary of the provincial rural support programmes, in agreement with the federal and provincial government, negotiates contracts with the district authorities for management of basic health units and their service delivery. The provincial health departments transfer all the yearly budgeted funds for these facilities to PPHI, which are managed independently by federal, provincial and district PPHI support units. Medical officers in the basic health units under PPHI are given contracts with a higher salary package and mobility incentives. Currently, the provision of basic curative care remains the main focus of PPHI-managed basic health units; with community support activities recently taken up through social organizers and support groups.

The managerial outsourcing of a large number of basic health units to PPHI was intended to improve the performance and outcomes of this critical level of the district health system. PPHI has shown an immediate enhancement of attendance and use of basic health units which could be attributed to improvement in availability of medicines and waiver of user charges. PPHI is addressing the previous weakness in its model, with curative services being the exclusive focus, and is now working towards making its BHU hubs for delivery of comprehensive primary health care

²⁷ Adapted from: PC-1, National Maternal Newborn and Child Health (MNCH) Program 2006 – 2011, Ministry of Health

²⁸ From: *Implementing the district health system in the framework of primary health care in Pakistan: can the evolving reforms enhance the pace towards the Millennium Development Goals?*, F. Sabih, K.M. Bile, W. Buehler, A. Hafeez, S. Nishtar and S.Siddiq, EMHJ, vol 16 supplement 2010

services to the community. **In future, in order to improve the coordination and quality of outsourcing, transparent and merits-based contractual bidding and selection procedures must be designed, while the interface between the contractual partner and the district health team must allow for a formal performance oversight, accountability, greater community participation and inter-sectoral action. (29)**

²⁹ DFID is currently financing an external evaluation on the PPHI. Results are expected soon.

Problem statement, goal, specific objectives and expected results of the health recovery plan

In the longer term, this plan will take into account the main priority actions for the global health reform as defined by the Federal Ministry of Health in the National Health Policy 2010 (see annex 1). This recovery plan, once adopted will have to be adapted for each provincial context resulting in 4 Provincial Health Strategies (serving as guideline for the provincial health reform).

Problem statement:

The flooding has disrupted the health delivery system in parts of the 4 provinces in Pakistan, affecting directly or indirectly 18 Million people. The damaging effect on the health sector varies from district to district but involves in all affected districts physical damage to the infrastructure, interruption of health delivery systems due to spoiled medical equipment and drug stocks and displaced health staff (which were temporarily partially replaced by external assistance), increased burden of disease (sometimes epidemic prone diseases), disrupted information systems and limitations on access due to logistic and security constraints.

Now that the majority of the flood-displaced people have returned to their places of origin, the health system has to be restored and health care delivery optimized. This should be done as much as possible in this short timeframe of 12 months in line with the priority actions of the longer term health reform. **Disaster Risk Management** components must be included to prepare for and mitigate the next natural disaster as much as possible.

Overall goal:

The overall goal of this early recovery plan is to support the reactivation of the health care system in areas affected by the floods with special emphasis on maximizing access for the returning and resident population to a basic package of quality essential health services

Specific objectives

- To upgrade in the most affected districts the health services delivery system and its credibility to the population by ensuring universal and equitable

Expected results

- A reasonable degree of contact between the population in the catchment area in each of the priority districts and the public health delivery system is maintained (defined by the utilization rates kept at a minimum of 0.5 NC/person/year) ⁽³⁰⁾

³⁰ Aiming at 0.5 NC/person/year would be a good target for the early recovery plan (1st 12 months). As provinces are preparing the health sector strategy for the period 2010 to 2017) this target may be progressively increased over the coming 7 years to reach e.g. 0.8 – 1 NC in 2017. In practice, the utilization rates will differ between provinces and districts and disaggregated data will be needed to follow up. Also other

<p>access to basic health services</p>	<ul style="list-style-type: none"> – Guaranteeing access in particular for the returning population (in addition to the resident population) by offering an <u>essential package of health services</u> (as defined recently by the Ministry of Health in “An Essential Package of Health Services for Pakistan 2010”) – Increased contact between the catchment population and the health system would help to detect health alerts at an earlier stage (surveillance system)
<ul style="list-style-type: none"> • To anchor the restoration of the health delivery system in a robust planning exercise which takes into account available health facilities, the health challenges of the catchment population, the available resources and the need to involve the communities 	<ul style="list-style-type: none"> • <u>The concept of “District Health planning” is promoted and universally applied as the main cornerstone for health planning</u> and efficient use of resources, for health data collection, collation and analysis (including the provincial supervisory function), the involvement and participation of the communities ⁽³¹⁾ and relevant components of DRM.
<ul style="list-style-type: none"> • To support the health authorities on Provincial and District level through a meaningful and effective capacity building against the background of the devolution process and the transfer of tasks and responsibilities to the Provincial and District level 	<ul style="list-style-type: none"> • <u>Quality technical assistance is provided to the provincial and district level</u> to be better prepared for the supervisory and policy development role and additional responsibilities they will be entrusted with from mid 2011. This technical assistance would also help to give concrete impetus to the health district planning process.
<ul style="list-style-type: none"> • To avoid the emergence of any epidemic prone diseases through intensive surveillance, rapid detection and response and to examine the longer term optimal position and sustainable role of the DEWS system in the 	<ul style="list-style-type: none"> • The <u>DEWS system is maintained and consolidated</u> as an early warning surveillance system but its progressive smooth <u>articulation with the broader District Health Information System</u> is promoted, designed and pursued. ⁽³²⁾

coverage indicators will have to be monitored such as the origin of the patients and the proportion of returning patients compared to overall patients (new and returning).

³¹ The concept of “**District Health planning**” has proven its value in many other countries and has also been proposed several times in the past as a pillar of the health reform in Pakistan.

³² While the preparatory work for the DHIS is accomplished (financed by JICA) its use has to be scaled up and the new system is yet to be applied in most districts. Also for this rolling out of the DHIS, technical assistance from WHO could be provided.

overall Health Information System in the country

- To improve the cooperation with and the regulation of the private sector health care providers and to explore the potential of outsourcing of specific services to semi public organizations
 - A pathway is outlined for a more efficient role and a more effective regulation/registration/certification of the private and public sector in curative as well as preventive services delivery (public-private partnership) and the role of outsourcing of selected services to semi public entities such as PPHI or PRSP is clarified and its regulation, supervision and institutional framework is improved.
 - To plan and implement this Early Recovery plan with a longer term perspective and therefore bring on board the priority actions as defined in the longer term health reform process
 - The priority actions to be undertaken in the context of the health reform process are taken into account in the early recovery process (to the extent possible in view of the timeframe).
-

Comparative advantage of WHO and the Health Cluster partners and main inputs required for the Early Recovery Plan

(1st 12 months)

While the main task during the immediate emergency period (first 6 months) was **life saving and emergency relief** with a degree of substitution, the early recovery period will have to rely on an intensive and realistically planned **capacity building on the provincial and district level**. This will have to be carried out by WHO as well as by the health cluster partners (with slightly different roles in view of their respective strengths as described below).

WHO and the health cluster partners have started already in the emergency phase to work closely with the health authorities on federal, provincial and district level. Health authorities on provincial and district level have been fully involved in the health cluster activities and therefore the capacity building and transition has already its foundation.

During the transition/early recovery phase, WHO and the health cluster partners should carefully weigh where their **comparative advantages** and strengths lay and should both further develop a constructive cooperation with the MOH. The traditional well developed capacity of WHO in providing **technical assistance and planning of health services**, should now be fully exploited. **Direct health service provision** should now be left as much as possible to the MOH and the longer term medical NGOs.

In designing the plan it would be counter-productive to try to aim too high. The health delivery system in the disaster area suffered from major structural and systemic deficiencies and it will not be easier to solve these now, compared to the pre-floods period.

A realistic planning of how best the health system can be re-launched in a sustainable way, taking into account realistic estimations of available financial and human resources will be the cornerstone of a successful recovery. The health authorities should decide to which extent they are ready to build a better system than what they had before and should get support to achieve this from longer term medical NGO's.

This will require a progressive **down scaling of the hands-on approach on a permanent basis in the hubs on the district level and would shift the WHO involvement in the direction of short (or medium) term but intensive capacity building and technical assistance on different levels (provincial and district). Medical NGO's should be encouraged to provide essential support for the implementation of the different recovery activities and capacity building on district level.**

In practical terms, the framework for continued technical assistance in the health sector should contain the following elements:

- Intensive and engaged support to the health district authorities to re-plan the health district and establish a capacity on the level of the district to supervise the peripheral health facilities (training of supervisors)
- Technical assistance to the provincial level for developing an improved private-public partnership
- Technical assistance to train health practitioners in rational use of drugs and medical supplies
- Technical assistance to establish on the district level a solid drugs and medical supplies management system (rolling out of the LSS = Logistic Support System) and improved management for maintenance and repair of medical equipment (databank)
- Technical assistance to maintain and consolidate the DEWS (Disease Early Warning System) and ensure the roll out of the DHIS. Link the two systems.
- Training of water supply service providers on water quality improvements and on water quality monitoring testing techniques
- Technical assistance to the 4 provincial Ministries to draft a comprehensive plan for human resources development for the coming decade
- Technical assistance to propose ways for improved private – public partnership and outsourcing of selected services

Regular consultations and workshops/refresher courses bringing together short and long term consultants with the health practitioners and authorities (provincial and districts) should streamline the effort and monitor progress.

Priority actions for six building blocks in the recovery phase

(Taking into account the longer term perspective in the context of the health system reform as described in the National Health Policy 2010)

Health information

Action 1

Ensure that the surveillance for epidemic prone diseases (DEWS) is maintained and expanded in a cost efficient and sustainable way and that rapid investigation and response is following immediately after every alert.

How?

- Technical assistance task on provincial/district level during a minimum of one year:
 - Revision of the TOR of the DEWS surveillance officers
 - Continuation of the DEWS system with close follow up of the surveillance officers in priority districts and further refresher courses in view of revision of the TORs, capacity building and empowerment of surveillance counterparts on district level
 - Emphasis on emergency preparedness and surveillance/EWS and on data which are required for better planning of the district
 - Designing the link between the DEWS and the DHIS and the district health planning

Action 2

Support the establishment of the District Health Information System (DHIS) replacing the Health Management Information System (HMIS) which was mainly concentrating on the primary health care facilities and the OPD of THQ hospitals.

- Agreement between health authorities on provincial and federal level on common approaches and supporting the roll out in the provinces (DHIS is the

agreed model and the methodology is developed but in depth application is still to be improved) (³³)

- Capacity for the use of the DHIS needs to be built on the district and provincial level
- Special emphasis on collation and analysis of data and linking these with health district planning and policy development on provincial level
- Functional linkages and data flow mechanisms between all levels (facilities, district, province and federal)
- Integration of vertical programmes and vertical health survey information
- Linking the surveillance system as a complement to the DHIS
- Explore the potential for deeper involvement of the private sector in the collection of data and the surveillance

How?

- Technical assistance task on provincial/district level during a minimum of one year:
 - Drafting action plan to roll out the DHIS in the target provinces
 - Training of EDOs and data managers of health facilities of priority districts in collection of data needed in the DHIS
 - Training of data managers on provincial level for collation and analysis of data
 - Designing the link to the district health planning and the DEWS
- Apart from the DEWS which is an integral component in DRM, there should be a comprehensive **Health Emergency Management information system** that would have information on various components of preparedness and response including stocks, trained personnel, database for volunteers, mapping of NGOs and other information that would be useful before, during and after an emergency. This may be linked to an e-portal for sharing of information with all relevant stakeholders.

Leadership and governance

Action 3

Apply the concept of “**District Health Planning**” as the cornerstone for more efficient use of resources and increasing access for the population to the public health delivery system and for meaningful community engagement and participation.

A district health plan will be drafted for each priority district and will include the health problems occurring in the district, the problems with the health services provided and the specific problems brought up by the communities living in the district.

It will aim at improving:

- Access
- Availability of health care (guarantee of services)
- Quality

³³ The DHIS has been rolled out in most districts in the target provinces but with a variable degree of success.

- Equity
- Cost efficiency
- Coordination and regulation between different contributors

It will comprise:

Activities aiming at good planning, management and supervisory practice

- Identification of the needs, analysis of these needs and prioritization
- Formulation of objectives and targets
- Designing solution interventions
- Preparation of an implementation plan
- Identifying resources and budget
- Capacity building of District Health Management Teams
- Organization and management planning
- Pathways of supervision, M and E system from district level
- Mapping of health facilities, defining catchment populations, monitoring access and workload. Measures to improve management of staff and their motivation.
- Reintroducing strict application of a pyramidal referral system where the first contact between patients and the health system is restricted to the primary health care facilities (BHU's mainly, RHCs to a lesser extent)
- Consensus on essential package of health services defined per type of facility with corresponding lists of health supplies and human resources
- Accountability systems to be designed and applied
- Identify gaps and deficiencies in service delivery
- Identify roles and responsibilities of each part of the system (private and public system, district and Tehsil level or Union Council level)

Activities to promote full involvement of Communities

- Ways to increase the awareness of communities about health entitlements (social mobilization)
- Improvement of shared understanding of the health issues
- Building ownership about public health services (community participation)
- Develop awareness about determinants of health and health behavior
- Interaction between static first contact facilities and reach out activities to local communities (households, schools, working places, markets etc)
- Review of the role and potential of the Lady Health Workers (see further)

Relevant components of Disaster Risk Management

- District Health planning should comprise of district risk management (Health Emergency Preparedness and Response) plans for the hazards in the district in reference to the NDMA-WB Hazard mapping.
- The community component should be strengthened to include CBDRM (Community-based Disaster Risk Management) program. This may include increasing awareness in the community, first aid trainings, community MCM/search and rescue teams.

- Since it is a 12 month plan, and the monsoon season is not far away, a detailed Contingency planning should be included to determine priority districts, stockpiling modalities, etc.
- For more details see overall generic plan on DRM in the health sector in annex 8

Note:

After the 2005 earthquake in KPK and AJ&K, district health plans were made for some districts: Abbottabad, Manshera, Battagram, Kohistan, Shangla, Bagh, Muzaffarabad, Neelum and Poonch. While these plans were very complete and well designed, they failed to a large extent to be executed satisfactorily. The reasons why this exercise remained a theoretical rather than a practical exercise must be examined. The longer term dynamic was clearly not created possibly because the plans were too overwhelming and no sustainable support was guaranteed by donors.

How?

- Technical assistance task on provincial/district level during minimum two years:
 - Designing of practical guidelines on how to plan for better health in the district. These guidelines should be simple and straightforward and guarantee the involvement of the communities; they should be realistic in what can be obtained and take into account potential funding from the donor community as well as the Provincial and District budgets; they should follow the provincial health strategy
 - Intensive training of EDOs and key members of the District Health Management Team (DHMT) with a clear description of tasks and responsibilities
 - Intensive technical assistance during the designing phase of the plans and follow up of its execution
 - Facilitating role for the community consultation and active participation
 - Facilitating role for fund raising towards a variety of donors.
- It is important that the EDO's health are taken on board as soon as possible and that a focal person in the district department of health is nominated and dedicated to roll out the plan along with supporting partners. These officers may begin with district profiling and may be asked to make a district plan out of the overall or provincial plan identifying feasible activities in their respective districts.

Action 4

Examine in depth how the **private – public partnership** can be improved and what role the **outsourcing of services** (privatization of provision of services using still public finances) can play (see annex 7); examine how to involve donors and civil society (provincial, district and union council level) in the overall provincial health management; examine how the different health providers can work together in a more constructive way, what their comparative advantages are and how known weaknesses of the institutional framework can be tackled.

- This includes the outsourcing of primary health care services to semi-governmental entities such as the PPHI or PRSP ⁽³⁴⁾ and the private-for-profit health practitioners.
- Reinforcing the role of the health authorities on district and provincial level in supervising and regulating/certifying the private sector
- Examine the potential role of the private sector in preventive healthcare and vertical programmes, in health data collection and in surveillance
- Examine and promote the role of the communities in taking responsibility in administering the primary health care facility in their area

How?

- Technical assistance task to discuss on provincial and district level different options such as:
 - The creation of a Provincial or District Health Commission, bringing together key persons of the provincial Ministry, representatives of the private sector (e.g. medical and dental council, nursing/midwives councils, pharmacy council, etc), provincial programme directors for PPHI/PRSP, representatives of the civil society and philanthropists, representatives of women advocacy groups, representatives of the donor community and health related UN agencies, teaching hospitals, universities etc. This Commission would have an oversight advisory and advocacy role in terms of improving quality of health care services in the province or district, and a regulatory/accreditation role to promote better medical practice, more efficient cooperation and regulation of the different health providers in the province/district. ⁽³⁵⁾ The establishment of this type of health commission could stimulate better cooperation between the different parts of the health system, could attract moral, political and financial support from internal and external sources and could promote a better regulation of private and semi public systems. If successful or as an alternative, similar institutions could be established on the union council level. The establishment of a provincial/district health commission in 2011 could be helpful also to provide guidance to provincial ministries when additional responsibilities are transferred from federal to provincial level (planned around mid 2011).
 - An in depth analysis is needed to examine inherent health systems weaknesses on provincial and district level, to explore reasons why public sector staff is under-performing, why the credibility of the public system is low, which

³⁴ People's Primary Health Care Initiative (in Sindh, KPK and FATA, Balochistan and Gilgit) of Punjab Rural Support Programme (in Punjab)

³⁵ A similar Health Commission exists already in Punjab and its functioning, tasks and composition is described in Act XVI of 2010. How it actually functions in reality is unknown and must be investigated. The concept is to be further adapted and discussed with federal and provincial health authorities. This approach could possibly be expanded to other social sectors to stimulate ownership on the provincial level and to involve more the civil society in Pakistan's strive to improved social service provision. Other UN agencies could consider getting involved possibly via the "One UN program" framework. See <http://punjablaws.gov.pk/laws/2434.html>

potential exists to promote incentives for health staff and diminish disincentives, to identify the determinants of poor quality service delivery.

Health workforce

Human resources development for health is a long term endeavour and to go into the depth of a full scale HR development will require many years of planning and implementation. Two actions are proposed during the early recovery phase of 12 months, one as a set of short term measures and one mostly in preparation of the longer term.

Action 5: in the short term

- **Rationalization of which services** are to be delivered where and by whom (as defined in the “Essential Package of health services”
 - Refresher courses for the different levels in relation to the Essential Package of Health Services and the District Health Planning (concentrating mainly on first contact facilities)
 - Apart from the various trainings on key life saving issues such as IMNCI, ENC, EmONC, Basic life support, the health workforce at various cadres should be trained on Management of Public Health Risks during emergencies.
 - Development of a clear responsibility and accountability model for supervision of delivered services (district and provincial level)
- Develop **staff retention strategies to retain in particular female health workers:**
 - System based on merit and performance and taking into account the market rates
 - Promotion of status and availability of female MD, LHV, nurses and qualified midwives
 - To promote staffing in primary care facilities and rural deployment (rural-urban discrepancy)
- Re-examine the role of the **Lady Health Workers** and their link to the communities and the BHU’s (social mobilization, communication for Behavioral Impact, IEC, surveillance)

How?

- Technical assistance incorporated in tasks under action 3 (district health planning)
- Provision of short term incentives to female MDs, nurses, midwives and LHV to motivate them to restart their job in the areas where there are gaps

Action 6: to prepare for the long term

To provide **technical assistance to the 4 provincial Ministries to draft a comprehensive plan for human resources development** for the coming decade. This plan should take into

account the current dearth of nursing and paramedical staff (³⁶), female MDs, qualified midwives and Lady Health Visitors. It should also be in line with the recently endorsed Essential Package of Health Services and the specifications of staffing on BHU and RHC level as mentioned in this document. The exercise should be conducted at the level of the province taking into account also gaps in teaching facilities, the need to revise curricula and emphasize the need for better training of first contact service providers.

How?

Technical assistance task for 6 months providing an HR expert who works with the 4 provinces on a HR development plan. These provincial plans would then have to be implemented over the coming decade by each province.

Health financing

Action 7

In the short term (recovery phase) ensure **resources for restoration and re-equipping/restocking of critical damaged facilities** (see under “medical products, vaccines and technology”)

Action 8: in the longer term

Advocacy for more **adequate budget allocations for health** (aiming at a minimum of 4% of GDP by 2017) taking into account the cost estimates for the Essential Package of Health Services

- Definition and adoption of the “Essential Package of Health Services” or its provincial equivalent
- Clear cost estimates for the package per level and per capita in the catchment area, per service
- During the process of district health planning, identify areas of duplication and wastage and rationalize the proportion curative/preventive health expenditures
- Improving access to the public system (aim at a minimum of 0.5 New Cases/person/year) where lower fees or waivers are applied so that the out of pocket expenditures for the poorest are minimized
- In cooperation with the private sector and following improved regularization, revise the fees applied in the public and the private system and narrow the difference between the two sectors

How?

³⁶ Including possibly in the long term support to selected nursing schools

- Technical assistance job incorporated in tasks under action 3 (district health planning)
- Long term advocacy for increased public investment in health via the Provincial health commission

Action 9: in the longer term

- Advocacy for **increased external resources** (ODA) to support critical aspects of the health sector reform on provincial level and promotion of **coordinated approaches and effective use in view of the devolution process**
- In the longer term: examine potential of introducing safety nets and social security schemes, partial cost recovery, etc

How?

- Overall task for Government, WHO, health cluster (with partners) to advocate for enhanced investment in health and to discuss which aspects of the health financing is best selected for external support

Medical products, vaccines and technology

Action 10

- Clearly define and cost which **medical supplies, drugs, diagnostics and reagents are needed per level of service** in the EHSP taking into account catchment population and level of utilization
- Promote and supervise (district and province) **rational use of drugs, supplies and equipment** and better quality of services provided ⁽³⁷⁾ with attention to the development of provincial bio medical engineering **capacity to manage, re-distribute, maintain and repair hi-tech assets** (fridges, solar panels, water pumps, radiography and laboratory equipment, etc)
- Introduce **effective supply management** (supply system coupled on performance and epidemiological reports)
- **Repair and re-construct physically critical damaged facilities**

How?

- Technical assistance (pharmacist for minimum 12 months and medical technician for 4 months) on provincial and federal level

³⁷ The quality of services provided by public health care providers is variable. Typically there is a short interaction time between patient and their health worker, overuse of antibiotics, poly-pharmacy, poor communication between patient and dispensing personnel and inadequate and faulty dispensing techniques. (from KPK Health sector strategy draft 2010-2017, November 2010)

- In initial stage, this will include provision of equipment package to rehabilitated health facilities and a 6 months seed-stock of medicines and medical supplies on primary and secondary level (emphasis on pediatric wards, emergency surgery and obstetrics, labor room, blood bank and missing essential medicines).
- Refresher courses on rational use of drugs
- Medical technician to work with provincial and district technicians to set up a databank of all technical equipment in the selected districts and to outline a strategy to ensure maintenance and repair of deficient equipment
- Technical assistance and capacity building to establish on the district and provincial level a solid drugs and medical supplies management system (rolling out of the LSS = Logistic Support System)
- Technical assistance at national, provincial and district level to improve quality assurance over the quality of medicines supplied domestically and from international sources
- Identify the critical health facilities that need repair and reconstruction and rebuild/rehabilitate via prefab structures (as applied after the 2005 earthquake in AJ&K and KPK)
- Repair and reconstruction should incorporate the safe hospital concept to improve the resilience of structures to remain functional in future disasters. New structures should be built in safe areas not prone to flooding, not necessarily where they were but where they should be and with a more appropriate design.

Health services

All the previous building blocks are brought together to provide a balanced and integrated service package with optimal balance between preventive and curative services, between public and private sector and between vertical and horizontal programmes.

- Nationally (or provincial) agreed Essential Health Services Package with definition and costing of required technologies, human resources and infrastructure (with special link to the child survival strategies and MNCH programmes including campaign based services for vaccine preventable diseases, nutritional surveillance and treatment programmes and reproductive health) ⁽³⁸⁾
- Integration of vertical programmes on provincial level, delivered via the health district teams
- Standardized performance criteria defined

³⁸ The EHSP (Essential Health Services Package) on national level or the MSDS (Minimum Service Delivery Standards) in Punjab, include the essential health and allied interventions which are preventive, promotive and curative including delivery care and family planning. It defines the types and nature of health services minimally required at fist level (BHUs, RHCs) along with matching resources, in terms of competencies (staffing), essential drugs, equipment etc. The initiative will primarily be targeted at strengthening the supply side of health systems. It includes also the services for special vulnerable groups such as children and mothers, elderly (chronic diseases), mentally ill and disabled persons.

- Monitoring and evaluation and supervision models and guidelines established (for province and district health authorities)
- Interaction and partnership with private for profit and private non profit sector improved
- Health information systems respond to needs for planning of health district
- Optimal role for communities to participate in health promotion and outreach activities via LHW
- Optimal interaction between the primary and secondary level with agreed and respected conduits for referral between the two levels avoiding duplication of services on different levels
- Health facilities and Hospitals should have a preparedness component with linkages to MCM (Mass casualty Management) including Emergency Medical Services and Search & rescue.

How?

- Overall task for Government and health cluster partners to improve functionality of the health services provided
- Technical assistance job incorporated in tasks above

Gender considerations

Gender inequality and in particular disadvantaged access of women and children to health care is an important issue in Pakistan. Women's inability to travel alone as and when they wish is viewed as a significant barrier to improve their health. The majority of Pakistani women report they are unable to go to a health facility unaccompanied; male family members must accompany them. ⁽³⁹⁾

This requires a gender-responsive approach that meets needs equally and recognizes the different capacities and vulnerabilities of women, girls, boys and men.

Looking specifically at the needs of women and young girls, the following aspects will get special attention in the Early Recovery plan:

- Special efforts will be made when **assessing and planning** that women and men are equally represented in any needs assessment or planning teams and that the needs of women and young girls are equally reflected in the action plans, the priority setting, the programme and interventions design and evaluation. Female assessors and translators will be added to the teams.
- All efforts will be made to collect **data disaggregated** by sex and age in all reports: medical epidemiological reports, health services reports or reports on health threats or challenges. Particular threats for women and young girls or other marginalized

³⁹ <http://www.ayubmed.edu.pk/JAMC/PAST/20-4/Moazzam.pdf>

- groups will get special attention and barriers in getting access to health care will be analyzed.
- Wherever available, **gender advocacy groups and in particular women associations** will be approached and wherever practical and feasible will be associated with the different programme actions. Wherever community consultation or participation or involvement of the civil society is part of the action, equal representation of men and women will be sought.
 - Special attention will be given to the availability and access to **comprehensive sexual and reproductive health services**, including GBV-related services and obstetric and gynecological care (safe and clean deliveries and emergency obstetric care), availability of sanitary towels for women, female and male condoms, post-exposure prophylaxis (PEP) kits where necessary, availability of contraceptives and pregnancy tests.
 - The programme will make sure that women and men have **equal opportunities for capacity building and training** on health issues.
 - The programme will look at **promoting female medical doctors and female nurses and midwives** by providing temporary motivational incentives (see action 5). The relative lack of female medical doctors has a serious impact on women’s access to quality health care in Pakistan. Women feel uncomfortable discussing reproductive health issues or other physical matters with male doctors and prefer to be seen by women doctors for gynecological and obstetric consultations. Thus the absence of female doctors or nurses makes many otherwise accessible health facilities unacceptable socially, hence inaccessible. ⁽⁴⁰⁾ The health facilities should have at least one qualified female medical staff, adequate privacy for health consultations, examinations and care preferably by a female health provider.

Summary of budget (details of costing in attached file)

Budget item		Estimation of cost in US\$ (rounded up)
1	Long term technical assistance (12 months) on provincial and district level (for 4 most affected provinces): <ul style="list-style-type: none"> – 1 overall coordinator of health recovery program working with the 4 provincial teams and in close contact with the federal DG, Health Sector Reform Unit, Health System Strengthening and Policy unit – 4 technical advisors (1 per province working with provincial Secretary, DG, Health Sector Reform Unit) – 1 pharmacist 	3.000.000

⁴⁰ <http://www.ayubmed.edu.pk/JAMC/PAST/20-4/Moazzam.pdf>

	<ul style="list-style-type: none"> – 1 data analyst/information manager – 1 human resources expert (6 months) – National support staff, transport, support office functions 	
2	<p>Short term technical assistance each for: (total of 28 man months)</p> <ul style="list-style-type: none"> – Training of trainers for health district planning (4 months x 2 people) – Support to the setting up of the district health information system and designing the link to the DEWS (4 months x 2 people) – Water supply service providers (quality of water) – Rational use of drugs and quality improvement of services – Revision of supply management system (LSS) (4 months x 1 person) – Setting up databank for medical equipment and designing longer term strategy for maintenance and repair of hi-tech equipment (medical technician for 4 months) – Improved public – private partnership (4 months x 1 person) 	600.000
3	<p>Repair and reconstruction of damaged primary health care facilities (BHU and RHC) (prefabs for new construction): unit costs following experience in AJ&K and KPK after 2005 earthquake with adaptations applied to the current prices, including health care facility water and sanitation repair/rehabilitation works and waste management</p> <ul style="list-style-type: none"> – Unit cost per BHU (construction): 30.000 U\$ – Unit cost per RHC (construction): 94.000 U\$ – Repair cost estimate per BHU: 12.000 U\$ – Repair cost estimate per RHC: 37.600 U\$ <p>Number of facilities to be reconstructed and repaired will change over the coming months but based on the DNA results, preliminary results from HeRAMS and which repairs and reconstruction are underway or planned, the following key may be used:</p> <ul style="list-style-type: none"> – BHUs prefabs to be constructed: 30% of total facilities – RHCs prefabs to be constructed: 5% of total facilities – BHUs to be repaired: 53% of total facilities – RHCs to be repaired: 12% of total facilities <p>This would roughly translate into: (total facilities = 233)</p> <ul style="list-style-type: none"> – 65 BHUs prefabs to be constructed – 8 RHCs prefabs to be constructed – 130 BHUs to be repaired – 30 RHCs to be repaired <p>With a geographic distribution as follows: percentage of all reconstruction/repair works</p> <ul style="list-style-type: none"> – Sindh: 50% – KPK: 20% – Punjab: 15% – Balochistan: 15% <p>These are indicative figures only; further information from HeRAMS will possibly change these figures slightly.</p>	5.400.000
4	Re-equipment of primary health care facilities (BHU and RHC): (medical	7.600.000

	<p>and diagnostic equipment, blood safety)</p> <ul style="list-style-type: none"> – For BHU: 16.130 U\$ – For RHC: 118.888 U\$ <p>Contains medical equipment, furniture, equipment for gyneco and labor room, <i>lab equipment, dental equipment, beds, operations theatre, ambulance equipment.</i> (<i>Italics = only for RHC</i>)</p> <p>Estimations based on detailed cost pricing of standard list as agreed with MOH</p>	
5	<p>Drugs seed stock for 6 months for rehabilitated health facilities (primary level):</p> <p>approximately</p> <ul style="list-style-type: none"> – 2.6 U\$/capita/yr for BHU: 26.000 U\$ needed per BHU per year – 3.04 U\$/capita/yr for RHC: 152.000 U\$ needed per RHC per year <p>Catchment population for BHU is 10.000 people and for RHC is 50.000.</p> <p>Estimations based on detailed cost pricing of standard list as agreed with MOH</p> <p>Seed stock to be provided progressively during installation of the supply management system and based on performance and epidemiological reporting</p>	5.500.000
6	<p>Support and equipment for selected secondary health care facilities (mostly DHQs for 23 priority districts) for pediatric ward (including isolation ward and nutritional stabilization centers), emergency surgery and obstetrics, labor room, blood safety and referral from primary level.</p> <p>For a limited number of hospitals, some repair work will be needed (emphasis on clean water provision, waste management and latrines).</p> <p>Average costing at 300.000 U\$/hospital</p>	7.000.000
7	<p>Maintenance of the DEWS system and making link to the DHIS</p> <ul style="list-style-type: none"> – Surveillance officers in Sindh: 17 districts, Punjab: 12 districts, Baluchistan: 12 districts, KP: 20 districts, & 3 districts each in AJK, G-B, FATA – Report weekly disease trends from country-wide sentinel sites in 70 districts – Building capacity of surveillance officers counterparts in the District teams – Respond to alerts within 24 hours and control outbreak – including water quality, sanitation inputs; clinical case management; health promotion as needed <p>Total cost approximately 125.000 U\$ on average per province per month</p>	6.000.000
8	<p>Training and refresher courses for</p> <ul style="list-style-type: none"> – District health planning: training of EDOs and key members of District Health Management Team – Refresher course for DEWS in view of the revision of the TOR of surveillance officers – Training of water supply service providers on water quality improvements and on water quality monitoring testing techniques – Training for roll out of District Health Information System (DHIS): 	1.400.000

	<p>training of trainers (EDOs) and district based training of data managers in health facilities</p> <ul style="list-style-type: none"> – Refresher courses for rational use of drugs and quality improvement of services provided for supervisors of primary health care facilities in districts – Training of provincial and district pharmacists on the roll out and the use of the LSS – Facilitation of meetings of provincial health commissions or other initiatives in the context of improving the private-public partnership <p>Unit cost at approximately 50.000 per training and 20.000 U\$ per meeting private - public partnership</p>	
9	<p>Temporary incentives to promote female health workers (MDs, nurses, qualified midwives) to return to their duty station or to fill up the worst gaps where female health workers are most lacking (6 months) Top up incentive approximately 35% for female MD and 20% for paramedical staff of average salary</p>	900.000
10	<p>Support to the provincial MOH (DG offices, Secretary, Health Sector Reform units) and empower the district health authorities to improve operations in the district health office: equipment, warehousing, transport, etc Establishment of an NGO support office in 23 districts</p>	3.800.000
11	<p>Establishment of district based monitoring and evaluation units in 23 districts and midterm real time evaluation after 7 months</p>	400,000
TOTAL		41,600.000

Indicative budget per province (following provincial distribution of the 23 priority districts):

Province	# of districts (23)	Approximate budget (USD)
Sindh	8	14.500.000
Punjab	7	12.600.000
KPK	5	9.000.000
Balochistan	3	5.500.000

Monitoring and evaluation of Early Recovery programme

In the past, many efforts have been made In Pakistan to increase accountability in the health sector. While expected results were often defined and targets set, the measuring of meaningful indicators has often been inaccurate or lacking and the follow up rather poor. This has contributed to the failure of many appropriate, well designed plans.

The launching and the implementation of the Early Recovery programme with the district as major hub for planning and supervision is an excellent opportunity to enhance this accountability through the initiation of a robust monitoring and evaluation system

This will be done in two ways:

- The establishment of a **District based M&E Unit**, as an oversight body to ensure implementation of all health care services delivery in the district. This unit could be attached but should remain independent from the DHMT and could be composed of a cross section of health providers such as representatives from the DHMT, private sector, PPHI/PRSP, external health partners (UN and NGO) and civil society. This unit could be chaired by a member of the Civil Society or of the DHMT and will follow the below described indicators from month to month. It will organise regular meetings to discuss progress and steer the process. The secretariat function of this unit will be carried out by the District Health Management Team.
- After the first 7 Months of the Early Recovery process, an **ad hoc real time evaluation** will be organised to measure progress made per district over the last 6 months using the same indicators. This RTE should be closely coordinated with the district based M&E Unit. It should look at midterm progress and inform the design of a follow up programme after the 1st 12 months. The necessary funds to carry out this RTE are requested in the programme budget.

Suggested monitoring indicators

Notes:

1. During the early recovery phase of 12 months, monitoring and evaluation will concentrate on the output indicators. In the midterm, outcome indicators may be considered, although many of them will only show improvement after consequent action over a number of years.
2. As much as possible, the selected indicators are based on those included in the National Health Policy 2010 and related documents such as the Essential Health Services Package.
3. The choice of indicators as well as their baseline and target for each of them will have to be defined for the respective provinces and districts as part of the preparation of the programme.

Building block	Indicator	Baseline	Target end of 12 months	MOV
Health information				
DEWS	Output			
	Number/proportion of sentinel sites reporting weekly on		80%	

	time			
	Number/proportion of alerts responded to within 24 hours		90%	
	Number/proportion of districts with raised capacity for alert notification, outbreak investigation and response		70 districts	
Outcome				
	Proportion of districts where a solid surveillance system prevents the eruption of any epidemic prone disease		70 districts	
DHIS	Output			
	Clear policy decision is made on the roll out of the DHIS system and its relation to the HMIS is specified (Federal and Provincial MOH)			Policy document
	The potential for linking the DEWS system to a functioning DHIS system is evaluated in detail			Technical evaluation report
Outcome				
	Proportion of districts from where validated health information is available in indicator format at District, Provincial and Federal level	0?	50%	
	Proportion of districts where the strategy and the policy decisions (including budget allocations) correlate with the available health information provided via the DHIS			
Leadership and governance				
District health planning	Output			
	Proportion of the 23 selected districts which have a district health plan developed	<5?	100%	M&E unit report
	Proportion of district health maps exist with health facilities and their catchment population defined	<5?	100%	M&E unit report
	Proportion of DHMT (District Health Management Team) who have actively engaged in the district health planning ⁽⁴¹⁾	<5?	100%	M&E unit report
	Proportion of communities where a health meeting took place	<5?	50%	M&E unit report
	Proportion of schools who were in contact with the health facility and engaged in spreading key health education messages	<5?	50%	M&E unit report
Outcome				
	Proportion of districts where the concept of District	0?	50%	M&E unit

⁴¹ Measured via subjective evaluation of performance of the DHMTs and the EDOs in the 23 districts: documented regular meetings of the district health management team, regular supervision of the primary health care facilities is carried out, interaction with civil society is engaged and meaningful and provides concrete positive results, roles and responsibilities of each part of the system is clearly defined (district, tehsil and Union Council), interaction with the private sector has been established and first signs of increased cooperation is documented

	Health Planning is pursued in the middle term and has reached beyond a plan on paper ⁽⁴²⁾			report
	Proportion of communities who have reached an active involvement ⁽⁴³⁾ in the health management of their environment and their primary health care facility	0?	50%	M&E unit report
Private-public partnership	Output			
	Proportion of districts ⁽⁴⁴⁾ where the outsourcing of services to semi-public entities is including also crucial preventive services, vertical programmes, health data collection and surveillance activities	<5?	100%	M&E unit report
	Proportion of districts where the outsourcing of services is subject to a meaningful supervision from the district health authorities	<5?	100%	M&E unit report
	Proportion of districts where private, semi public and public health service providers regularly meet with a fixed goal to interact in a cooperative way	<5?	100%	M&E unit report
	Outcome			
	Number of Provinces where an increased degree of regulation of the private sector is applied and a certification of health care providers of all levels is established			
	Proportion of districts where the private sector health care providers are organised and represented in any provincial or district based regulatory, advisory or advocacy role			
	Health workforce			
	Output			
	Proportion of the selected districts where a refresher course was held about the Essential Package of Health Services	0	100%	Training report
	Proportion of the selected districts where a refresher course was held about the District health planning	0	100%	Training report
	Longer term human resources development plan has been discussed with MOH at different levels (Federal, Provincial and District) and a plan has been accepted			Plan exists
	Outcome			
	Ratio nurses to doctors has improved	1 nurse to 3 MDs	2 nurses to 3 MDs	DHIS
	Ratio female MDs to male MDs has improved	?	20%	DHIS

⁴² Measured by sustainable capacity building of the DHMT, respected referral systems and health pyramid, integration of disaster management plans, attraction of external funds, etc

⁴³ Measured by increased awareness of communities about their health entitlements, improved understanding of the health issues, increased shared ownership about public health services, improved knowledge of critical health behavior

⁴⁴ In those districts where e.g. PPHI has made a contractual agreement with the District health authorities

			female MDs
Health financing			
Output			
Proportion of fully functional PHC facilities in each district (critical facilities made functional again via physical repairs and re-equipment (see under next building block – medical products, vaccines and technology)	On average 75% of total facilities are functional	95%	
Outcome			
Proportion of selected districts which are successfully guaranteeing equitable access to an adequate per capita provision of essential drugs and medical supplies (at least 2 U\$/year/capita)		80%	
Public budget allocation for health	0.6% of GDP	? in short term, 4% in long term	
Increased ratio curative/preventive expenditures	80/20	60/40	
Medical products, vaccines and technologies			
Output			
Proportion of health facilities that have relevant drugs, diagnostics and medical equipment available according to the EHSP	20%?	100%	
Proportion of health facilities that have out of stocks of essential drugs (list of 30 drugs to be drafted and regular supervision of health facilities to verify this list)		<5%	
Proportion of health facilities supervising staff dealing with the facility pharmacy having participated in a refresher course on rational use of drugs and better quality of care		50%	Training report
Proportion of secondary health facilities that are included in the provincial databank for all technical equipment in the selected provinces	0%?	100%	
Proportion of selected districts that are applying the LSS		100%	
Outcome			
Monitor effective implementation of the <u>Essential Health Services Package</u> at the BHU and RHC levels ⁽⁴⁵⁾			
See also annex 8			
Output			
% of health facilities at the BHU and RHC level by district/province that are implementing EHSP at pre-defined standards of care			
% of eligible women that have utilized antenatal services in the last 1 year (this would require a denominator to be			

⁴⁵ Adapted from the Essential Package of Health Services for Pakistan 2010

identified/calculated)		
% children born in target area of the 1st level facilities that are delivered using a skilled birth attendant		
% of BHUs that offer promotive and preventive health services (those specific services of interest will need to be identified)		
% children in the target areas of 1st level facilities that have received DPT3 vaccination		
% consultations for chronic medical conditions such as diabetes, hypertension, etc		
Proportion of target population that switched care seeking to public facilities in the last 1 year		
Outcome		
Reduced out of pocket expenses for PHC	11 US\$ /cap/yr	
Utilization rate of health facilities (# of outpatient consultations per person per year, by administrative unit) to measure Increased access and equity to basic health care (i.e. proportion of the district population that has accessed/utilized BHUs/RHCs in the last 1 year. This can then be compared to baseline or non- EHSP districts or BHUs/RHCs)	0.2 NC/ Pers/yr	0.5 NC /pers
Impact		
Reduction in vaccine preventable diseases and mortality		National surveys
Reduction in maternal mortality		National surveys
Reduction in , neonatal, infant and under 5 mortality		National surveys

Risk Analysis

An ambitious plan always contains many risks and this is certainly the case for this plan.

First there are **security considerations**; which often impede movement and limit access to sometimes the most critical areas. If the security conditions would deteriorate, many supervisory trips may not be made and activities may be postponed or made impossible.

A permanently looming risk in Pakistan is the occurrence of a **new natural disaster**, which can undo any progress very rapidly and create a setback. The inclusion in the plan of components of Disaster Risk Management is therefore essential and emergency preparedness and response interventions should be integrated into the district operational plans.

The programme also contains many ambitious and to some extent innovative ideas which, while most of them were discussed before in different settings, could challenge the **interests of certain groups**. Upsetting the balance will always have supporters and opponents. The crucial issue will be to motivate these opponents and clarify what interests they may have in a changing and improving health situation in Pakistan. Bringing the civil society and communities on board in the different oversight bodies on different levels is not meant to challenge the authority of the Governmental institutions but exactly the opposite: to broaden the discussion platform, to bring on board stakeholders and resources without which a better health in Pakistan will not be reached easily. The importance of a better functioning private health sector will also be crucial and a lot of attention should be given to this aspect but again this may contain advantages and disadvantages for the private health provider.

Another considerable risk is embedded in the fact that the **plan relies heavily on the enthusiasm of Provincial and District health authorities to tackle the real issues and work towards a better health situation in their province and district**. It presumes that there is a sufficient critical minimum of the decision makers who feel that better health in Pakistan is not just a catchphrase but a real possibility within reach, if there is sufficient support from the civil society, the communities and from external partners and donors. The careful selection of the technical experts WHO and partners can field will be essential not only to provide technical assistance but also to animate, motivate and encourage the counterparts on different levels. The Early Recovery plan is inserted in a longer term perspective of the health reform exactly because sustainable results cannot be reached within 12 months. It is more meant to build on the foundation of a health reform while taking care of the restoration of health services damaged by the floods.

A last most important risk is the **sustainability of the actions** launched in the plan. Without follow up in the coming years in the context of a real and meaningful reform, genuinely carried by the Federal, Provincial and District health authorities, the efforts and results of the first 12 months risk to be lost. To increase public investment in health, to invest in longer term health human resources, to involve the private and semi public sector, to work on an efficient information system, all this rooted in a solid District Health planning are just few of the conditions to reach a more durable improvement of the health situation in Pakistan.

Annex 1: Summary of health sector reform objectives

The National Health Policy 2010 (January draft – Ministry of Health) summarises the reform policy objectives as follows:

Goal

The goal of the National Health Policy is to improve the health and well being of Pakistanis by providing the template of a workable, affordable set of essential preventive and medical services that may be adapted for service delivery by the provinces.

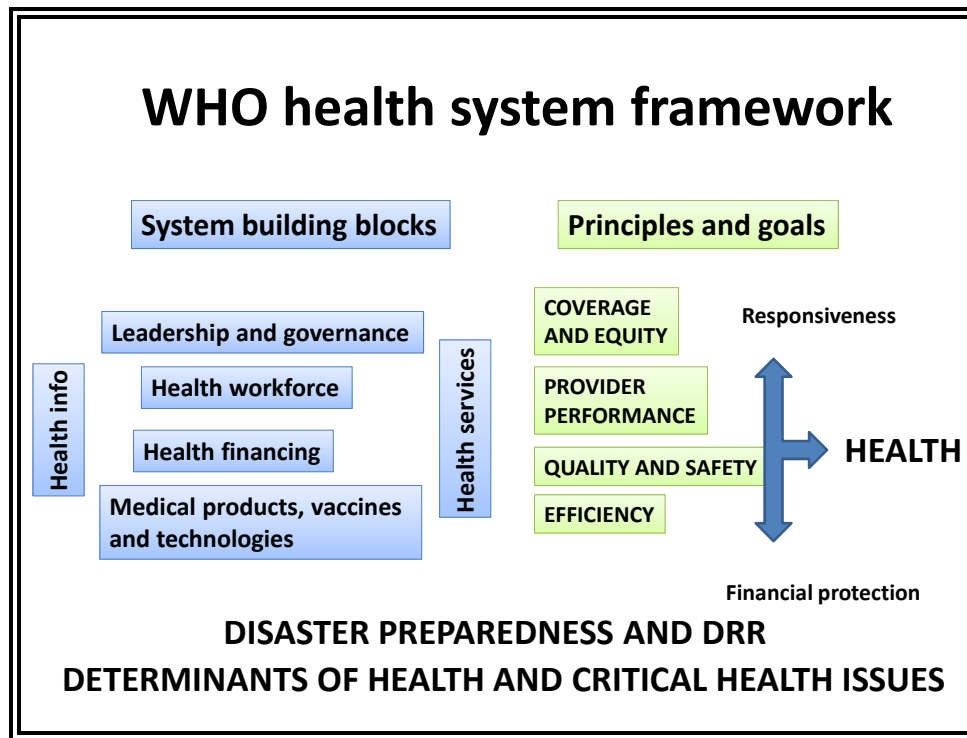
Policy Objectives: Challenges, Reforms and Priority Actions

To achieve the above stated vision i.e. to increase access and equity to essential health services, the Government of Pakistan will be guided by the following Policy Objectives to reform and strengthen critical aspects of its health system:

- *Enhancing coverage to achieve universal health access, particularly for the poor and the vulnerable, by provision of preventive services and a **package of quality basic Essential Health services***
- *Develop and manage competent and committed **health care providers and managers***
- *Generate reliable and validated **health information** to manage and evaluate health services*
- *Reform the **Health Administration** to make it accountable to the public and deliver results*
- ***Finance** the costs of providing basic health care to all Pakistanis*
- *Adopt appropriate **health technology** to deliver efficient and high quality services*

The delivery of health services is a provincial responsibility. The Ministry of Health understands that each Provincial Department of Health is best able to identify their province's varied healthcare needs and expectations and is best able to deliver appropriate health care to their populations. The national health policy aims to resonate with the ideals and expectations of provinces. The Federal ministry of Health will support and facilitate the provinces in implementing their strategies by providing the overall vision and the relevant financial and technical resources to ensure that essential health services are accessible to all citizens.

Annex 2: the six building blocks



Annex 3: what should the six building blocks look like? (principles and goals)

1/ Health information	<ul style="list-style-type: none"> • Should ensure the production, analysis, dissemination and use of reliable and timely information on health determinants, health system performance and health status • Importance of information flow and analysis at the appropriate level with follow up action • In acute and recovery phase: should ensure timely detection of any epidemic prone diseases and provide rapid reaction to it. (DEWS surveillance as complement to the DHIS)
2/ Leadership and governance	<ul style="list-style-type: none"> • Policy frameworks and regulations • Political commitment • Effective oversight and coordination

	<ul style="list-style-type: none"> • Coalition building and cooperation between Government, partners and donors, between public and private system • Design of effective system and interaction between different levels of health pyramid: importance of adequate health district planning • Efficient accountability system, • Regular supervision and M & E • Community engagement and participation
3/ Health workforce	<ul style="list-style-type: none"> • Regular and adequate remuneration • Sufficient staff, fairly distributed according to the needs, right staff at the right level, adequate gender balance • Competent, responsive and productive with clear task description • Value of Capacity building, refresher training and training in e.g. Disaster preparedness, district health planning, DHIS
4/Health financing	<ul style="list-style-type: none"> • Sufficient investment and balance between public, out of pocket and external expenditures • Guaranteeing access to the poorest and to women and girls • Protection from financial catastrophe • Cost efficiency • Incentives for providers and users to be cost efficient
5/ Medical products, vaccines and technology	<ul style="list-style-type: none"> • Equitable access to essential medical products • Rational use of the medical products based on evidence • Standardization of supply per level of service • Quality and safety control • Sufficient provision per capita • Maintenance and repair of technical equipment and infrastructure • Adequate supply management based on performance
6/ Health services	<ul style="list-style-type: none"> • Delivers effective, safe, quality personal and non personal health interventions to those that need them, when and where needed with sufficient coverage • Optimal balance between curative and preventive services and between public and private sector • Respecting clearly defined Essential Health Services Package • Cost efficiency • Delivery models are clear: e.g district based health planning • Community involvement and participation • Adequate infrastructure • Adequate information

Annex 4: Effect of floods on progress towards MDGs 4,5 and 6

Key health indicators / MDGs			
Goals	2000-1	2006-7	MDG Targets 2015
Infant Mortality Rate	85	72	40
Under 5 Mortality Rate	105	94	52
Maternal Mortality Ratio	400-450	297	140
Under 5 children under weight	41.5%	38%	<20%

Sources: Pak MDG report 2006, PDHS, PSLM, NHPU

Note:

The prediction in the FIMA report that access to health facilities was difficult is actually only valid for the first few weeks of the crisis. The rapid establishment of additional first line facilities to support the damaged facilities and the organisation of mobile health teams, actually reinforced the access and resulted in a much higher average utilisation of the first line facilities (estimated for first three months at approximately 1 to 1.5 New Cases/person/year instead of the pre-flood estimation of 0.12 to 0.2 NC/pers/year). While it is clear that the caseload (incidence rates) of many diseases rose, it remains to be examined if indicators such as infant and under five mortality rates indeed increased. (As the FIMA report predicts).

Below are extracts from the FIMA report:

MDG 4 – Reduce Child Mortality is measured in case of FIMA as 1/Under five mortality rate and 2/ infant mortality rate.

- The 2010 floods have affected more than 2.8 million children under five, 1.4 million of them severely. Even though the current trend of the U5MR in Pakistan is at 94, more than 5 million children in the flood affected areas are at

higher risk and face an U5MR estimated between 110 and 120 death per 1,000 live births. Data emerging from the Ministry of Health and WHO confirm that the incidence rate of the diarrhoea, acute respiratory infections and suspected malaria has increased while access to health facilities has fallen.

- Given the massive movement of population and the proximity in camps where hygiene and sanitation are lacking, diarrhoea, measles and pneumonia has increased. The lack of access to facilities has made it difficult for mothers to provide proper care for their sick children. Combined, these factors will result in an estimated 10 % increase in the under-five mortality rate, an increase in the neonatal mortality rate and an immediate increase of prevalence of wasting;
- Displacement of population, has meant that around 10,600 or 1/3 of Lady Health Workers in flooded areas were unable to function. Therefore it is estimated that the human resources in flood affected have been reduced by at least 1/3 for the extremely vulnerable communities.

MDG 5 – Improving Maternal health is measured in the case of FIMA as 1/ Proportion of births attended by Skilled Birth Attendants (SBA) and 2/ Contraceptive Prevalence Rate (CPR).

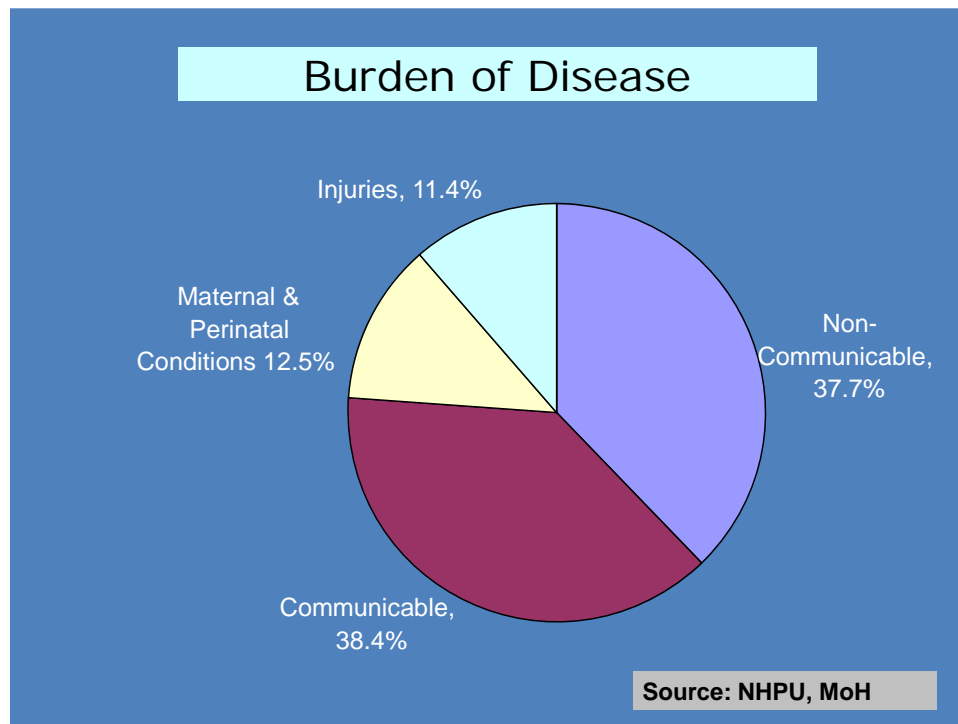
- As a result of the damage caused by floods the proportion of births attended by skilled birth attendants will decline to 36 % from the national average of 39% which means that an additional 15,000 pregnant women will not be delivered by SBAs. The affect will be more devastating on the already vulnerable populations such as rural residents and people in lowest wealth quintiles. In the longer term displacement of significant proportions of Lady Health Workers (almost 10,500) and Community Midwives would not only reduce promotional and preventive coverage but would also affect appropriate and timely referral to skilled healthcare provider in case of obstetric complications. Access to emergency obstetric care (EmOC) including within the framework of extended humanitarian response for the Minimal Initial Services Package (MISP) will be critical to further maternal mortality and morbidity.
- The floods will likely reduce the contraceptive prevalence rate to 27 % from its current level of 30%. This means that an additional 96,000 women of reproductive age group will fail to use modern contraceptives in the affected areas. Damage to health facilities and displacement of LHWs will reduce access to the supply of contraceptives. Since poor EmOC is a critical determinant of poor neonatal outcome, there is an expected rise in neonatal deaths in the post-flood period. This may compel families to have more children, further emphasizing the need for access to contraceptives to ensure regular supply.

MDG 6 – Combating HIV/AIDS, Malaria and Other Diseases is measured in case of FIMA as 1/HIV/AIDS prevalence among 15-24 years; 2/ Proportion of population in malaria risk area using effective malaria prevention and treatment measures 3/

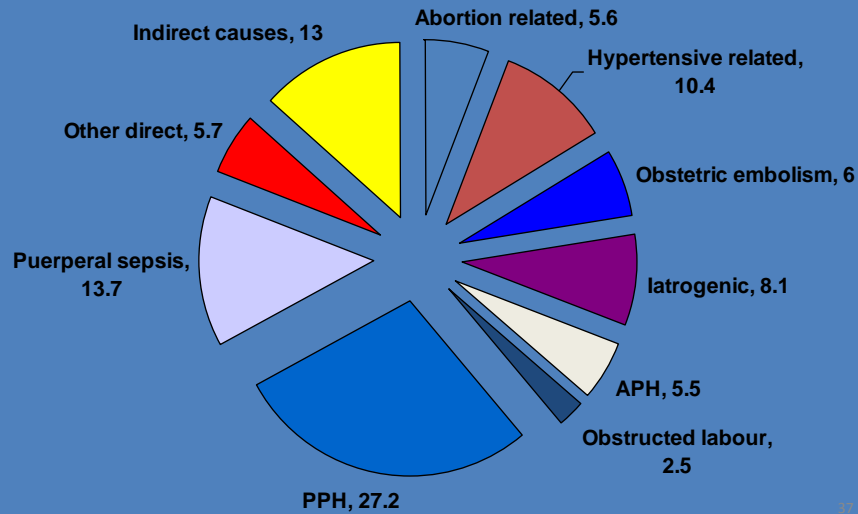
Incidence of Tuberculosis per 100,000 population; 4/ Proportion of TB cases detected and cured under DOTS.

- Based on data records provided by the national and provincial AIDS programmes across the country, the flood damage on AIDS prevalence is expected to be modest for the general population but high for people living with HIV (PLHIV) currently on anti-retroviral therapy (ART). Up to 1,000 people living with HIV need support in flood affected areas. The ensuing loss due to the floods is the increased risk of contracting HIV due to poor infection control measures in health facilities (including condom availability), reduced access to treatment of Sexually Transmitted Infections and behavioural changes including risk-taking behavior and contractual sex. Losses will also accrue through disruption of specialized health care including the treatment of Opportunistic Infections (OI), poor or absent access to ART combined with poor living conditions.
- The floods will have the greatest impact on malaria risk. The annual parasite incidence rate has shot up to 7/1000 population from the initial 1.9/1000. This means that due to the floods the confirmed malaria cases in the country has increased from 168,000 in 2009 to now 1.12 million cases. The malaria transmission is expected to end in November in the KP province while the malaria risk in the South will persist, albeit at lower levels, during the winter. Epidemiology of the disease may also suffer from a spill-over effect in neighbouring districts, if population movement from high to low endemic areas is significant and living conditions remain poor. In addition, an increase in the incidence of Dengue/DHF is currently happening particularly in urban areas.
- It is not easy to correlate the incidence and prevalence of TB to the floods. Due to the floods, around 20 million people have been displaced and it is estimated that around 46,000 TB cases exist in the displaced population, including 20,000 cases under treatment, which are highly infectious and can spread TB to others if not treated. It is estimated that one smear positive TB case can transmit the disease to up to 10 people in a year. Population mobility, poor living conditions, over-crowding, malnutrition and scarcity of access to health services and drugs will likely disrupt TB treatment and contribute to enhanced transmission.

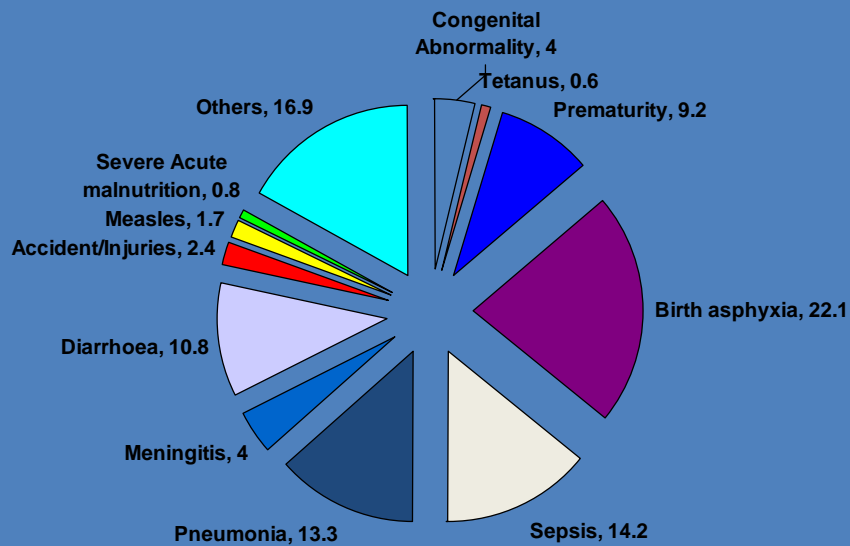
Annex 5: burden of disease, causes of maternal deaths and under five deaths



Causes of maternal deaths

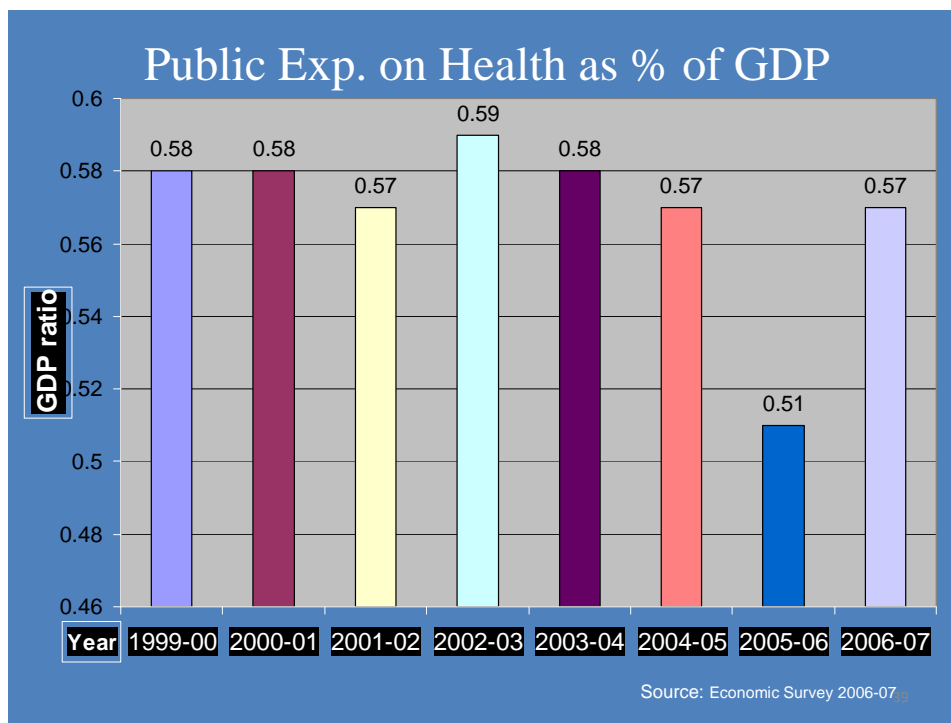
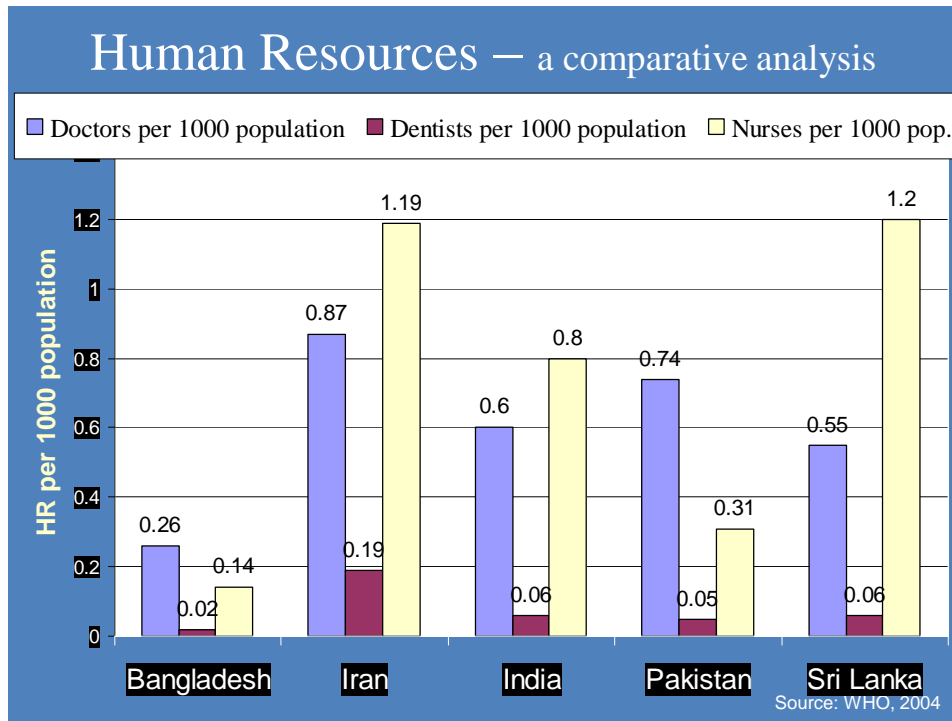


Causes of under-five deaths



Source: "Briefing by the Ministry of Health" 2008

Annex 6: human resources, public expenditure spent on health and structure of health care management levels



Structure of Health Care Services

Management levels

Federal **MoH**

- Health Policy
- National Health Regulations
- Provision of technical assistance
- National programs

Provincial **HD**

- Translating policy into planning
- M&E of policy implementation
- Tertiary and teaching institutions
- Oversee primary & secondary health services

District **HD**

- Provision of primary & secondary health services
- Implementation of national programs
- Public health management

10

Annex 7: Understanding the role of the Government and interaction with the private sector

Public finances		Private finances	
Public provision of services	Private provision of services	Public provision of services	Private provision of services
The public sector	Privatization of the provision	Privatization of the financing	Full Privatization
e.g. Public health clinics or hospitals fully funded by government	e.g. <ul style="list-style-type: none"> • Subsidized NGOs such as PPHI • Lease hospitals to the private sector and subsidize lease costs • Allow private doctors to admit patients to public hospital 	e.g. <ul style="list-style-type: none"> • Public facility with cost recovery • Bamako initiative • Private health insurance which allows use of governmental facilities 	e.g. <ul style="list-style-type: none"> • Not for profit self supporting health facilities • For profit private providers • Private insurance using private providers

Annex 8: Overall generic plan for Disaster Risk Management within the Health sector

Overall objective: To strengthen and develop comprehensive national, district and community capacities and plans for mitigation, preparedness and response within the Pakistan health sector

Specific objective: To strengthen policies, institutionalize and establish coordination mechanisms at national/sub-national, district and community levels for disaster risk management with emphasis on preparedness and response within the health sector

Expected results:

1. Sub-national DRM response mechanisms strengthened and emergency preparedness plans developed for target districts
2. Essential human resources capabilities are identified, trained, updated and maintained for disaster risk management within the health sector partners
3. Safe Hospital Program established in all selected hospitals in targeted districts
4. Early Warning and Surveillance systems for identifying health concerns established
5. An enabling community-based environment created for comprehensive disaster risk reduction in rural as well as urban areas

Activities:

- Development of the health sector policy on Health Emergency Preparedness and Response (HEPR) and inclusion in the National Health Policy through consultation with policy makers and relevant stakeholders
- Development of the national plan/guidelines/SOPs for the health sector on EPR and its implementation at the Provincial and District level after consultation with concerned authorities
- Training of the relevant authorities at the federal, provincial and district levels on the Health Emergency Preparedness and Response (HEPR) plan
- Development of communication and advocacy/awareness tools on Disaster Risk Reduction in health sector
- Training of the human resource in the public health system as part of preparedness for emergency response
- Establishment and expansion of the Disease Early Warning System in targeted districts
- Vulnerability health assessment in targeted districts
- Assessment, training and supporting District Headquarters (DHQ) hospitals to be safe from disasters
- Support to the development of Community Based Disaster Risk Management (DRM) plans to include health preparedness and response
- Conduct First aid training

- Conduct simulation exercises/drills for mass casualty management and SAR (Search and Rescue)
- Procurement of basic equipment for community response
- Development and regular updating of a contingency plan for the health sector (inc procurement and availability of a contingency stock)

Annex 9: Generic indicators for health services (health cluster guide 2009)

Health services (adapted from the health cluster guide 2009)	
Input	
Average population covered by functioning Health Facility (HF), by type of HF and by administrative unit	SPHERE standards: 10 000 for 1 Health Unit, 50 000 for 1 Health Centre, 250 000 for 1 District/Rural Hospital
# HF with Basic Emergency Obstetric Care / 500.000 population, by administrative unit	>= 4 BEmOC /500 000
# HF with Comprehensive Emergency Obstetric Care / 500.000 population, by administrative unit	>= 1 CEmOC /500 000
% of HF without stock out of a selected essential drug in 4 group of drugs, by administrative unit	100 %
# of hospital beds per 10 000 population (inpatients & maternity), by administrative unit	> 10
Output	
# of outpatient consultations per person per year, by administrative unit	> = 1 new visit/person per year
# of consultations per clinician per day, by administrative unit	Less than 50/ day per clinician
Coverage of measles vaccination (6 months-15 years)	> 95% in camps or urban areas > 90% in rural areas
Coverage of DPT3 in < 1 year, by administrative unit	> 95%
% births assisted by skilled attendant	> 90%
% expected deliveries by Caesarean section, by administrative unit	>= 5% and <= 15%
Outcome	
# of cases or incidence rates for selected diseases relevant to the local context (cholera, measles, acute meningitis, others)	Measure trends
CFR for most common diseases	Measure trends
Proportional mortality	Measure trends
CMR	>=2x base rate OR >1/10 000 per day
U5MR	>=2x base rate OR >2/10 000 per day

