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Country Cooperation Strategy for WHO and Pakistan

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ABBREVIATIONS

ADB	Asian Development Bank
AJK	Azad Jammu and Kashmir
AusAID	Australian Agency for International Development
BDN	Basic development needs
CCS	Country cooperation strategy
CIDA	Canadian International Development Agency
DFID	Department for International Development, United Kingdom
DHIS	District health information system
DPT	Diphtheria–pertussis–tetanus vaccine
EPI	Expanded Programme on Immunization
FAO	Food and Agriculture Organization of the United Nations
FATA	Federally Administered Tribal Areas
GDP	Gross domestic product
HIV/AIDS	Human immunodeficiency virus/acquired immunodeficiency syndrome
HMIS	Health management information system
JICA	Japan International Development Association
KP	Khyber Pakhtunkhwa province
LHV	Lady health visitor
LHW	Lady health worker
MDGs	Millennium Development Goals
MICS	Multiple indicator cluster survey
NFC	National Finance Commission
OCHA	United Nations Office for Coordination of Humanitarian Assistance
ODA	Official development assistance
OECD	Organization of Economic Co-operation and Development
PDHS	Pakistan Demographic and Health Survey
PHIS	Provincial health information system
PKR	Pakistani rupee
PPHI	People’s Primary Health Initiative
PRSP	Punjab Rural Support Programme
PSLM	Pakistan Social and Living Standards Measurement survey
UNCT	UN Country Team
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
USAID	United States Agency for International Development
WFP	World Food Programme
WHO	World Health Organization

EXECUTIVE SUMMARY

The Country Cooperation Strategy (CCS) reflects the medium-term vision for technical cooperation of World Health Organization (WHO) with a Member State and defines the strategic framework for working within that country. It is the key document to guide the biennial collaborative operation plan of WHO with countries usually over a period of six years. The CCS brings together the collective technical strength of WHO support at the country office, Regional Office and headquarters levels in a coherent manner with a view to address the country's health priorities and challenges. The current document discusses the priorities for Pakistan for the period 2011–2017 under the unique circumstances of no Ministry of Health at the national level. The document critically analyses in great detail the health situation in the country including strengths and weaknesses of all six building blocks of the health system, activities of health development partners and the exact pattern of financing in the health sector of Pakistan. Its aim is to facilitate the provision of health for all within the purview of the primary health care philosophy and the pursuit of the Millennium Development Goals (MDGs).

Pakistan is a large country with an area of around 800 000 kilometres and an estimated population of 173.5 million in 2011, making it the fifth most populous country in the world and the largest in the WHO Eastern Mediterranean Region. The country is divided into five provinces, Punjab, Sindh, Balochistan, Khyber Pakhtunkhwa (KP) and the relatively smaller Gilgit–Baltistan, as well as three territories, Federally Administered Tribal Areas (FATA), Azad Jammu and Kashmir (AJK) and Islamabad Capital Territory. The country has experienced several natural and other disasters following the massive earthquake of 2005. Militancy in its northern belt has created several security-compromised areas making access to health care problematic. A consistently high population growth rate exceeding 2% annually has led to Pakistan being quite a young nation with over 35% of its population being under the age of 14 years. Despite a well-developed and multi-tiered health infrastructure, the country has poor health indicators such as high maternal, infant and under-5 mortality and a high burden of communicable diseases such as tuberculosis and hepatitis B and C, in addition to a rising trend of noncommunicable diseases.

In pursuance of a constitutional requirement; virtually all the major responsibilities in respect of health have been devolved to the federating units or provinces, while certain critical residual national health functions have been distributed among six ministries and divisions of the Government of Pakistan. There are huge disparities among the provinces in terms of capacity, infrastructure and level of governance. The disparities are often exacerbated by security issues or natural calamities in this disaster-prone country. Meanwhile, the United Nations system in Pakistan is piloting the "Delivering as One" agenda with 14 UN agencies, funds and offices working for health and population with a strong and heavy agenda that can serve as a good vehicle for promoting intersectoral action. Such intersectoral action is particularly warranted in view of the several social determinants of health such as income poverty, lack of basic education particularly among rural females, lack of adequate safe water and sanitation facilities and gender inequities also pose impediments to the delivery of health care, particularly to the marginalized segments of the population.

Foreign assistance has played a critical role in developing the health sector of Pakistan, with the country historically receiving large volumes in aid. In 2007, Pakistan received more

than US$ 2.2 billion in Official Development Assistance (ODA), ranking the country as the sixth largest recipient of official aid in the world. Generally speaking, public sector investment in the development of health care services is quite low, with the overwhelming share of health costs continuing to be borne through out-of-pocket expenditure by the majority of the people with low average per capita income. Urgent donor support is a clear prerequisite for attaining the health-related targets of the MDGs, as the current pace of progress in maternal, neonatal and child health care and communicable disease control is not commensurate with the required targets, necessitating a substantial up scaling of investment alongside more forceful interventions.

With some regulation, the sizable private sector can complement the health authorities, particularly in the provision of social safety nets to the underprivileged population segments. It is also widely understood that the initial point of contact of the general public is with private practitioners, making it imperative to train them on the protocols of important public health initiatives such as integrated management of neonatal and child health, emergency obstetric and neonatal health, tuberculosis, malaria, to ensure standardization of the best practices across the board within the health sector.

Over the past decade, the collaborative efforts of WHO were characterized with a strong continued focus on polio eradication and improvement in routine immunization; emergency response, recovery and rehabilitation; health system strengthening; support for maternal, neonatal and child health; family planning; primary health care; nutrition; tuberculosis control; malaria control; prevention and control of hepatitis; community-based initiatives; environmental health interventions, mainly for safe water and sanitation; gender and health issues such as gender-based violence; and health promotion with a particular emphasis on tobacco control.

The current strategic agenda of WHO in Pakistan was developed through a comprehensive situation analysis and intensive consultative process encompassing all stakeholders and tiers within the health sector. The strategic way forward for the health sector in Pakistan calls for revision of WHO priorities for engagement with a more strategic focus on critical cross-cutting areas such as health system strengthening to create an enabling environment for provision of effective maternal, neonatal and child health, communicable disease control, nutrition support interventions and health promotion strategies. Strong emphasis is also needed on social determinants of health, particularly gender and human rights issues. In the context of devolution, the strategic vision of WHO technical support to Pakistan is being mainly guided by the vacuum created by the abolition of the Federal Ministry of Health alongside the enhanced technical assistance needs of the provincial departments of health. The CCS will have a provincial focus, requiring upgrading of WHO provincial sub-offices both in technical and managerial terms to enable meaningful presence and provision of appropriate technical support to departments of health for requisite capacity-building. The WHO country office intends to assume a more proactive role as the principal technical adviser to the Government of Pakistan and all provincial governments on health issues. It will therefore require the capacity and authority to fulfil these functions effectively in a rapidly changing environment.

SECTION 1. INTRODUCTION

The Country Cooperation Strategy (CCS) reflects the medium-term vision for technical cooperation with a Member State and defines the strategic framework for working within that country. It is the key document to guide the biennial collaborative operation plan of the World Health Organization (WHO) with countries, usually over a period of six years. The CCS brings together the collective technical strength of WHO support at the country office, Regional Office and headquarter levels in a coherent manner with a view to address the health priorities and challenges in the country, envisaging a close and meaningful collaboration between different tiers of the organization.

With a fundamental view to facilitate the provision of Health for All within the purview of primary health care philosophy, the CCS examines the health situation in the country by adapting a holistic approach on the health sector, socioeconomic status, social determinants of health and upstream policies and strategies that have a major bearing on health. It identifies the country-context sensitive health priorities alongside WHO support to be provided within the stipulated timeframe in order to have a stronger impact on health policy and health system development and strengthening the linkages between health and cross-cutting issues. This medium-term strategy does not however, preclude a response on any additional technical and managerial areas in which the country may require WHO assistance.

The CCS process takes into consideration the work of all other partners and stakeholders in health and health-related areas including community representatives and religious scholars, and is sensitive to evolutions in policy or strategic exercises undertaken at any level. In particular, the CCS is developed to assist the implementation of the United Nations Development Assistance Framework (UNDAF) and preparation of the Common Country Assessment. The overall purpose is to provide a foundation and strategic basis for planning as well as to improve WHO contribution to the Member States, particularly in achieving the Millennium Development Goals (MDGs). Pakistan is currently lagging behind and off track in almost all the relevant health indicators, with a few exceptions including achieving full immunization coverage in children 12–23 months, lady health worker coverage of the population and children less than 5 years reporting diarrhoeal episodes and oral rehydration therapy. A strong, well-organized effort and commitment of the Government of Pakistan ably supported by the United Nations partners and donor organizations will be required to move as close to the MDG targets in 2015 as it possibly can.

The CCS document has six chapters. The first is the introduction. The second chapter undertakes a situation analysis of key health programmes and social determinants of health with identification of critical priorities and challenges. Chapter 3 describes partnerships and aid flow to the health sector with discussion on the role of key partners and donors, the trends of external assistance and the dynamics of how partnerships and other support by internal and external donors are coordinated and managed. As the country relies heavily on external assistance, the flow of aid, shortfalls and gaps are analysed along with an assessment of the specificity of external assistance to address key priorities of the health sector of Pakistan. The fourth chapter describes the WHO country programme, areas and nature of support provided in the previous 2–3 biennia and takes stock of the strengths and challenges in sustaining WHO operations in Pakistan. In Chapter 5, the strategic priorities are synthesized and articulated for collaboration with the country over the next CCS time-frame. Chapter 6 makes

an assessment of the impact and how best WHO assistance can be strengthened, realigned and harmonized at all levels to support the country in addressing its most important strategic priorities particularly in the context of devolution. Strong emphasis is placed on developing partnerships within the United Nations agencies, funds and offices, international donors, nongovernmental organizations and other development partners, particularly those that are involved in health as a regular function as well as during disasters and emergencies.

SECTION 2. COUNTRY HEALTH AND DEVELOPMENT CHALLENGES

2.1 Geographical overview

Pakistan gained independence in 1947 and has a land area of nearly 800 000 square kilometres and an estimated population of 173.5 million (2010). It is the fifth most populous country in the world and the largest in the WHO Eastern Mediterranean Region, with approximately two-thirds of the population residing in rural areas. The country is divided into five provinces, namely Punjab, Sindh, Balochistan, Khyber Pakhtunkhwa (KP) and the relatively smaller Gilgit–Baltistan, as well as three territories, namely Federally Administered Tribal Areas (FATA), Azad Jammu and Kashmir (AJK) and the Islamabad Capital Territory.

2.2 Poverty and health

The links between ill health and poverty are well known.[1] In addition, the link between low levels of education and high fertility not only exacerbates the mortality risks among women and children, but also keeps children away from schools, thereby reducing their chances of a productive adulthood. In Pakistan, public expenditures on health are low, even though they are viewed as part of the government's poverty reduction efforts aimed at making progress towards achieving the MDGs by 2015 (see Table 1). Security and governance challenges in some parts of the country are emerging as another major risk to health outcomes, with state-building fast becoming part of the orthodoxy of security and development. Investment in health has a long-term beneficial effect, as improving health outcomes reduces poverty and helps to eliminate a major risk factor for further conflict. The health sector is seen as a legitimate entry point for wider state-building as it contains a highly skilled workforce and a relatively good evidence base.

1 *Investing in health. A summary of the findings of the Commission on Macroeconomics and Health*. Geneva, World Health Organization, 2003.

Table 1. Progress towards the health-related Millennium Development Goals

Goal and related indicators	2003	2004	2005	2006	2007	2008	2009	2010*
MDG 4: Reducing child mortality								
Under five mortality rate (deaths per 1000 live births)	88.6	86.2	83.9	82.0	80.02	78.1	75.7	77
Infant mortality rate (deaths per 1000 live births)	71.2	69.5	67.8	66.4	65	63.6	61.9	65
Children 1 year old immunized against measles (%)	61	67	78	80	80	85	80	90
MDG 5: Improving maternal health								
Maternal mortality ratio (deaths per 100 000 live births)	–	–	310	–	–	–	–	300
Births attended by skilled health personnel (%)	–	31	–	–	38.8	–	–	60
Current contraceptive use among married women 15–49 years old, any method (%)	32.1	–	–	26	29.6	27	–	51
Adolescent birth rate (births per 1000 women)	23.7	–	20.3	18.1	16.1	–	–	–
MDG 6: Combating HIV/AIDS, malaria and other diseases								
People living with HIV, 15–49 years old (%)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
HIV incidence rate, 15–49 years old (%)	0.01	0.01	0.01	0	0	0	0	–
Condom use to overall contraceptive use among current married women 15–49 years (%)	19.9	–	–	20	23	20	–	–
Malaria incidence per 100000 population	–	–	–	–	–	881	–	–
Tuberculosis prevalence per 100 000 population	510	484	455	424	398	379	373	300

Source: United Nations MDGs database (mdgs.un.org)

– Data not available

*2010 Figures are taken from Pakistan MDGs report 2010

2.3 Health status of the population

The overall health status in Pakistan has improved since the 1990 albeit at a much slower pace in relation to its neighbouring countries. The increase in life expectancy at birth, from 64 years to 67 years in the past decade, has not been substantial. It is, however, higher than the life expectancy at birth in India and Bangladesh, but significantly lower than in Sri Lanka, Indonesia and Malaysia. Pakistan ranked 145 among 189 countries on the Human Development Index in 2011.

The vulnerability of the Pakistani population with regard to health stems from the many challenges to its health system ranging from poor health indicators, low health investments, expenditures and utilization. However, this vulnerability is exacerbated by the poor social determinants of health such as illiteracy, unemployment, gender inequality, social exclusion, rapid urbanization and environmental degradation. Women continue to face the risk of limited access to reproductive health services and pregnancy related morbidity and mortality. Nearly 11 000 women and girls die annually while giving birth, signifying one of the highest maternal mortality rates in the Region. In 2008–2009 only 28% of births were attended by a doctor and an overwhelming 65% of women delivered their children at home.[2] Limited access to essential prenatal and postnatal medical services all over the country is further

2 Government of Pakistan 2010

compounded by marked disparities among different provinces and between rural and urban areas. Similarly malnutrition remains widespread with few significant or positive outcomes achieved in the last two decades. A comparison of provincial indicators for maternal, newborn and child health and for nutrition is provided in Annex 1.

2.4 Provincial health profiles

2.4.1 Punjab

Progress towards achieving health goals has remained uneven for the nearly 96 million people of Punjab, with a number of districts being at a greater level of deprivation as compared to the provincial average and experiencing a greater burden of poor health within the population. The province is currently facing a double burden of both communicable and noncommunicable diseases while its health system is working under systemic inertia. The Government of Punjab, cognizant of the emerging health needs of its people, has made substantial investment in the health sector during the past few years. However, significant improvement in health indicators has not been achieved.

Punjab, like the country as a whole, is at the early stage of an epidemiological transition. While communicable diseases still account for a predominant share of morbidity and mortality in the province, the prevalence of noncommunicable diseases is rapidly rising. Some areas in Punjab and some segments of the population, especially women and children, bear a disproportionately higher burden of ill health, and yet have limited access to health care services. The current macroeconomic environment provides limited fiscal space to resolve the health care challenges in Punjab. In this context the identified challenges and analysis highlight major issues for strategic planning in the province.

Main health challenges

In Punjab, an approximate three million women experience pregnancy each year, yet maternal care in the province is beset with numerous issues leading to slow progress in improving maternal health outcomes. The province is still a long way from achieving the MDG targets of increasing skilled birth attendance to 90% and reducing the maternal mortality ratio to 140 deaths per 10 000 population by 2015. A recent effort to reduce access barriers in rural and hard-to-reach areas through mobile health services is of questionable effectiveness. Service delivery is further attenuated due to lack of basic infrastructure, as 24% of basic health units in Punjab are without a functional labour room. Similarly, at secondary health care facilities, blood banks are not available at 46% of the district headquarters hospital and *tehsil* headquarters hospitals. Deficiency of neonatal care service is evident from lack of paediatric wards at 66% and paediatric nurseries at 45% of the secondary health care hospitals. Regarding quality of care, minimum service delivery standards have been set but there is need for mentoring health facilities towards achievement of these standards. Finally, the absence of any organized primary health care service system is a glaring deficiency in health services delivery in Punjab.

Governance and accountability

If managed optimally, the health delivery system in Punjab has the organizational capacity to achieve much better results; however, weak management remains a key concern at all levels. Governance and management of the health system has three levels in the province, i.e. provincial health department, directorate and district health departments. While these organizational structures are in place, mechanisms and processes to connect policy and planning goals with organizational mandates and performance are missing. Weak management, non-transparent performance evaluation and weak incentives both at the individual and institutional level lead to lack of accountability and suboptimal performance, with absenteeism and vacant positions still widespread in the system. At all levels of the health sector in Punjab, problems are indicative of an over-centralized system that has diluted the initiative at lower levels resulting in de-motivation and lack of performance. Provincial government has made efforts in recent years to improve management through steps such as granting autonomy to district health authorities and major hospitals. However, the persistent health challenges indicate that management issues are pervading all parts of the health sector. Hence, after the 18th Constitutional Amendment the larger provincial role in health demands a re-evaluation of the organizational structure, capacity at the governance and management levels and provision of decision-making autonomy to the districts.

Health workforce

Health workforce is a critical factor in the long-term planning, implementation and sustaining of health care services. Human resource policies therefore need to lay out a medium-term to long-term path to provide skilled, motivated and accountable health workers in Punjab. Currently, no effective mechanism exists for human resource planning and development in the Department of Health. Unfavourable contractual recruitment policy and uncertainty of career progression has made the government service unattractive. Although the government has increased salaries of doctors to create higher incentives for public sector jobs, this needs to be accompanied by better career paths and service structures to retain larger numbers of doctors. Similar incentives are required for all other professionals in the health workforce.

Health information systems

The health information system is a cross-cutting component, essential for health system policy development, implementation and evaluation. However, it is an area of management that has been long ignored. The current state of health data is weak in the province and field evidence is seldom considered during decision-making and performance assessment. In the absence of demands from decision-making levels in the government, data systems have not developed sufficiently to produce timely, accurate and credible data. In the absence of a population census, which was last conducted in 1998, and incomplete civil registration (currently at 77%), household surveys have remained the key source of information on demographic and health indicators. Although multiple indicator cluster surveys have been conducted regularly to gather district-disaggregated information, there is need to initiate periodic health surveys to identify the burden of both communicable and noncommunicable diseases.

Essential medicines and medical technologies

Low availability, high prices and poor affordability of medicines are key impediments to treatment access in Punjab, even though drug procurement absorbs a substantial proportion of the health budget of each facility. In order to decentralize the procurement including rate contracting, powers were transferred to the districts to ensure timely completion of the process. The essential medicine list was last updated in 1998 and there is no system for regular revision of the list. In principle, health facilities prescribe freely provided medicines when available; however, most public sector facilities suffer from frequent stock-outs and average availability of medicines and supplies ranges from 64% at basic health units to 68% at hospitals. Similarly, the required number of vaccines is not available at 12% of basic health units. Various factors like cumbersome procurement processes, lack of budget, inadequate storage capacities and delayed supplies are associated with stock-outs of essential medicines. Regarding vaccines, there are increasing reports that the cold chain is not maintained in many areas (especially remote areas) of Punjab. Drug regulation is enforced through the Drugs Act of 1976 and a provincial quality control board has been constituted for regulating drug manufacturing, sale and quality control of drugs through implementation of good manufacturing practices. However, lack of sufficient number of drug inspectors is a major hindrance in regulating the more than 600 pharmaceutical units producing about 70 000 registered brands in the market. In the context of 18th Amendment, there is a need to strengthen the newly-established drug regulatory agency to rebuild public trust and prevent more loss of life due to spurious medicines.

Health care financing

Health care in Punjab is underfunded, inequitable, low in population coverage and low in productivity, with per capita cost investment in health of between US$ 6.5 and 7.5 per person per year in 2010–2011, resulting in high out-of-pocket expenditures of over 70% of the total health expenditure in Punjab. The Government of Punjab spends around 9% of its total expenditures on health, while districts spend around 14% of their budgets on health care. There has been an increase in budgetary allocation and expenditures during recent years; however, government spending is still far less than the critical requirement of the health care delivery system.

The provincial government receives most of its revenue from unconditional transfers distributed through the National Finance Commission (NFC) award and has full budgetary autonomy to make allocations according to its priorities. However, the current award (2010) was issued before the 18th Constitutional Amendment and has led to issues in financing of vertical programmes by the province. A coherent strategy is therefore needed that will underpin all public sector investments and also provide an enabling environment for the private sector to accelerate economic growth with benefits accruing to all socioeconomic classes.

2.4.2 Sindh

Sindh is the second most populous province of Pakistan. It has the highest growth rate in the country, 2.8%, and an estimated population of 43 million excluding 3–4 million Afghan refugees. Rapid urbanization has rendered the province vulnerable to socio-demographic

challenges for both the rural and urban populations. The major areas of concern include unsafe deliveries, low utilization of health facilities in rural areas, nutritional deficiencies, unhealthy lifestyles and a general lack of health awareness. Generally low priority is accorded to communicable disease control programmes, while scant attention is paid to noncommunicable diseases such as cardiovascular disease, stroke, cancer, diabetes, mental illness and chronic respiratory diseases.

Health workforce and infrastructure

The Sindh Department of Health currently has more than 14 000 doctors, 3000 nurses, and over 12 000 paramedics serving all over the province. The province has three medical universities, in Karachi, Jamshoro and Larkana, and two medical colleges, in Sukkur and Shaheed Benazirabad. The paramedical institutions include 12 nursing schools, 10 midwifery schools and 5 public health schools for lady health visitors in the province. The huge network of hospitals and health facilities include 6 teaching hospitals, 5 specialized institutions for chest, dermatological and mental illnesses, 11 district headquarter hospitals, 27 major hospitals located in the major cities, 44 *taluka* hospitals, 125 rural health centres in small towns, 738 basic health units in union councils, 305 dispensaries in larger union councils, 36 maternal and child health centres, 12 maternity homes and 39 centres for traditional medicine. The rural health centres provide specialist care in the morning hours in addition to minor emergency services and have indoor facilities that are seldom utilized, while the basic health units and dispensaries provide outdoor medication and preventive care until 2 pm. The rural facilities are usually ill-equipped, under-staffed and under-utilized. There is a marked urban bias for both the health facilities and hospitals of the public and private sectors, with little linkages between the two. A cadre of lady health workers (LHWs) was established at the grass-roots level in 1994 in order to ensure that health education, reproductive health, vaccination, control of diarrhoea and other communicable diseases, promotion of safe water and sanitation and other aspects of primary health care could be made easily accessible to the local community. The LHWs have completed secondary education, are preferably married, and reside in the catchment areas which they serve. They are subsequently trained to provide preventive, promotive and simple curative care. Currently, 22 000 LHWs and 705 lady health worker supervisors are working in the field in Sindh, while around 4000 more LHWs are required to cover the entire rural population of the province.

Social and health indicators

Social indicators are particularly poor among the rural population and fall below the overall average for rural Pakistan. Total fertility rate is high at 4.5, female literacy is only 12% and the inverse sex ratio, at 114, reflects gender discrimination in health status. Proper sanitation is present for only 24% of the population, with safe water and electricity available to only 64% and 52% of the households, respectively. The rural population scattered over large distances further challenges health care access and basically requires better road linkages and aggressive outreach efforts. The situation has worsened in terms of livelihood due to the decreasing agricultural productivity and heavy damage caused by successive floods in 2010 and 2011.

Over the past decade, Sindh has shown no reduction in its infant mortality rate, 81 deaths per 1000 live births, while the neonatal mortality rate actually increased from 44 to 53

deaths per 1000 live births. Although there has been some decline in the maternal mortality ratio, at 314 maternal deaths per 100 000 live births it is much higher than the national average while institutional deliveries have remained stagnant at best or even declined over the past decade. A high percentage of pregnant and lactating mothers are anaemic and more than 60% of pregnant women give birth at home with limited access to community midwives or skilled birth attendants. Women affected by diseases such as tuberculosis, malaria and hepatitis give birth to underweight and premature babies whose chances of survival are quite diminished. Likewise, poor nutrition of girls and women increases their chances of developing life-threatening complications at the time of pregnancy or during the time of an obstetric emergency. Education of women correlates with positive maternal health outcomes.

Vaccination coverage has seen a slow increase, with existing BCG coverage at 76%, measles at 51% and polio at 84%. However, a gap of 20% point exists between survey data and actual immunity levels. Gaps in coverage have led to the incidence of as many as 32 polio cases in 2011, with the highest concentration in the Karachi urban area. Under-nutrition is also a serious issue, with higher levels of anaemia and underweight children than other provinces. Sindh is the most food-deprived of all provinces, with 72% of the population facing food insecurity. Contraceptive prevalence, at the low level of 26.7%, has largely remained unchanged over the past decade and fertility reductions as seen in urban areas are mainly due to the increase in age of marriage rather than the roll-out of contraceptive services. Contrary to common perceptions, there is high unmet need for contraception in both rural and urban areas, with as much as 88% of induced abortions due to unmet need. Malaria incidence is on the rise and has coincided with outbreaks of dengue fever, requiring a comprehensive vector control strategy. Tuberculosis is believed to be endemic; however, the exact case load for Sindh is not available. Case detection, at 57%, needs further improvement while the treatment success rate of 87% is above the national target. Bloodborne diseases such as hepatitis B and C have a high prevalence of 3%–4%; however, the hepatitis B vaccination coverage is at best 14%–15% even in the high-performing districts. HIV has an overall low prevalence of 0.1% but concentrated levels of 13%–26% in injecting drug users.

Maternal, newborn and child health issues, under-nutrition, low contraceptive use and priority communicable diseases are particular problems in rural Sindh and require integrated efforts. Although urban Sindh indicators are far better comparatively, urban aggregates mask inequities in the increasing number of low income dwellers, with uneven polio coverage a case in point. Use of public sector health care is lower in Sindh at 22% compared to 29% in rest of the country and predominant utilization of private providers is seen in both urban and rural areas, even for promotive services such as maternal and child care. Rural areas have a well-designed district health system but frontline facilities and even several secondary care *taluka* hospitals are poorly utilized due to chronic staff and drug shortages and poor maintenance of facility and equipment. The LHWs programme is the flagship programme of Department of Health for community interventions but has coverage of only 20%–43% in at least 6 districts and is in need of more stringent field-based supervision in all the districts.

Private providers are the predominant providers of primary, secondary, diagnostic, pharmacy and ambulance services while the public sector dominates in provision of tertiary care for low-income groups. Sindh has 59% of Pakistan’s private for-profit hospitals as well as the largest non-profit sector comprising more than 18 large non-profit medical entities and 11 large–medium scaled health nongovernmental organizations. Successful models of

nongovernmental organizations are seen in certain districts but the scope of services is still limited. The government has initiated the Benazir Income Support Programme, Pakistan Baitul Mal Food Security Programme, and provision of vitamin A supplements to children less than five years of age through the micronutrient deficiency control programme to overcome health issues and provide social security nets to the population.

Child health

The increasing number of child deaths due to vaccine-preventable diseases are a matter of grave concern, as over 150 000 children in Pakistan die from vaccine-preventable diseases every year. The Expanded Programme on Immunization (EPI) provides vaccination against childhood tuberculosis, poliomyelitis, diphtheria, pertussis, tetanus, hepatitis B, haemophilic influenza type b and measles. It also protects pregnant women and their neonates against tetanus. Although childhood immunization is the most cost-effective health intervention known and is an investment in the future, routine coverage for the seven deadly diseases included under EPI remains below standard and polio eradication has not yet been achieved.

Poverty, low female literacy and poor environmental hygiene and living conditions are the major reasons why full vaccination coverage in Pakistan has been unattainable so far. There is an essential need to unite health professionals, civil society representatives, policy-makers, federal and provincial health officials, paediatricians, nongovernmental organizations, donors, primary health care providers and international health organizations such as the United States Agency for International Development (USAID), WHO and UNICEF for creating awareness and taking effective action to prevent and combat vaccine-preventable diseases in Pakistan. Another main reason behind growing child mortality in Pakistan is lack of child health care facilities in rural areas, where the majority of the population resides. Low state spending on health care, abject poverty, low literacy, lack of skilled birth attendants, widespread communicable diseases and insufficient emergency child health services in government-run district and rural hospitals compound this situation.

2.4.3 Balochistan

The largest (44%) and least populated (5%) province of Pakistan is more than half covered by mountains and hills; with the population density of the estimated 9.4 million people being 22 persons per square kilometre. Ensuring access to health services in this environment is thus a great challenge requiring commitment, resources and possibly innovative solutions as well. Access to health facilities is further constrained by the fact that Balochistan has the least developed roads and communication infrastructure, while the distances between health facilities are very large. The very low levels of education, especially among females, lack of access to clean drinking water and poor sanitation further contribute to the poor health outcomes. Poverty remains widespread in Balochistan, with the poorest households surviving off US$ 35 per month or less, although the differential is less marked in Balochistan than other provinces. The urban poor are concentrated in *katchi abadi* (slum) areas where nearly half of all urban dwellings are located.

Social and health indicators

Poverty has an adverse effect on health which is made worse by low literacy rate in the province of only 55% for men and 33% for women.[3] Female literacy in Balochistan rates among the lowest in the world, with most girls not enrolled in school. Use of improved water sources in Balochistan is 72% with more than half of the households (62%) with adequate sanitary toilet facilities. The overall current contraceptive prevalence rate is 14.7%, which is slightly lower (13%) for modern contraceptives (sterilization, intrauterine device, pill, injections and condom).

In the absence of a comprehensive information system, reliable figures on mortality and morbidity are difficult to obtain in Balochistan due to the systemic imperfections and inefficiencies. The crude death rate is estimated to have fallen by 40% over the past 25 years; and expectation of life at birth has increased slowly to reach 62 years for females and 63 years for males. Polio remains endemic in parts of Balochistan due to continued low intensity transmission of the wild virus affecting mainly underserved populations in particular sub-groups moving across the Pakistan–Afghanistan border. Data show that infant and child mortality worsened considerably during the 1980s, and has been gradually recovering since, although the MICS 2010 estimate of 72 per 1000 live births is substantially lower than the one from the MICS 2004 (104), which covers a similar period. For Balochistan the odds of infant death are 1.7 times greater as compared to Punjab. Another important aspect is that the odds of death in the first month are 10 times greater than in the remaining 11 months, with the neonatal mortality rate of 58 per 1000 live births being almost static over the last 20 years. In the recently published MICS 2010–2011, the data indicate that over half of the children who were ill with diarrhoea were taken to a health provider. Female children are also slightly less likely to receive medical assistance than male children. Under-five mortality in Balochistan has improved over time. The reduction in infant and child mortality indicates the potential to achieve MDG targets and thus strategies being adopted for these preventive programmes need to continue. However, inequalities in child survival outcomes persist between rural and urban areas, across districts and across socioeconomic groups.

Maternal mortality in Balochistan remains exceedingly high, and in the absence of a functional vital registration system it is very difficult to provide reliable data. Different surveys estimate the maternal mortality ratio at 500 to 785 per 100 000 live births. The 2004 provincial MICS estimate of 600 per 100 000 births indicates that improvements, if any, have been minimal since the 1990s. One of the proxy indicators for maternal mortality is delivery by skilled health care attendants, which is only 29% for Balochistan and includes deliveries by LHVs. Comprehensive emergency obstetric and neonatal care services in the province beyond Quetta are limited to 7–8 hospitals which are able to provide 24-hour coverage. High rates of fertility are often the result of inadequately spaced and repeated pregnancies which are detrimental to both maternal and child health.

3 MICS Balochistan, 2010

Nutritional status

Malnutrition is the most widespread condition affecting the health of children and the rates remain high with a small urban rural differential. As per the national nutrition survey in 2011, 39.6% of children under 5 years were underweight, 36% had moderate iron deficiency anaemia; moderate iodine deficiency was found in 15% children under 5 while moderate deficiency of vitamin A and zinc was found in 18% and 62% of children in the same age group. Lack of exclusive breastfeeding up to six months, timely complementary feeding and appropriate complementary foods, frequent infections especially diarrhoeal illnesses and measles, unhealthy traditional beliefs, maternal nutritional deficiencies, absence/inadequacy of micronutrient supplementation, household food insecurity, gender inequity and pregnancy, illness or death of the mother all contribute to the persistent problem of malnutrition.

The health care delivery system in Balochistan comprises 4 tertiary hospitals, 21 district hospitals, 1 *tehsil* hospital, 84 rural health centres, 555 basic health units, 90 maternal and child health centres and 575 dispensaries. The maternal and child health indicators are poor compared to the national indicators. This trend is seen in all the surveys, reflecting a lack of appreciable improvement in the indicators and a need to change the current implementation mechanisms in the province.

Health financing

The limited fiscal space available in Balochistan and the low level of development point to a need for further funds, especially for the health sector. In this regard, the public sector development programme for 2007–2008 indicated an amount of PKR 202 million in foreign aided health projects for Balochistan. The rate of utilization of these projects is very low and large amounts of funds are yet to be disbursed. The resources spent directly by United Nations organizations on joint projects are not reflected in the public sector development programme. There is support from UNICEF for EPI in seven districts, the European Union is supporting maternal, neonatal and child health activities in two districts, and Save the Children is also supporting maternal, neonatal and child health activities in three districts. The information on these activities is scattered and not available with the health department.

The federal government runs many vertical programmes. For the majority of these, funds are transferred to different accounts and not reflected in the provincial budget as these programmes are administered vertically through separate management units. The federal government is the sole financer of the national programme for family planning and primary health care, and after devolution has pledged commitment to continue funding of all the programmes until the next National Finance Commission award in 2015.

Health information systems

At the provincial level the responsibility for information is with the HMIS cell and the statistical cell working under the supervision of the Director General Health Services. This cell is primarily responsible for compilation of data from the districts on the HMIS reports. A major gap in the provincial structure is the lack of integration of information from the primary health care (vertical) programmes with the provincial DHIS office. The level of

dissemination of information needs to change with a focus on integration. The development of a consolidated information base at the provincial level is a longstanding requirement and would be developed on lines to accommodate gaps and challenges.

Heath systems management

The Health Department has the Secretary Health as its principal accounting officer and is the administrative head of the department. The technical side of the department is led by the Director General Health Services. The reporting relationships that exist at the provincial level although duly notified by the establishment are mainly observed in breach. The allied departments are supposed to report directly to the Director General Health Services and the programmes and teaching/training institutions are supposed to report through the Director, Public Health and Director, Human Resource Development respectively. The Director General's office has historically been the source of budget allocations and disbursement to the district. The Director General's office should now fulfil its other primary functions of technical advice and support to the districts and coordination with other departments and programmes.

There is no system of monitoring health services at the provincial level and during discussions for a monitoring mechanism the main question that arises is transport and funds for field visits. The real issues of establishment of performance indicators, technical support to the districts and enhanced management capacity at both levels are not addressed. The lack of information about the interventions or their success does not figure in the monitoring, and neither does the question of provision of services.

2.4.4 Khyber Pakhtunkhwa

Among the four main provinces of Pakistan, Khyber Pakhtunkhwa (KP) is the smallest in terms of area, lying landlocked nearly 1500 kilometres from the country's major port in the south. With a population of 17.7 million in 1998 at the time of the last census, and growing at 2.8% per annum, the total population of KP was estimated at 24.7 million in 2010, making it the third most populous province of Pakistan. Nearly half the population lives in the mountainous and arid areas. The population density of the province was 332.4 people per square kilometre in 1998. Peshawar is the most urbanized city of the province, followed by the districts of Kohat, Hangu and Mardan.

The recent NFC award has increased the provincial share of the divisible pool; as a result total federal transfers to provinces were enhanced from US$ 7.7 billion in 2009–2010 to US$ 11.4 billion in 2010–2011. The share of KP has increased accordingly from US$ 0.7 billion in 2009–2010 to US$ 1.3 billion in 2010–2011, reflecting an increase of 82.5%. The deterioration in the security environment has perhaps been the single largest factor which has derailed the province from investing in development as planned. The situation has been compounded by the devastation caused by the recent floods. Major issues relating to the health sector include weak management and governance systems, partially functional logistics and supply systems, poorly motivated and inadequately compensated staff, lack of adequate supportive supervision, evidence-based planning and decision-making, and low levels of public sector expenditure and its inequitable distribution.

Nutrition and food security

It is difficult to ascertain the percentage of underweight children in KP today; the most recent figures available date to 2001 and indicate 38% of all children under the age of five were underweight. District detail reflects the highest percentage of underweight children in Kohistan (52%), which has consistently shown the poorest record of socioeconomic indicators. The districts with the least incidence of underweight children were Karak, Malakand and Peshawar, but even here, a third of children surveyed were found to be underweight. Most of the problems affecting child health and the provision of health services to children are related to social determinants of health, including illiteracy, unemployment, gender inequality, social exclusion, lack of access to safe drinking water and inadequate sanitation and food insecurity, combined with the slashing of funds for the health sector due to the prevailing fiscal crisis.

Health indicators

The infant mortality rate for KP was 63 deaths per 1000 births in 2007. Reduction in the infant mortality rate has not been in line with the MDGs target; in fact, the rise in infant mortality from 69 to 79 deaths per 1000 live births in the early part of this decade was a considerable source of concern for the provincial government. Despite a wide disparity in reports, the latest estimates show that 73% of children from 12 to 23 months of age in the province have been fully immunized, which is a marked improvement from 47% reported in the PDHS 2006–2007. The immunization programmes appear to have been quite successful in the urban areas of several districts in KP. In some urban regions, 100% of children are recorded as fully immunized (e.g. Charsadda, Chitral, Swabi and Lower Dir). Rates of immunization in rural areas have been found to be highest in Malakand and Swat, both districts where militants were active in 2007–2008 and tried to disrupt immunization campaigns. Mardan, Nowshera, Chitral and Charsadda also had high immunization coverage in rural areas. The lowest immunization rate was in the rural areas of the districts of Kohistan and Lakki Marwat, standing at 33% only. There are a total of 13 702 LHWs working in the province in 2011, estimated on average to be covering about 58% of the population. Coverage was particularly good in Chitral (95%), Lakki Marwat (94%), Abbottabad (93%) and other districts in the Hazara belt, and in Karak (84%). In general, coverage was more than 50% in over half of KP districts, but fell to about a quarter of the population in districts such as Buner, Upper Dir and Hangu. Coverage was practically non-existent in Kohistan, at barely 2%, due to the difficulty in finding educated local girls to be trained as LHWs, as the unique sociocultural traditions of the area preclude sending women from other districts into Kohistan.

The total fertility rate in the province for the mean number of children born per adult female was estimated to be 4.3 in 2006–2007, which compared to the figure of 5.5 recorded in 1990–1991 indicates only modest progress in this regard over a period of 15 years. Contraceptive prevalence rates, however, seem to be showing an upward trend and the PDHS 2006–2007 indicates a substantial increase to 25%. Antenatal health care coverage is estimated at 51.3% for the province.

2.4.5 Gilgit–Baltistan

Formerly known as the Northern Areas, this is a small northernmost newly created province within Pakistan covering a mountainous area of 72 971 square kilometres. It has an estimated population approaching 1 million, with its capital in the city of Gilgit. The Department of Health is responsible the prevention and control of infectious and contagious diseases including tuberculosis and malaria, nutrition and food safety issues, immunization, blood transfusion services and population planning. WHO's sub-office for AJK also handles matters relating to this province.

2.5 Social determinants of health

Pakistan is vulnerable to a range of disasters including avalanches, cyclones and storms, droughts, earthquakes, epidemics, floods, glacial lake outbursts, landslides, pest attacks, river erosion and tsunamis. Human induced hazards that threaten the country relate to transport, industry, oil spills, forest fires, civil conflicts and internal displacements of communities as a result of multiple factors. On the global seismic hazard map, Pakistan is crossed by two major fault lines and stands out as one of the most earthquake prone countries. With 175 million people, representing only about 2.5% of the global population, Pakistan experiences an average of 2393 disaster-related deaths on annually, constituting 3.4% of the 70 000 annual disaster-related deaths worldwide.

Lack of safe water and sanitation facilities constitute a major determinant of communicable diseases. In urban areas 66% of households have an improved source for drinking water; however, 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. 30% of Pakistani households, mostly in rural areas, do not have any toilet facility.[4]

As the delivery of quality health care services is critical in the immediate aftermath of any disaster, it is important that the health care delivery system performs with versatility and efficiency in such situations. Health service providers need to provide services that meet the health needs of the affected population with minimal interruptions. A recent impact assessment of the 2010 floods conducted by WHO and Johns Hopkins School of Public Health found that following disaster, 79.1% of households required health care at least once, with an average occurrence of 7.7 health care events per household. Of these, 77% reported the health issue being related to flood. Only 5.6% of households were unable to access care, for which the most common barriers were the cost (66.6%) or the distance to the health care facility (31%). 61% reported that access to health care was either the same or better since the flood, while 66% claimed similar or better access to pregnancy services compared to before the flooding. Of the 66.9% children of all households receiving vaccinations after the floods, 33% had been reached by a mass campaign, with 94.3% and 43.6% receiving oral poliovaccine and measles vaccine, respectively. The study shows that emergencies can

4 Pakistan Demographic and Health Survey 2006–2007

positively impact health and that care providers may perform better during and after emergencies than under normal conditions.

Illiteracy, unemployment, gender inequality, social exclusion, rapid urbanization, environmental degradation and natural disasters contribute significantly to the overall poor health of the Pakistani population. Low levels of education, low resources and weak detection and monitoring systems leave people exposed to threats from pandemics. For example, the National Institute of Health confirmed the first death from the influenza A H1N1 virus only in December 2009; however, by January 2010, the virus had resulted in more than a dozen deaths and affected over 150 people despite government efforts to contain the pandemic.

2.6 Barriers to accessing health services

Provincial differences in access in terms of distance to the nearest health facility in rural areas are shown in Table 2. The situation is generally better in the rural population of Punjab, with 74% having access to the nearest hospital/dispensary within 10 kilometres as compared to 67% in Sindh, 59% in KP and 36% in Balochistan. In the case of private doctors, 49% of the population in Sindh has access within 10 kilometres as compared to 70% in Punjab. Given its low population density, Balochistan suffers most in terms of access to health facilities.

Performance of the public health system is marked by low utilization rates and inadequate institutional frameworks for outsourcing health services, as reflected by only 0.12 to 0.2 new cases per person per year utilization of public health services and only 20% to 30% of primary health care delivered by the public sector. The utilization rate was increased to 1 to 1.5 new contacts per person per year during the 2010 flood emergency due to heavy external investment and increased burden of disease. The outsourcing of primary health care services by the provincial and district health authorities to semi-public systems like the People's Primary Health Care Initiative (PPHI) or the PRSP (Punjab Rural Support Programme) is an appealing yet contentious design. On 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 with lack of adequate regulation and supervision from health authorities at the federal and provincial/district level. Finally, there is insufficient institutional capacity for procurement and purchase of equipment, supply and for contracting out maintenance services.

Table 2. Percentage population with access to health services within 10 km

Health facility	Punjab (%)	Sindh (%)	KP (%)	Balochistan (%)
Basic health unit	80	65	65	56
Rural health unit	77	65	59	32
Hospital/dispensary	74	67	59	36
Private doctor	70	49	56	NA
Maternal and child care centre	68	53	50	NA

Source: Mouza census 2008

NA Data not available

It is pertinent to mention the Adelaide Statement on Health in All Policies, developed in 2010 to engage leaders and policy-makers at all levels of government, which emphasizes that government objectives are best achieved when all sectors include health and well-being as a key component of policy development. This is because the causes of health and well-being lie outside the health sector and are socially and economically formed. Although many sectors already contribute to better health, significant gaps still exist. The Adelaide Statement outlines the need for a new social contract between all sectors to advance human development, sustainability and equity, as well as to improve health outcomes. This requires a new form of governance where there is joined-up leadership within governments, across all sectors and between levels of government. Some of the sectors and issues that can be taken up under Health in All Policies include economy, employment, security, justice, education, early life, agriculture, food, environmental sustainability, housing, community services, land and culture.

This approach was strongly supported by the 62nd World Health Assembly in May 2009, which has called upon the international community to take action in collaboration with WHO Member States on assessing the impacts of policies and programmes on health inequities and addressing the social determinants of health. WHO has a major role in promoting this approach which calls for enhancing health equity and incorporating it in all national policies addressing those determinants and consider developing and strengthening universal comprehensive social protection policies, including health promotion, disease prevention and health care, along with promoting availability of and access to goods and services essential to health and well-being.

Pakistan has also played a leading role in fostering the BDN approach since 1995 which substantiates a holistic vision incorporating the missing links in primary health care through community involvement and intersectoral action to bring about human development. BDN promotes ownership for a set of essential package of community needs and recognizes local organizational capacities and mobilization skills as the major driving force for attaining a number of desired health outcomes, while ensuring their long term sustainability. This strategy has been effective in scaling up primary health care services and recognized health as an essential social goal for community development. In addition to the BDN initiative, possible entry points for action on social determinants of health include interventions on hand-washing, tobacco, sanitation, waste disposal and appropriate use of pesticides, and gender and health including health sector response to gender-based violence. All these aspects require collaboration with other sectors to be effective. Pakistan’s strong One UN agenda can also serve as a vehicle for promoting intersectoral action.

2.7 National responses to overcome health challenges

Pakistan has a multi-tiered and mixed health care delivery system that has grown exponentially during the past three decades, with an increasing number of programmes, projects, interventions and facilities, many of them on a fragmented and time bound basis. These are supported by different levels of government and/or development partners with overlapping geographical and thematic areas, leading to duplication and wastage of resources. The health care delivery system includes both state and non-state, and profit and not-for-profit service provision. The provincial and district health departments, para-statal organizations, social security institutions, nongovernmental organizations and private sector

finance provide services mostly through vertically managed disease-specific mechanisms. The public priorities in allocation of expenditure on health are highlighted in Table 3. It can clearly be seen that the highest share of the expenditure (73%) in 2001–2002 was on general hospitals and clinics, which declined slightly to 68% in 2009–2010. Maternal and child health care facilities received the lowest share in the expenditure, less than 1%, in 2009–2010. There has, however, been a significant increase in expenditures on health facilities and preventive activities from 13% in 2001–2002 to 20% in 2009–2010.

Public policy shows a low priority for health and as such there is the minimal allocation at only 0.6% of the GDP in 2009–2010. In 2007, public spending on health Pakistan was US$ 64 per capita (in purchasing power parity) as compared to US$ 109 in India, US$ 179 in Sri Lanka, US$ 233 in China, US$ 286 in Thailand, US$ 604 in Malaysia and US$ 677 in Turkey. Given the low coverage of governmental health facilities, the private sector has emerged as the principal provider of health services in the country contributing to 60%–70% of the health care in Pakistan.

In the current scenario, although the provincial and district levels of health management theoretically have clear roles and responsibilities, in practical terms many functions overlap. Moreover, the situation at federal level is somewhat fragmented after the dissolution of the Ministry of Health and devolution of its responsibilities to provincial departments of health. According to the rules of business under the Constitution, the major roles of the federal government related to policy formulation, provision of technical backstopping and coordination with different partners within and outside the country. However an overemphasis of the former Ministry of Health towards national programmes diminished its stewardship and governance roles of policy-making, regulation and financing.

Provincial departments of health are responsible for translating the national policy into planning and actual implementation through generating the required human resources, providing specialized care through the tertiary care hospitals, and overseeing primary and secondary health services provided by the district. Actual service delivery takes place at the district level where the two tiers of primary and secondary health outlets are managed. Districts also implemented the federally or provincially financed health programmes, resulting in dichotomy in the management due to the dual command mechanism.

Table 3. Priorities in public (federal/provincial) expenditure on health (%)

Area of expenditure	2001–2002	2006–2007	2009–2010
General hospitals and clinics	73.3	70.0	68.4
Maternal and child health centre	0.3	2.6	0.4
Health facilities and preventive measures	13.6	16.4	20.2
Other	12.8	11.0	10.9
Total	100.0	100.0	100.0
Total expenditure (US$ million)	203	562	998
% of GDP	(0.4)	(0.6)	(0.6)

Source: Poverty Reduction Strategy paper progress report

All preventive services are implemented at the district level where the government is virtually the sole provider, with a significant role of the private sector in the provision of curative services. This is reflected in the high expenditures by households on health. According to the Household Integrated Economic Survey 2007–2008, the average expenditure per household per month was US$ 17.7, which aggregates to over US$ 5 billion on an annual basis for the country as whole. The burden of health expenditure is high even on the lowest quintile of households who spend over 10% of their monthly income on such expenditure.

2.8 Post-devolution scenario in the health sector of Pakistan

The unanimous adoption during April 2010 by the Parliament on 18th Amendment to the Constitution of Pakistan was a highly popular move that reverted many responsibilities from the federation to its federating units, or provinces. As a result, as of end June 2011, 17 ministries or divisions were totally abolished at the federal level including the Ministry of Health. Furthermore, certain critical health functions that constitutionally vest with the federal government and whose technical nature require careful handling have been assigned mainly to seven divisions of the Government of Pakistan. These are the Planning Commission, Cabinet Division, Economic Affairs Division, Inter-Provincial Coordination Division, States and Frontier Regions Division, Capital Administration and Development Division, and a newly created Health Services and Regulations Division, which may lead to a certain degree of fragmentation with no clustering under a single entity. This raises concerns that certain critical oversight functions requiring federal intervention may be compromised, such as health policy formulation, human resource planning, enabling policies on medicines, vaccines and biological, responding to public health emergencies, compliance with domestic and International Health Regulations, fulfilling international commitments including the three health-specific MDGs, and coordination and monitoring and resource mobilization.

2.9 National health policy

The draft national health policy 2010 was developed after broad consultations with all the national and provincial stakeholders. It hinges on the concept of Health for All through primary health care services and promotes development of minimal essential services package for health facilities with a view to ensure quality, standards and efficiency at the delivery level. The national health policy 2010 is based on seven fundamental pillars: universal access to essential health services; streamlining human resource for health; reliable health information systems; effective use of health and medical technologies; safety nets; governance and accountability at all levels; and intersectoral linkages for improved health outcomes. Significant differences in this policy approach are a strong emphasis on preventive services, phasing in of different services, and advocacy for safety nets and increased health spending for the poorest segments of the population.

2.10 Health systems and services and the response of other sectors

2.10.1Human resources for health

There is an imbalance in the human health workforce in Pakistan, resulting in more doctors than nurses, a dearth of trained midwives, high urban concentration and rural to urban disparity, intensified by continuous drain of qualified personnel. In addition to the overall

numbers of health professionals, there are also individual shortages of specialists, particularly beyond certain urban centres resulting in gross disparities among geographic areas. The quality of medical care is further compromised by substandard medical curricula, lack of in-service training and continuing supervision along with a poorly defined service structure for health workers that favours tenure over competence, ignores technical capacities and does not allow for rewarding good performance or cater to accountability in health care. The health system is currently not conducive to non-physician providers such as nurses, midwives and allied health professionals that play a pivotal role in ensuring the provision of vital primary health care services in the absence of doctors.

The types and number of services delivered by primary health care facilities are severely constrained by the number and categories of health providers present. The absence of a doctor or medical officer is often cited as the main reason for a non-functional basic health unit and impeded access of women to essential maternal health care. Consequently, providers deliver the types and standards of services that are most beneficial to them and not necessarily those required of them. Additionally, certain specialized fields such as nutrition lack trained human resources deployed at the health facilities, compromising the quality of services. The health workforce is central to advancing the quality of health care. Investments during the past three decades have resulted in considerable improvement; however, the lopsided focus on human resource development with insufficient emphasis placed on nursing and paramedical education has led to a negative impact on the quality of health care. While Pakistan has a critical shortage of health staff, there is no well-defined policy for human resource development in the health sector, and the provincial departments of health lack organizational structures for carrying out human resource development at the requisite levels. Several critical issues also limit the quality of workforce produced, such as curricula not matching local health needs and educational institutions ill-equipped to provide quality education. Furthermore, there is inadequate emphasis on use of information technology, communication methods, medical ethics, or the bio-psycho-social model of health. Re-orientation of medical education and curricula is required to introduce problem-based learning relating to the true community needs, in order to increase the focus on public health, prevention and promotion of health.

Dynamic health management is required for the functioning of an efficient health care delivery system capable of achieving the desired goals and targets within the available meagre resources. Health management is not generally regarded as a specialized field, and although public health courses are being increasingly offered in some institutions, managerial positions are mostly filled on a seniority basis, with medical doctors often shuffling between clinical and management positions. The mechanism for in-service training for different cadres in the health sector is not institutionalized with only a few activities carried out through donor-driven projects. Some courses are offered through the Health Services Academy, provincial and district health development centres and certain institutes of public health since the 1990s on an ad hoc basis. Similarly there is no formal policy, national standards or guidelines for structured implementation to update knowledge and skills of health care providers, including programmes for continuing medical education and systems of re-accreditation of doctors, nurses and paramedics. Other critical areas in which there is shortage of skilled health workforce include management of hospitals and health systems as a whole. Achieving the MDGs will depend on finding effective human approaches that can be implemented rapidly. Considerable and

coherent thinking is required in several areas to formulate ways of recruiting and retaining health workers with adequate opportunities for career development.

2.10.2Quality of health care service delivery

The health system has expanded gradually with a large network of health facilities, workforce and services across Pakistan, despite uneven progress in the health sector. In 1947, there were 292 hospitals in the country which had risen to 989 public and 800 private hospitals in 2010. There are 596 rural health centres and 4910 basic health units functioning at the primary health care level. Additionally there are 5007 dispensaries and 1140 maternal and child health centres providing outpatient services in urban areas.[5] Information on the private sector is grossly lacking; however, a rough estimate indicates around 20 000 private clinics in Pakistan.

- Pakistan had two medical colleges in 1947. In 2010, this number had risen to 78 medical and dental colleges, with 34 in the public sector and 44 in the private sector. The number of registered doctors has increased exponentially, from 78 in 1947 to more than 113 700 doctors, 8700 dentists, 21 800 specialist doctors and 540 specialist dentists in 2010.[6]
- The nursing profession has also seen growth with 109 schools of nursing (76 in the public and 33 in the private sector), 141 schools of midwifery, 26 public health schools and 7 colleges of nursing. More than 46 000 nurses and 4500 lady health visitors (LHVs) are registered with the Pakistan Nursing Council[7] backed up by a community-based workforce of over 100 000 LHWs.[8] Pakistan has also recently initiated a programme to deploy 12 000 community midwives in the rural areas.[9]
- Currently, there are 25 000 pharmacists registered in the country with 20 institutions awarding doctoral degrees in pharmacy. About 525 pharmaceutical units produce more than 47 000 pharmaceutical products; and medicines costing US$ 100 million are exported every year.[10]
- Federal, provincial and district governments are implementing national health programmes mainly focusing on cost-effective interventions. Recent successes include increased access to maternal, neonatal and child health and family planning services in rural communities through expansion of the LHWs cadre from 38 000 in 2001 to more than 100 000 in 2010; while about 5000 community midwifes are under training before deployment in their own communities.

However, despite improvements the health sector in Pakistan continues to face many challenges. The key issue remains slow progress in improving health outcomes, and the poor who most require the services are ostensibly benefiting the least from the health system. The expanded infrastructure is poorly located and inadequately equipped and maintained,

5 Government of Pakistan 2010
6 Pakistan Medical and Dental Council 2010
7 Database of the Pakistan Nursing Council 2011
8 Management information system of the Lady Health Workers' Programme, Ministry of Health, 2011
9 Project document (PC-1) of National Maternal, Newborn and Child Health Programme, Ministry of Health
10 Drugs Control Organization, Ministry of Health, 2011

resulting in inadequate coverage and access to essential basic services. The private health sector continues to expand unregulated, mainly in urban areas.

2.11 Information systems, research and surveillance

Research, monitoring and evaluation and surveillance remain weak at all levels due to a lack of focus on results and the absence of an integrated system. The need for evidence-based knowledge to inform policy-making and management decisions is especially imperative for the efficient use of limited resources and the benefit of the poor and marginalized people. Despite recognition of the importance of using research to influence policy and practice, understanding of how evidence uptake might be achieved is less clear.

Information systems are present in most first level care facilities and in the major national programmes, enabling a culture of continuous data reporting. However, these systems are fragmented leading to duplication of efforts. The health management information system (HMIS) developed during the early 1990s is functional and is being converted to district health information system (DHIS). It continues to be confronted with major issues such as poor data quality and accuracy with negligible use of information for decision-making at all levels. Other information sub-systems such as the human resource information system were not established as earlier envisioned, nor were their indicators incorporated in DHIS. Public hospitals lack a standardized information system, with most hospitals maintaining their own systems without any regular reporting mechanism. There is also no system to gather information from the large private sector hospitals to enable the state to undertake its function of protecting the larger public interest. Although LHWs are working at the community level, the nutritional status surveillance at community level is not comprehensive enough to combat the increasing levels of malnutrition.

Weak information systems often lead to sub-optimal institutional mechanisms for monitoring and evaluation, coupled with lack of ownership and organizational support for data and information. Governments tend to focus more on routine data coming from the health information systems than on data collected through household surveys. Pakistan has not undertaken a national health survey for more than a decade.

Monitoring and evaluation are key provincial responsibilities and critical for enhancing accountability and making the system results-oriented. The Ministry of Health has earlier taken steps to strengthen monitoring and evaluation including a detailed assessment of the DHIS incorporating data from the hospital sector. The third party evaluation of DHIS and the performance assessment analysing secondary data for intermediate health outcomes generated from the PSLM survey are steps in the right direction to generate more information to facilitate informed decision-making; however, greater efforts are needed.

Public health surveillance is a recognized responsibility of the state. However, at present Pakistan has no single surveillance system able to generate high quality information for taking key public health decisions. The fragmentation results from lack of organizational capacity for surveillance at all levels, a legal framework for disease reporting and a skilled workforce and resources for this important function. In addition, no public health laboratory network exists in the provinces. A detailed framework has been developed for implementing the International Health Regulations; however, it is not fully in place. Some aspects of the

plan are being implemented, for example a training programme through Fulbright fellowships for researchers has been started to produce a skilled workforce for surveillance. The framework entails development of a comprehensive surveillance system and enhanced capacity at federal, provincial and district levels.

2.12 Governance and accountability

There is ample evidence that the health system that delivers health care is only as good as its management and the oversight accorded to it. Better governance and accountability can address both. The institution of good governance in essential medicines will lead to more evidence-based policies and practices. Furthermore, the focus on inputs and outputs should be shifted to results-based management. By insisting on results without micro-management, programmes will have to achieve the results intended within allocated budgets, by means that are best suited for the purpose, and be accountable for their own actions.

The private sector is become increasingly involved in the delivery of health care services in Pakistan, resulting in significant changes in the roles, responsibilities, access and ownership within the sector without any formal guidance, strategy or regulation in place. Some experience has been derived from PPHI and PRSP contracting out models of basic health units in Punjab and Sindh provinces. The need for ensuring basic legislation and a working legal recourse governing the licensing and registration of all health professionals and facilities is paramount, though KP and Punjab have been endeavouring to achieve this over the last few years. Development of a regulatory framework for accreditation and quality standards is another prerequisite for greater involvement of the private sector in the delivery of health care services.

2.13 Medical technologies and the pharmaceuticals sector

Pakistan had no pharmaceutical manufacturing unit at the time of independence, and all its requirements were met through imports. The local pharmaceutical industry, responding to indigenous demand, developed over time to a size of about US$ 1 billion with exports of US$ 160 million annually (0.22% of global pharmaceutical market) in 2007. There are over 60 000 registered products manufactured by 525 companies including 30 multinationals.[10] However, not a single one is approved by WHO, the European Medicines Agency, Food and Drug Administration or any stringent regulatory authority.

The pharmaceutical sector in Pakistan needs to be more effectively regulated in order to ensure the quality, safety, efficacy and affordability of medicines. The national medicines regulatory capacity and infrastructure has not kept pace with the impressive growth of the pharmaceutical industry or with global regulatory trends. The prequalification programme of WHO aims to increase the number of quality assured medicinal products for each priority medicine in order to achieve more choice, lower prices and better supply security. Increasingly important is the maintenance of the quality, safety and efficacy elements of products already prequalified. The country bioequivalence capacity is also very limited. A drug regulatory authority was recently established.

Provision of essential medicines is an important component of primary health care. Pakistan will be supported in making full use of the evidence in updating its lists as the basis

for the supply, financing, reimbursement, quality assurance and rational use of essential medicines for primary health care and the referral systems. The government has developed the national essential medicines list for different tiers of the health system; however, compliance with the guidelines is poor. Widespread over-the-counter sale of drugs and over-prescription by physicians due to unethical marketing practices is increasing the cost of treatment, contributing to drug resistance and exposing the population to unforeseen hazards due to self-prescribing. There is also a need for more rational use of medicines through improved supervision, availability of treatment protocols and appropriate training. WHO will continue to support a systematic approach to pre-service training of health staff.

As a policy initiative, WHO will facilitate the integration of traditional medicines into the national health system with a focus on regulation of traditional medicines and practitioners to ensure promotion of quality, safety and efficacy. The flourishing traditional medicines market also needs proper control, registration and periodic inspections.

Drug procurement constitutes a major proportion of largely out-of-pocket health expenditures, underscoring the need for a pro-poor drug policy that maintains the prices of essential medicines at affordable levels while ensuring the necessary focus on quality, safety, efficacy and availability. Procurement procedures need to be adjusted to avoid wastage and duplication with limited internal controls. Integrated supply and management will be encouraged for diseases that pose the greatest health burden. WHO will also assist the country in addressing the issue of counterfeit medical products that challenges public confidence in the system, affecting the reputation of manufacturers, wholesalers, pharmacists, doctors, private organizations and government institutions alike.

2.14 Health care financing

Pakistan continues to spend less on health than other countries at similar levels of economic development. The total expenditure on health in Pakistan in 2008 was estimated to be US$ 18 per capita, of which public sector expenditure was US$ 4 per capita.[11] This is far below the figure of US$ 34 proposed by the Commission on Macroeconomics and Health to provide essential package of health services. Over the past 15 years, public health expenditures have increased by 50% in nominal terms. However, taking into account population increase and inflation, real expenditure as a percentage of GDP has remained at below 0.6%.[12] Between 2001–2002 and 2006–2007, public sector investment increased by 90% in real terms compared to by 5% over the previous 5 years, but this increase did not meet the targets set under the Poverty Reduction Strategy Paper-I and Fiscal Responsibility Act 2005. There is a general lack of information on private health expenditure in Pakistan, despite estimates that out-of-pocket spending contributes to 75% of the total health expenditure in Pakistan.[11] Hence, in the absence of social protection mechanisms a large number of families are at risk of poverty due to catastrophic events of illness.

A total of 2.9% of the GDP is spent on health with 1.16% by the public sector and a larger share of 1.17% by the private sector. Public sources account for 33.3% of health

11 WHO national health accounts database (http://www.int/nha/country/pak/en/)
12 Government of Pakistan, National Economic Survey 2007–08, Ministry of Finance 2008

expenditure, semi-government agencies 5.1% and donor assistance 1.7%, while private sources make up the largest share of 59.8%. Within the private spending, out-of-pocket payments account for 57.3% of total health expenditure, private employees 1.6% while philanthropy accounts for around 0.9%. About 26% of the country's population has either partial or comprehensive financial coverage paid by employers, while 0.32% is covered by government safety nets.[13] Progressive increases have been witnessed in the public sector federal and provincial budgets.

SECTION 3. DEVELOPMENT COOPERATION AND PARTNERSHIPS

3.1 Aid environment in the country

Foreign assistance has played a critical role in developing Pakistan's health sector and the country has historically received large volumes of aid. In 2007, Pakistan received more than US$ 2.2 billion in Official Development Assistance (ODA), ranking the country as the sixth largest recipient of official aid in the world. The overall aid often comes from diverse sources through a combination of budgetary and non-budgetary arrangements. The multiplicity of donors and disjointed nature of support, combined with the overall weakness in governance of the health sector have created a complex situation that makes the coordination of external assistance difficult and often leads to overlapping and duplication without a meaningful impact on improved health outcomes.

Generally speaking, public sector investment in the development of health care services is quite low. The overwhelming share of health cost is borne by out-of-pocket expenditure by a major segment of the poor people with low average per capita income. Therefore, the external support to health services needs to be used for optimal benefit and efficiency. Aid in the health services sector over the past 2–3 decades has assisted in capacity-building, health systems development, provision of basic health services and material support. In view of a burgeoning population, economic slump and mass disasters, the devastating effects of the earthquake and recent floods underlined the need for rapid increase in external assistance as an absolute imperative. The other factor that brings the urgency to donors' support is the national and global priority to meet the MDGs.

3.2 Stakeholder analysis

While development assistance from the United States of America historically constituted the bulk of the aid to Pakistan, the major multilateral development banks now provide more than half of all donor assistance to Pakistan. Of the US$ 4 billion in development assistance recorded by the State Bank of Pakistan in 2009, US$ 2.6 billion came from multilateral organizations and development banks (Table 4). Several non-OECD countries, most significantly China and Saudi Arabia, are currently providing significant amounts of aid. Some bilateral donors and nearly all of Pakistan's major multilateral partners have enormously increased their funding to Pakistan in the recent years.

13 Nishtar S. *Choked pipes: reforming Pakistan's mixed health systems*. Karachi, Oxford University Press, 2010.

Table 4. Development assistance to Pakistan 2004–2009

Donor	Annual recorded grant assistance to Pakistan 2004–2009 (US$)	Donor	Annual recorded loan disbursements to Pakistan 2004–2009 (US$)
United States	268 million	Asian Development Bank	1197 million
Saudi Arabia	134 million	World Bank	986 million
United Kingdom	124 million	China	217 million
European Commission and Euro OECD members	63 million	Japan	76 million
Japan	54 million	Islamic Development Bank	71 million
Multilaterals: UN, Asian Development Bank, World Bank, Islamic Development Bank	44 million	Saudi Arabia and Kuwait	68 million
China	9 million	European Investment Bank and Euro OCED members	34 million
Others	8 million	Other multilaterals	23 million

Source: State Bank of Pakistan, 2009 report

However, the United States still remains the largest source of bilateral aid to Pakistan. For the 2010 fiscal year, the United States budgeted approximately US$ 1.2 billion in economic assistance through the Kerry-Lugar-Berman Bill, with another US$ 300 million pending through the president's supplemental request. Of this amount, US$ 176 million is anticipated for health sector support. Key partners and donors and their areas of input are listed below.

- Asian Development Bank (ADB): Main areas of contribution are women and reproductive health.
- Department for International Development (DFID): Major budgetary allocation for the national health facility; other spheres of collaboration include reproductive health, primary health care and consumer protection.
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ): Working in three main areas which include supporting communicable disease control particularly tuberculosis control, human resources development/management issues and health sector reform.
- Japan International Cooperation Agency (JICA): Major areas of support are communicable diseases control including tuberculosis, HMIS, and maternal and child health. A large amount of vaccine has been provided as grant in aid.
- Norwegian Government: Support to maternal, neonatal and child health in Sindh through the United Nations system, namely UNFPA, UNICEF and WHO.
- UNICEF: Main area of work is maternal and child health including immunization support.
- USAID: Contributes budgetary support for the national health facility; other areas of support include reproductive health, communicable diseases and maternal health.
- World Bank: Supports maternal and child health (main support is for LHW programme), HIV/AIDS programme and public health surveillance; a nutrition programme is in the offing.

- UNFPA, European Union, Save the Children (United States) and the Aga Khan Foundation contribute towards maternal and reproductive health. The Global Fund to Fight AIDS, Tuberculosis and Malaria and GAVI Alliance have major contributions in communicable diseases and maternal, neonatal and child health, respectively, with windows for overall health system strengthening. UNDP, WFP, UNAIDS, UNFPA and FAO are also contributing through the United Nations system, while the Canadian International Development Agency (CIDA), JICA and Australian Agency for International Development (AusAID) are bilateral organizations working in the health sector. The latter in association with DFID have constituted a technical resource facility with a view to assist provincial governments in the wake of the devolution process.

3.3 Role of the private health sector in Pakistan

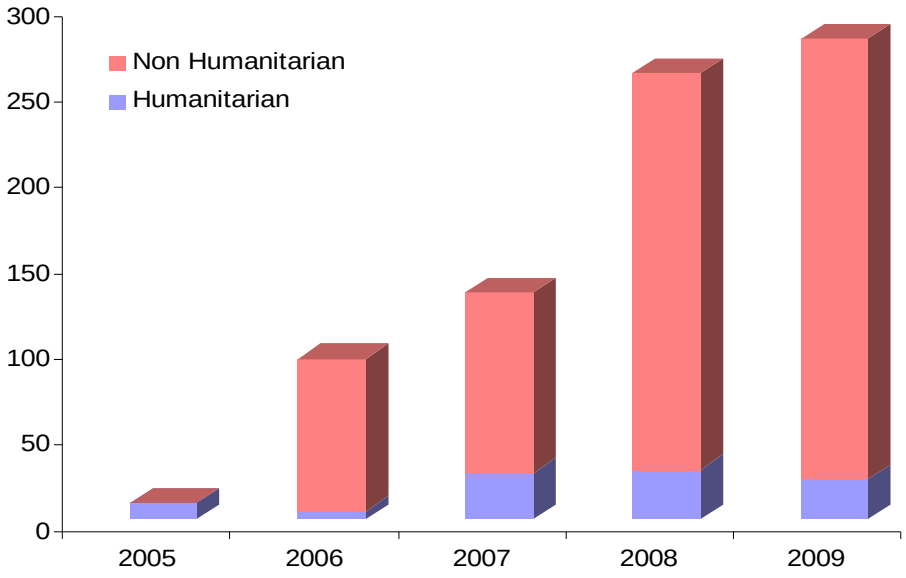
Pakistan has a relatively sizeable non-profit private sector with more than 80 000 not-for-profit nongovernmental organizations. However, within the health sector, the nongovernmental organizations are relatively less and somewhat concentrated in urban areas. The sector possesses strengths that can complement the functions of the public sector in health service delivery. These strengths include technical expertise in specific programme-related areas, the flexibility to introduce innovations and outreach advantage, community distribution channels and mobile health units. Many nongovernmental organizations also preferentially target special groups such as people living with HIV/AIDS, victims of drug abuse and rape and non-camp-based refugees. In addition, successful nongovernmental organizations can serve as good partners to work with, largely focusing on the marginalized population and thus providing social safety nets for the underprivileged.

3.4 Investment in health and gaps

The overall investment in the health services sector during 2009 was US$ 4.853 billion, with the government providing 24%, donors 6%, the military 4%, and 1% through social security. The remaining 65% was paid by individuals as out-of-pocket medical expenses. It is estimated that US$ 19.51 billion is currently required to maintain the health services on track for a 3-year period. Even though the government has increased its investment in health by an additional 34% from 2005 to 2009 (US$ 3.4 billion as compared with US$ 4.6 billion in 2010–2012), there is still a huge gap of almost US$ 15.0 billion. As regards the attainment of MDGs, the Poverty Reduction Strategy Paper-II has estimated an overall funding gap of US$ 1.3 billion. In view of a shortfall of US$ 481 million from government sources in 2009–2010 for meeting the health MDGs, the future funding gap is expected to be even greater.

3.5 External aid flow in the health and nutrition sector

Health and nutrition investment by foreign donors was around US$ 289 million and US$ 4.5 million for population welfare in 2009. Overall investment in the health and nutrition sector accounted for approximately 14% of overall foreign assistance in 2009. Around 88% of the foreign assistance to the health and nutrition sector was directed at non humanitarian projects while all of the foreign aid to the population welfare sector comprised non-humanitarian projects (Figure 1). It is estimated that approximately US$ 894 million was invested by foreign donors in the health and nutrition sector over the five year period 2005–2009, most of which was in the form of grant assistance.



Source: Economic Affairs Division and donors

Figure 1. Foreign investment in health and nutrition (US$ million)

Bilateral organizations continue to be the largest foreign funding source within the health and nutrition sector. Of this total investment, approximately 64% (US$ 537 million) was financed by bilateral organizations while 34% (US$ 285 million) was financed by multilateral organizations. A review of trends shows the increasing participation of multilateral organizations in the health sector, with their share increasing from 14% of the total foreign health investment in 2006 to 43% in 2009. United Nations agencies constitute an overwhelming share of 88% of the total health investment by multilateral organizations followed by Asian Development Bank and the World Bank. A breakdown of bilateral investment by funding sources reveals that the United States is the largest donor, comprising 38% of the total bilateral investment, followed by the United Kingdom (30%), Japan (7%) and Australia, Germany and Norway (4% each).

A detailed overview of health investment by funding agency in the health and nutrition sub-sectors is provided in Annex 2.

3.6 Coordination and aid effectiveness in the country

It has become clear to the government as well as its development partners that unless extensive resource mobilization and coordinated investment is carried out, Pakistan is unlikely to achieve most of its health targets including those of the MDGs. The investments in health therefore need to be embedded in broader social and economic development in order to make clear the link between health financing and positive outcomes, and mechanisms are needed to hold all partners accountable for their performance.

The current devolution scenario affords an opportunity to re-visit the need for coordination and planning along scientific lines. The Planning Commission that has been assigned the role of national coordination is fostering a meaningful dialogue on health issues between the federation, provinces, development partners and all other stakeholders in the

health sector. The Planning Commission also intends to establish a health sector planning and coordination cell to strengthen coordination of all partners. Additional initiatives, such as the International Health Partnership Plus, are available to assist in developing a unified country health financing strategy, monitoring framework and budgetary overview.

The Vision 2030 document of the Planning Commission reiterates the resolve of the Government of Pakistan to increase its investment in the health sector, while the economic growth strategy calls for harnessing the potential of youth through community organization. Although the economic growth strategy does not seem to place much reliance on the social sectors, some salient features of the strategy can provide an effective roadmap to the provinces, adapted to their specific needs with regard to the health sector.

- Revamping/management of secondary and tertiary care hospitals through public–private partnerships and provision of autonomy, respectively.
- Developing a multifaceted and comprehensive health care financing strategy to move towards a national health services programme with introduction of social health insurance for the impoverished through the Benazir Income Support Programme and encouraging private health insurance.
- Better governance in health in terms of building partnerships, aid effectiveness, career structures, capacity building, accountability, quality and access to medicines.
- Consolidation of services by enforcement of quality standards, regulatory mechanisms, and introduction of an integrated essential health services package at primary health care level focusing on maternal and child health services and health risk reduction.
- Introduction of a new structure of health ombudsman for better accountability.
- Development and implementation of an integrated nutrition policy and strategy.
- Preparation of a minimum dietary requirements package to promote home-grown food and ensuring household food security to reduce the prevalence of malnutrition.
- The provision of “street food” with a minimum level of quality and safety standard-setting, to make it a safe and nutritious diet.
- Reintroduction of school nutrition programmes in the form of cash transfers for food.
- Integration and interlinking of micronutrient fortification programmes for vitamin A supplementation, iodine salt, iron supplementation at primary health care level.
- Enhancing of mass awareness campaigns through print and electronic media, particularly with regard to nutritious dietary habits.

The Economic Affairs Division is responsible for assessment of requirements, programming and negotiations of external economic assistance related to the Government of Pakistan and its constituent units from foreign governments and multilateral agencies. All issues relating to external debt management and technical assistance or credit from friendly countries or lending / re-lending of foreign loans and monitoring of aid utilization are traditionally handled by this division of the federal government as a constitutional requirement.

The macro coordination of UN collaborative activities and support is undertaken by the Resident Coordinator in association with the UN Country Team (UNCT), comprising heads of all the United Nations agencies, offices and funds located in Pakistan. The UNCT coordinates all external support from bilateral and multilateral donors that support the One

UN joint programmes including that on health and population. The joint programmes are coordinated by the respective joint programme steering committees.

OCHA is the key agency for coordination of humanitarian support that maintains a close liaison and inventory of support through the Financial Tracking System received by different UN agencies from their own sources and donors. In addition, OCHA also coordinates the support channelled through their office from the Central Emergency Relief Fund and other donors, while supporting resource mobilization.

3.7 UN reform status and the UNDAF process

Pakistan is one of the eight pilot countries for the UN "Delivering as One" reform initiative. The aim of this reform is to align UN programmes and funding more closely to policy priorities at the national level in order to capitalize on the strengths and comparative advantages of the organizations working within the UN. Increased coordination and coherence achieved through this reform is expected to strengthen government leadership and ownership and assist member countries to achieve the MDGs. An important component of that UN reform effort is the "One UN" programme, which comprises the joint programmes and joint programme components through which the participating United Nations organizations will contribute to socioeconomic development in Pakistan.

At the overall UN reform pilot level, the highest governance body is the High Level Committee on UN Reform in Pakistan, established in early 2007, which brings together government, United Nations and development partners. The High Level Committee oversees all aspects of the reform experience in Pakistan, monitoring of its progress, and fine tuning to enhance aid effectiveness. It is chaired by the Prime Minister or his/her representative and consists of main line agencies at the federal level, provincial governments and selected donor representatives, meeting periodically. Within the United Nations system in Pakistan, the UNCT is the inter-agency coordination and decision-making body, led by the Resident Coordinator. Within the One UN programme context, the main purpose of UNCT is to plan, implement, monitor, fine-tune and ensure the delivery of tangible results in support of the development agenda of Pakistan.

As constituent elements of the One UN programme, five joint programmes are developed (agriculture, rural development and poverty; health and population; education; environment; and disaster risk management). Joint programme steering committees provide strategic guidance for implementation of the joint programme. Each joint programme, apart from fully addressing the issues within its substantive coverage, also integrates four cross-cutting issues (refugees and internally displaced persons, human rights, civil society engagement and gender) in their work. These committees are co-chaired by a high level government representative and a relevant UNCT member. In addition, observers by invitation may include two donor representatives, civil society and other partners as suitable. WHO is the co-chair for the joint programme on health and population and an active participating agency for other four joint programmes: agriculture, rural development and poverty reduction, education, environment, and disaster risk management.

Table 5. UN agencies collaboration in health and population

Agency	Main areas of collaboration
UNICEF	Maternal health care: community maternal care, antenatal care, Skilled birth attendants, database and information, support to prevention of HIV/AIDS
	UNICEF child protection and empowerment of adolescents
	Immunization “Plus” project vaccination, advocacy, social mobilization. Major partner in polio eradication
	Child survival and development
WHO	Main partner in polio eradication
	Health policy and strategic planning: health governance, human resources development, emergency preparedness, health information
	Community health development :district health system, primary health care, making pregnancy safer/reproductive health and family planning
	Health promotion and protection; healthy lifestyles, reducing health risks from environmental causes, prevention of noncommunicable disease, Tobacco Free Initiative, mental health, nutrition, prevention of injuries and child and adolescent health
	Communicable diseases: tuberculosis, malaria, HIV/AIDS, immunization, surveillance,
UNFPA	Reproductive health: family planning, family friendly facility, emergency obstetric care
	Population and development strategy
WFP	Promoting safe motherhood through incentivizing antenatal visits
UNHCR	Immunization services, tuberculosis control, health information system, reproductive health services, leishmaniasis and malaria control and training of primary health care workers
UNDP	HIV/AIDS, National Commission for Human Development
UNAIDS	HIV/AIDS
WHO/UNICEF/ World Bank	GAVI support for EPI

3.8 Participation of UN agencies in the health sector

The UN system is currently by far the largest contributor of technical and material support to the health sector and its collaborative programmes and projects with the government are quite extensive. The agencies with major engagement are WHO, UNICEF, UNFPA, WFP, UNHCR, FAO, UNWomen and UNAIDS. Table 5 shows the main areas of collaboration of UN agencies.

3.9 Role of health and population in the context of One UN

Health and population is one of the biggest joint programmes, with an estimated budgetary outlay of US$ 384.6 million from 12–14 participating UN agencies to achieve the intended outcomes. Following the devolution of the Ministry of Health and considering that the next phase of the programme in the planning stage, there is currently an important window of opportunity to plan for working in very close collaboration with the provincial health departments. Although provincial/regional departments are at different levels in terms of capacity and available resources, UN agencies, donors, civil society organizations and international partners can work out and plan with each of these departments to address their specific needs and priorities. WHO has an advantage of being the lead technical agency in the area of health, facilitating and collaborating with government ministries and departments in

fulfilling the health needs of the population, whether in peace or in disaster situations. Looking at the action plan under development for the next phase, there will be dispersed areas within many strategic priority areas and outcomes where WHO and other UN agencies can collaborate with provincial and district health departments as well as other stakeholders to ensure the fulfilment of basic health needs of the country. Some of the areas include: providing support and technical assistance for devising provincial health policies; facilitating the development of equitable health financing systems at the regional/provincial level; assisting departments in improving access to quality health services with focus on minorities and vulnerable groups; building capacities of health department staff for equitable health services; and providing technical assistance in ensuring proper governance of health departments.

3.10 Achievements, opportunities and challenges

The aid flow, similar to many other development issues, is affected by the overall political, institutional, social and global factors. Unfortunately, the security issue, terrorism and violence have negatively impacted on the efficiency and effectiveness of development activities including health. The global economic slump has not spared Pakistan and its impact will linger on for some years. Furthermore, during this transition phase of almost total decentralization without any substantial groundwork, it is imperative to provide robust support to the provincial governments, particularly Departments of Health. In this regard and based on the analysis in section 3.5 above, the lower limit of the minimal investment level for health development is at least US$ 40 billion in the next 5–6 years, which translates into US$ 40 per person per year based on current population estimates (WHO 2010 Global Report).

Of the total requirement, the assumption is that around US$ 10 billion will be provided from governmental sources, while the remaining US$ 30 billion will be borne through out-of-pocket spending by the people or external assistance. This underlines the urgent need to improve the executive capacity and efficiency of the health systems for achieving better outcomes, and carrying out extensive resource mobilization from all potential sources. In order to address these challenges in relation to aid flow and partnership building, mechanisms need to be devised for the strategies below.

- Ensure enhanced coordination between the donors and external development partners as well as with the national and provincial authorities.
- Minimize the bureaucratic bottlenecks and strengthen transparency with a view to increase the institutional implementation capacity.
- Use external assistance to optimize capacity-building and increase implementation capacity.
- Use to maximum advantage the opportunities offered by the UN “Delivering as One” initiative to promote and foster a coordinated initiative to improve the governance and resource mobilization within the health sector at all levels.
- Optimize external assistance opportunities to leverage and strengthen intersectoral collaboration between various governmental agencies at different levels.
- Facilitate the participation of nongovernmental organizations and civil society in health development.
- Enhance the capacity of the health authorities in relation to resource mobilization and accountably to development partners.

- Align donor contributions to restructure the fragmented small scale projects and programmes supported by various external partners within the major health cluster priorities.

While the emphasis on primary health care at both government and donor levels is encouraging, there is a considerable lack of investment in secondary and tertiary level health care services including training and development, accompanied by a dearth of specialists to cover people residing in rural or remote areas. Therefore, concerted efforts need to be ensured for investment in health services delivery in Pakistan, with focus on all levels of health care, horizontally integrated with research, training and development.

SECTION 4. PAST AND CURRENT WHO COOPERATION

4.1 Review of WHO's cooperation with stakeholders

WHO's country office in Pakistan was established in 1960, and has since been providing technical and programmatic support to the former Ministry of Health, provincial departments of health and other areas of the health sector ranging from policy development, strategic planning, health system and community development to health promotion and communicable disease control. During the past decade, WHO collaborative efforts have focused on assisting several national and provincial health programmes. However, the overriding engagement and resultant achievements in line with the previous CCS have been in the following key areas.

- Polio eradication and improvement in routine immunization
- Emergency preparedness and response, recovery and rehabilitation, especially following major disasters
- Support to the national programmes for maternal and child health, family planning and primary health care
- Support to the nutrition wing and nutrition cells at provincial level

The WHO country office in Islamabad is headed by a WHO Representative and there are five sub-offices, one in each province (except Gilgit–Baltistan) and one for AJK. The country office is well staffed with a core group of international and national professionals along with a variable number of consultants to assist the technical operations of the various programmes.

In addition to the main areas of engagement mentioned above, other key programmes supported by WHO include the national maternal, neonatal and child health programme, tuberculosis control using the Stop TB strategy, malaria control and elimination, national programme for prevention and control of hepatitis, health system strengthening, promoting community-based initiatives, environmental health interventions mainly for safe water and sanitation and health promotion with a strong emphasis on the Tobacco-Free Initiative.

4.2 Cross-cutting issues of gender and human rights in the context of health

Despite having 21% women Parliamentarians, Pakistan generally does not perform well in its gender indicators in relation to neighbouring countries (Table 6). The link between

gender and poverty is highly evident in Pakistan, with women being the poorest among the poor and the most vulnerable among communities owing limited access to economic resources and low participation in decision-making. Poverty in Pakistan has a "woman's face", with considerable intra-household gender disparities even in food distribution and investment of resources between male and female members. One example can be seen in the incidence of chronic malnutrition being higher among female children in poorer households.

The issues relating to gender and health are complex and include gender-based violence, which severely impacts the physical, sexual and mental health of women, and discrimination and patriarchal social norms, which hinder access of women and girls to health care services as a consequence of low family investments on health, nutrition and education of women and girls. Achievements are low with regard to health-related basic human rights including: rights to life, survival, bodily integrity, liberty and security; rights to highest attainable standard of physical and mental health as well as benefits of scientific progress; freedom from torture or cruel, inhuman, discriminatory or degrading treatment or punishment; freedom of opinion and expression; access to food/nutrition, safe drinking water, education, information, social security and personal development. The situation warrants interventions to mainstream gender and human rights perspectives in health policies and programmes and a gender-sensitive evidence base, addressing gender-based barriers in achieving health and monitoring and evaluation of gender and health issues.

Table 6. Gender development indicators in selected Asian countries

Indicator	Bangladesh	China	India	Indonesia	Pakistan	Malaysia	Sri Lanka	Thailand
Life expectancy at birth (years) (2007)	66.7	74.7	64.9	72.5	66.5	76.6	77.9	72.1
Adult literacy rate (% aged 15 and above) (1999–2007)	48.0	90.0	54.5	88.8	39.6	89.6	89.1	92.6
Combined gross enrolment ratio in education (%) (2007)	52.5	74.50	57.4	66.8	34.4	66.0	56.0	79.6
Labour force participation rate (%) 2008	61.4	74.5	35.7	53.3	21.8	46.7	38.5	70.7
Estimated earned income PPP US$) (2007)	830	4323	1304	2263	760	7972	5450	6341

Source: Human Development Reports, 2009 and 2010

The human and health security of women is consistently violated despite constitutional provisions and international agreements of Pakistan to the contrary. Some of the most basic human rights enshrined in the Constitution of Pakistan, as well as in the many instruments of human rights to which the state is a signatory, such as the Universal Declaration of Human Rights, Convention on the Elimination of All Forms of Discrimination against Women, Convention against Torture and the United Nations Convention on the Rights of the Child, are violated not merely as a result of poverty but also due to sociocultural beliefs and traditions. These human rights violations constitute barriers to the achievement of highest attainable standards of optimal health for women, girls and other marginalized groups of society. WHO through the Deliver as One initiative, has been working on gender-based violence and other gender and health issues through advocacy, development of guidelines and capacity-building. The gender and health programme is a WHO collaborative effort with health and other sectors to address underlying social and economic determinants of health through policies and programmes that enhance health equity and integrate pro-poor, gender-responsive, and human rights-based approaches. The programme interventions have contributed towards progress on MDGs 3, 4, 5 and 6 through evidence-based research, guideline development and capacity building of health managers, professionals and care providers. There is however, a need to involve male parliamentarians and especially religious leaders in order to make further substantial progress.

4.3 Health-related outcomes of the UNDAF

Besides its function of providing technical support to the government, WHO also supports the country under the broader UN umbrella. Out of the 5 joint programmes of "Deliver as One" WHO is the convening agency for the joint programme on health and population and an active participating agency for three of the other joint programmes: agriculture, rural development and poverty reduction; environment; and disaster risk management. WHO assisted in the preparation of the common country assessment, which is an overview of national development priorities and programmes and the UN Development Assistance Framework (UNDAF) designed in partnership with the government. All these strategic documents guide WHO collaboration in Pakistan.

4.4 Comparative strengths of WHO

The Pakistan country office possesses a number of comparative advantages and strengths to achieve the mandate and effective accomplishment of assigned tasks.

- It is the leading specialized agency of the United Nations on all health issues.
- WHO has a presence in all four major provinces and AJK, which provides a valuable opportunity for the Organization to closely interact with local health institutions and district health systems and assist public health interventions at the operational level.
- There is a strong and close relationship between the WHO country office and the provincial departments of health, with WHO as a partner in all national dialogues for instituting health reform agendas through appropriate policies, strategies and programmatic interventions.
- Strong collaboration between WHO and academic institutes is providing a platform for boosting service delivery through tertiary care hospitals using WHO protocols and production of human resource well equipped to implement public health programmes.

- The presence of a strong UN country team and their active engagement in health activities through their thematic working groups provides WHO with the opportunity to mobilize the UN system and build broader alliances in support of the health sector.
- The direct association of health in three of the MDGs and its relevance to many other MDGs offers WHO the legitimacy of interacting with a large number of stakeholders and promotes the central role of health in national socioeconomic development and poverty reduction.
- WHO through the BDN programme has been directly interacting with civil society organizations and local communities at the district and grass-roots level.
- The country office has managed to bring in prompt specialized technical support from the Regional Office and headquarters, which has facilitated the active role of WHO in all health reform debates and development of so-called programme-based support.

4.5 Current WHO presence

The WHO Representative is currently assisted by 23 long-term international staff for the various programme areas and 18 temporary international staff supporting the current flood response, while a primary health care position is vacant. There are nine national professional officers and 500 personnel on special service contracts (mostly for polio) supporting various programmes at different levels. In addition WHO general staff assist the implementation of WHO activities at the WHO Representatives' office, provincial offices and technical programmes.

WHO investment in priority health programmes and capacity-building in the past two biennia has been approximately US$ 182 million. The level of support has increased considerably in the past few years, mainly due to the major emergencies that the country has experienced. US$ 4.43 million was provided as financial input for technical assistance during biennium 2008–2009. In addition, an amount of US$ 92 million was earmarked from extrabudgetary sources, primarily for eradication of poliomyelitis. Other priority areas, such as tuberculosis control, research activities, and the activities of the National Commission of Macroeconomics and Health have also been supported out of the above sum. WHO facilitates resource mobilization through partnership development, e.g. the GAVI Alliance, Global Fund and Global Drug Facility. WHO has been in the mainstream of resource mobilization through flash appeals and development of projects and proposals to be funded for post-disaster recovery and rehabilitation. Table 7 shows resources from the regular budget, extrabudgetary funds and those specifically for polio eradication and emergency and humanitarian assistance.

Table 7. Distribution of WHO resources to Pakistan 2006–2010, by type of fund

Programme	2006–2007 (million US$)	2008–2009 (million US$)	2010 only (million US$)
Regular budget (workplan)	5.085	5.29	4.29
Extrabudgetary funds	78.88	97.77	93.65
Polio eradication	51.43	51.00	25.26
Emergency preparedness and humanitarian action	25.53 (2005–2007)	20.50	53.99 (both IDPs and floods)

In addition to the country office in Islamabad, WHO has sub-office in all the provinces and in Muzaffarabad, AJK with emergency hubs wherever most needed. The offices have adequate information technology and office equipment, vehicles and staff.

The WHO country office receives technical as well as financial support from the Regional Office and headquarters. The support includes extrabudgetary resources through resource mobilization and visits of staff and experts for exchange of information and experiences. The Regional Office also supports a range of intercountry activities such as intercountry consultations and training while fostering operational or systems research.

SECTION 5. STRATEGIC AGENDA FOR WHO COOPERATION

5.1 Conducting the prioritization exercise to define the strategic agenda

The strategic agenda of WHO in Pakistan has been developed after an exhaustive situation analysis of the health sector and through an intensive process of consultation with federal, provincial and district levels of the federal government, departments of health, donors and UN agencies. The strategic directions aim to support the government in providing adequate health coverage to all the people particularly in the ongoing context of devolution process and the commitment to achieve the MDGs. The strategic agenda is also aligned with the priorities set at the global level during the 64th World Health Assembly as well as priorities set at the regional level. The agenda for cooperation is based on facts and figures from past records, assessments, data and events as impacting on the health sector in Pakistan. Over the past six months, the country office has held various consultations, meetings and missions, with the Planning Commission, Cabinet, Economic Affairs and Inter-Provincial Coordination divisions. In addition, a mission from the Regional Office reviewed the current devolution process in the country and its potential impact on the working of WHO. WHO staff in Islamabad, provincial sub-offices, emergency hubs and at district level have also been providing their technical expertise to their government counterparts to ensure that local needs and capacity gaps are bridged. Need assessments, surveys, data collection from various authenticated sources and the Disease Early Warning System and polio surveillance have substantiated the existing ground realities and delineated the way forward for the health sector in Pakistan.

5.2 Defining the strategic agenda

Defining the strategic way forward for health system and sector in Pakistan is more complex as compared to other developing countries. Besides the low expenditure and meagre investment in health, there are several other factors such as the political, social and security situation which have a huge impact in terms of affecting the policies and impeding the overall health service delivery in the country. This also includes implementation of the 18th Constitutional Amendment and the decentralization in process. The country has been repeatedly confronted with several major emergencies since 2005 rendering it more vulnerable to public health emergencies and precipitating the existing weaknesses and gaps in the health system. The frequent disasters have also led to the diversion of resources – both internal and external – and facilities to the emergency-affected areas, sometimes at the expense of depriving areas with poor indicators not falling in the affected region. The history of latest disaster incidents in the country illustrate that local health authorities at each level

and communities are the first responders to crises, and they, in turn, need the resources to respond immediately to risks in their communities. The flood situation in 2011 showed that disasters affect the health of the population well beyond the immediate risk of disease, death and injuries; and local health systems appeared to be one of the most vulnerable to the flood impact. Therefore, vulnerability and protection of the physical infrastructure, the institutions and the personnel is one of the major challenges to be addressed during crisis. Keeping all these factors in mind and looking at the current scenario, WHO is redefining its strategies in Pakistan to respond to this changing environment by calling for new ways of working in such emergency situations.

At the country level, through the CCS process, the following is envisaged.

- WHO collaboration will be more strategic and focused on specific priority areas such as health system strengthening across board in Pakistan to create an enabling environment for provision of effective maternal, newborn and child health, communicable disease control, nutrition supportive interventions, noncommunicable disease control including mental health, health promotion and disaster risk management strategies. The previous experience of programmatic support is not encouraging and even the vertical programmes can work more effectively in the presence of a dynamic and vibrant health system.
- The role of WHO in the country, particularly in the provinces, will be that of a technical and policy adviser adapting to the emerging constitutional realities on ground. Moreover, the advocacy role of WHO particularly in policy formulation and strategic guidance to the critical aspect of provincial implementation, will be further emphasized particularly in the context of devolution.
- National and international partnership strengthening will be enhanced and new avenues of collaboration explored to ensure coordination in health.
- Review and redefinition of the functions within WHO Pakistan would be sought to ensure effectiveness of WHO support in the country with optimal utilization of resources, expertise, knowledge and skills available within WHO at all levels.

The WHO Country Cooperation Strategy for the next six years has been framed to support the Government of Pakistan in eventually achieving the MDGs. The strategic directions, however, also take into account the national goals of the Government of Pakistan to provide adequate health coverage to all people, the desire of the senior leadership for rapid strengthening of the health sector and the ongoing devolution of governance and administration in the country. The strategic directions are guided by the spirit and essence of primary health care and Health for All. They also take into consideration the fact that a large share of health care delivery is provided by the private sector. In addition to the residual federal health structures and the provincial Departments of Health, the directions are selected to be sensitive to and support other key health partners in government, civil society and programmes and activities that are supported by UN agencies, development banks and donors. Lastly, the strategic directions are cognizant of the WHO mandate, means and technical domain.

The strategic direction of WHO focus will be on the following seven priority areas.

- Health policy and system development with community involvement
- Communicable disease control
- Maternal, neonatal, child health and nutrition
- Noncommunicable diseases control including mental health
- Social determinants of health encompassing equity, human rights and gender dimensions
- Emergency preparedness and response and disaster risk management
- Partnerships, resource mobilization and coordination

5.3 Strategic priorities and approaches

Strategic priority 1: health policy and system development

WHO will support improvements in policy-making and governance; service delivery; access, equity and fair financing; regulating medicines and biotechnologies; developing public–private partnership and managing human resources for health; developing an integrated health information system and promoting and supporting applied research.

Improving policy-making and governance

- Conduct policy assessment and analysis and review the health system with a view to outline gaps and propose solutions as part of the new health policy/strategy.
- Strengthen the capacity of the federal bodies governing, coordinating and regulating health issues and the provincial departments of health to redefine the roles and responsibilities and provide clear directions in light of the current devolution process. Attention will paid to health sector reform at provincial departments of health.
- Continue building and upgrading competencies at national, provincial and district level for strategy development, planning and management including effective mobilization and utilization of resources.
- Refine and strengthen supervision, monitoring and evaluation mechanisms at all levels to ensure efficient and effective health system solutions.

Human resources for health

- Prioritize, in the context of national economic conditions, public sector spending on health, as appropriate, to ensure that sufficient financial resources are available for the implementation of policies and strategies to scale up and retain the health workforce, and to recognize it as investment in the health of the population which contributes to social and economic development.
- Develop and maintain a national health workforce plan as an integral part of a validated national health plan, in accordance with national and provincial responsibilities with increased efforts towards effective implementation and monitoring.
- Develop strategies and policies to increase the availability of motivated and skilled health workers in remote and rural areas, with reference to WHO global policy recommendations on increasing access to health workers in remote and rural areas through improved retention of the health workforce.

- Support the scaling-up of education and training while ensuring quality of training and improve the retention of the health workforce including medical and allied health personnel, midwifery and nursing, in particular focusing on pre-service training.
- Develop strategies for career pathways as a tool to ensure retention of health workers in specific areas (technical and geographical stations) and to serve as a motivating factor for career development, rationalize and orient in-service training programmes.

Improving service delivery, access and equity

- Support the development of an integrated framework for the provision of quality and equitable health care to the population. The application of an essential health services package will also be budgeted and tested at provincial level. Focus on maternal, newborn and child health including their survival, nutrition, and promoting their health.
- 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.
- Support monitoring and supervision to ensure that services are adequate, accessible and of the quality desired with motivated staff, availability of equipment, information and finance, and adequate medicines.
- Strengthen the capacities of provincial and district departments of health for implementation of priority health programmes including better management and utilization of available infrastructure and ability to respond to devolution.

Achieving equitable and fair health financing

- Advocate 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.
- Advocate for increased external resources (ODA) to support critical aspects of health sector reform at provincial level and promote coordinated approaches and effective use in view of the devolution process.
- Review the possibilities for introducing safety nets and social security schemes, partial cost recovery, etc.

Developing public–private sector partnership and regulation of private sector

- Assist the departments of health to develop specific guidelines to steer public–private partnerships including roles and responsibilities of different stakeholders.
- Support the development of models with combined governance structures, with the private sector having well defined roles and with responsibilities for all actors.
- Develop a mechanism for balancing the power relationships, ensuring the sustainability of partnerships and ensuring that all players are held accountable for the delivery of efficient, effective and equitable services.

Medical products, vaccines and technology

- Promote and support implementation of international norms and standards for quality of medical products, vaccines and technologies.

- Encourage and facilitate reliable procurement to combat counterfeit and substandard medical products, vaccines and technologies, and to promote good governance and transparency.
- Support the monitoring and supervision of the quality and safety of medical products, vaccines and technologies by generating, analysing and disseminating signals on access, quality, effectiveness, safety and use.
- Promote equitable access, rational use and adherence to standards by providing technical and policy support to relevant stakeholders.
- Encourage development, testing and use of new products, tools, standards and policy guidelines and establishment of drug testing laboratories.
- Set quality norms and standards, particularly for good manufacturing practices, and strengthen enforcement of law in this regard.

Health information and research

- Strengthen the national health information systems to generate, analyse and use reliable information from multiple data sources.
- Strengthen and expand the disease early warning system to all districts in order to detect, investigate, communicate and contain threats to public health security.
- Develop a mechanism for integrating the DHIS with the disease early warning system.
- Design mechanisms to integrate information from both the private and public sector and to include all health components including nutrition surveillance, maternal, newborn and child health and noncommunicable diseases.
- Promote the use of the available information and knowledge for policy and planning and the use of innovative technologies such as eHealth, distance learning and human resource information systems.
- Promote and support the implementation of operational and applied research to strengthen policy formulation, planning, human resources development, monitoring and management at all levels, with special reference to improvement of access and equity.

Strategic priority 2: communicable disease control

WHO will support the provincial and district health authorities in controlling communicable diseases of public health importance. Disease surveillance and early warning systems will be supported for the detection and timely control of communicable diseases including polio, tuberculosis, malaria, HIV/AIDS, leishmaniasis, hepatitis, acute watery diarrhoea, acute respiratory infection, malaria, dengue fever, Crimean–Congo haemorrhagic fever among others. Support will also be provided for improving immunization.

Immunization

- Promote poliomyelitis eradication through intensive vaccination support.
- Strengthen routine immunization and vaccination against preventable diseases, including with measles, DPT, BCG and hepatitis B vaccines, in collaboration with UNICEF and other key partners.

Disease control

- Support the provincial and district health systems in the detection and timely control of communicable diseases.
- Support the prevention and control of tuberculosis, malaria, hepatitis, dengue, leishmaniasis and other neglected tropical and zoonotic diseases.
- Strengthen the HIV/AIDS programme in collaboration with other partners, especially UNAIDS.

Disease surveillance

- Strengthen and expand the disease early warning system in all districts with timely detection of alerts and outbreaks, investigation and control of communicable diseases.
- Support health laboratories for quality control and surveillance.

Strategic priority 3: Improving the health of women and children

- Support the provincial departments of health in improving mother, newborn and child health/reproductive health in collaboration with other stakeholders including UNFPA, UNICEF and USAID.
- Strengthen the capacities of the provincial maternal, newborn and child health programmes to promote safe motherhood, family planning, prevention and control of sexually transmitted infections and reduction of neonatal and peri-natal mortality.
- Develop a comprehensive policy, strategy and implementation plan on the prevention and Control of sexual and gender based violence.
- Improve child and adolescent health through technical assistance, capacity-building and addressing underlying determinants such as safe water, sanitation, nutrition and education and awareness.
- Develop comprehensive policies and strategies for adolescent and youth health, paying particular attention to the prevention and care of sexual and reproductive health.
- Develop a framework for reporting, oversight and accountability on women's, maternal and child health.

Strategic priority 4: Noncommunicable diseases and mental health

- Support and strengthen policy coherence to maximize positive and minimize negative impacts on noncommunicable disease risk factors and the burden resulting from policies of other sectors.
- Support the development of multisectoral public policies that create equitable health-promoting environments that enable individuals, families and communities to make healthy choices and lead healthy lives, addressing health risk factors.
- Support departments of health and stakeholders to ensure best possible integrated health care is provided to persons with noncommunicable diseases throughout the lifecycle including empowerment, rehabilitation and palliation.
- Engage the private sector in order to strengthen its contribution to noncommunicable disease prevention and control according to international and national noncommunicable disease priorities.

- Accelerate implementation of the provisions of the WHO Framework Convention on Tobacco Control.
- Integrate mental health and substance abuse into primary health care services through health systems strengthening, according to capacities and priorities.

Strategic priority 5: Addressing the social determinants of health

Promotion of healthy environments

- Promote healthy environments by advocating for safe water availability and utilization as well as proper sanitation facilities.
- Support environmental health units in the provinces to design and implement environmental health programmes including water quality monitoring, health and hygiene promotion.
- Promote healthy and safe behaviours and environment under the principles of health in all policies.
- Participate in development of economic and social policy responses to climate change and other environmental issues that take into account health equity.

Gender mainstreaming and occupational health

- Mainstream gender into all health programmes of WHO and the departments of health to ensure gender equity and equality including sex-disaggregated health data and information.
- In collaboration with the International Labour Organisation and other partners, promote improved working conditions for all workers, especially female workers.

Strategic priority 6: Emergency preparedness and response and disaster risk management

WHO will support the national health emergency preparedness and response network and the provincial disaster management authorities along with other health partners to ensure emergency preparedness within the health sector and respond to any event of disaster with the best possible health response.

- Establish policy, legal and institutional arrangements for disaster risk reduction within the health sector.
- Develop the national plan, guidelines and standard operating procedures for health emergency preparedness and response.
- Conduct hazard mapping and vulnerability health assessments at district and selected health facilities.
- Develop and regularly update the health emergency management information system.
- Develop and regularly update the health sector contingency plan.
- Support the global safe hospital initiative and associated campaign (including patient safety, structural and non-structural safety, mass casualty management plans).
- Develop the capacity of various human resource cadres on health emergency preparedness and response with special attention to provincial and disaster-prone districts.

- Support health-related community-based disaster risk management including community awareness-raising, training and equipping on first aid at community level, and health education and promotion.

Strategic priority 7: Partnerships, resource mobilization and coordination

Improving resource mobilization

- Develop a resource mobilization strategy for WHO Pakistan.
- Support the health sector in resource mobilization.
- Develop and regularly update an information system for donors and health partners with the aim of supporting external assistance in form of data, surveys, studies and reports.

Improving partnerships and coordination

- Facilitate the coordination process among the various health development partners, UN agencies, nongovernmental organizations, donors, funding agencies and the health authorities at the federal and provincial level.
- Lead the health cluster in any emergency situation and use the health cluster approach to improve the coordination system within the health sector.

The relative importance of these approaches will vary from province to province depending on development and strategic priorities identified for collaboration with WHO during the process of formulation of CCS.

5.4 Enhanced role of WHO collaborating centres

WHO collaborating centres are institutions such as research institutes, parts of universities or academia which are designated by the Director-General to carry out activities in support of the Organization's programmes. Currently there are over 800 WHO collaborating centres in over 80 Member States working with WHO on areas such as nursing, occupational health, communicable diseases, nutrition, mental health, chronic diseases and health technologies. WHO relies on the expertise available in these centres as the professionals working in them constitute a critical mass of technocrats of excellence in the health sector. Pakistan has currently five such active collaborative centres whose role can be enhanced in view of the devolution to provide technical assistance to the provinces.

Institution name	City	Area of collaboration
College of Physicians and Surgeons	Karachi	Training in research and educational development of health personnel
Aga Khan University Karachi Pakistan	Karachi	Emergency medicine and trauma care
Rawalpindi Medical College	Rawalpindi	Mental health research, training and substance abuse
Diabetic Association of Pakistan	Karachi	Treatment, education and research in diabetes and diabetic pregnancies
Al-Shifa Trust Eye Hospital	Rawalpindi	Prevention of blindness

SECTION 6. IMPLEMENTING THE STRATEGIC AGENDA: IMPLICATIONS FOR WHO

6.1 Follow-up and next steps at each level

The Country Cooperation Strategy 2011–2017 will be a significant step in the collaborative work of WHO and the Government of Pakistan. It will streamline and strengthen the contribution of WHO to national health development under extremely peculiar circumstance of the absence of a Ministry of Health or any single entity at the federal level assigned to handle health issues. Implementation of this strategy will have considerable implications on the working of WHO at various levels and will significantly contribute to the development of its strategic vision.

6.2 Country office

In order to meet the strategic requirements arising out of the devolution and ensure strengthened provincial visibility, the CCS will necessarily have a provincial focus strongly warranting the upgrading of the WHO sub-offices in the country both in the technical and administrative capacity. The growing shift from the role of programme implementation to one of an effective advocate and catalyst for strategic development of the health sector has immediate implications for the country office. The implications and changes need to be adopted as soon as possible. The strengthening of the capacities of the country office and sub-offices to fulfil the essential technical, managerial, advocacy, representation and partnerships functions should be facilitated by all levels of the Organization. It is recommended that Provincial Operations Officers be assigned fixed-term positions of National Professional Officers and given a greater degree of delegated financial and managerial powers to facilitate execution of enhanced roles and responsibilities including overall support to health system strengthening. A focal person may be assigned for each province to support and coordinate province-specific activities.

The strategic vision of WHO for technical support to Pakistan will also focus on the vacuum created due to the abolition of the Federal Ministry of Health, while taking into consideration the enhanced technical assistance needs of the provincial departments of health in view of the lack of clarity on specific mechanisms and institutional arrangements to take on the additional functions traditionally restricted to the federal government. WHO support will aim to enable provincial engagement with other departments, public sector organizations and civil society to catalyse intersectoral action to promote health in all policies, address social determinants of health and measure equity in health outcomes. WHO is also assisting provincial governments in tandem with other development partners in developing health sector strategies giving consideration to their specific priorities and underserved areas.

WHO will sustain its support to the provinces in the context of health system development, aligned to the six building blocks of health system strengthening: leadership and governance; health information system; health financing and accountability; human resources for health; medical products and technology; and quality health service delivery. Integration and coordination of all components into a common strategy and plan will enable attainment of the overall aim of significant enhancement in access to equitable primary health care services towards improving the health condition of the people of Pakistan.

One of the key areas of provincial support and collaboration in terms of health policy, strategy and reform processes will be the establishment and strengthening of the provincial health policy reform units. Such units are already functional in KP and Punjab, while Sindh is in the process of establishing this unit. The Balochistan Department of Health is also planning the establishment of this unit. It should be noted that WHO was instrumental in the establishment, continuation and strengthening of the health system strengthening and policy unit at the federal level, which after devolution has been recently notified for placement under the Ministry of Inter Provincial Coordination. Health system strengthening will remain the prime focus of WHO support at both the national and provincial levels.

6.2.1 Technical functions

- Stronger human resources and technical core groups to be developed in the next biennium at the sub-office level, especially in the areas of health policy, strategy and programming, health systems development and health care delivery, epidemiology, mother and child health care and control of communicable diseases, as well as stronger technical and advocacy capacity in areas relating to environmental health and health promotion.
- Stronger capacity in information sharing, knowledge management, dissemination and advocacy. Emphasis needs to be placed on improving the evidence base with systemized data collection and capacity to analyse and use the data for policy inputs.
- Strengthening and supporting the functions of planning, monitoring and evaluation.

6.2.2 Managerial and administrative functions

- Ensuring that CCS is used to inform strategic planning as well as the biennial programme budgeting in a highly transparent manner.
- Implementation of the new expanded delegation of authority to the WHO Representative by the Regional Office is commensurate with the WHO Representative's responsibilities including flexibility to allocate, re-allocate, and spend resources within the strategic framework.
- Redefinition, revision and assessing the need of staffing at the country office to fulfil the expected functions of the office. This should include revision of the terms of reference of the existing country staff to incorporate the new strategic directions.
- Strengthening the roles and functions of the WHO sub-offices at provincial level. Appropriate staffing and adequate logistics need to be secured for these sub-offices to improve their performance, including recruitment of at least 3–4 fixed-term national professional officers in each sub-office to handle the key issues of health system strengthening, and enabling quality implementation of maternal, newborn and child health, nutrition, communicable disease control and health promotion interventions.
- Making the necessary arrangements for staff development and improving the attitude and skills of all members of the WHO country team including the general services staff.
- Improving the physical work environment inside the office through the provision of more space and a better communication system.

6.2.3 Advocacy, representation and partnership

The current visibility of WHO and the acknowledgement of its inputs and technical excellence by national and international partners need to be further strengthened. Ensuring timely flow of information between the country office, Regional Office and headquarters and the availability of up-to-date guidelines, and strengthening WHO's work in knowledge management and system development for facilitating access to scientific resources are among key priority areas for CCS implementation. The main strength of WHO and the platform on which it can build its technical leadership role is its technical credibility and ability to draw on leading international expertise for the full range of specific topics and disciplines required. With the support of the Regional Office and headquarters to help the country office with the above requirements, the three level of the Organization should be building partnerships and alliances with all segments of civil society to create synergy, share resources and harmonize action among all stakeholders. The CCS should lead to an expansion of partnerships with the government at district, province and federal levels, and with other national stakeholders such as the media, local nongovernmental organizations, professional associations, communities and international organizations.

6.3 Regional Office and headquarters

The new CCS for Pakistan will require the country office to assume the lead role in decision-making and programme planning and implementation at national level. The execution of this changed function and the minimal requirements stated above will depend to a large extent on the increasing transformation from decisive to supportive management at Regional Office and HQ levels. It will involve new ways of thinking, enhanced and prompt operating procedures and more effective and timely mobilization of resources to bridge the gaps in the health system. The Regional Office and headquarters will work closely to track technical resources to support country office activities by developing standards, guidelines and protocols and providing documents and publications. Traditional methods and modern communication and information technology will be utilized for the dissemination of technical resources between different levels of WHO. Shifting the focus from the Regional Office and headquarters to the country level may necessitate moving some technical and staff capacity to the country level to provide the health system, disease control and health promotion expertise required for WHO to maintain a strategic and technical leadership role. The Regional Office will continue to:

- provide technical support and systematic response to urgent technical needs of the country;
- share regional experiences, resources and development of guidelines and protocols, especially in the priority areas in the CCS;
- strengthen monitoring and evaluation;
- mobilize and allocate additional resources to the country office; and
- build technical as well as administrative capacities of staff at country level by involving them in regional and intercountry meetings and training.

Annex 1

COMPARISON OF PROVINCIAL INDICATORS

Table A1. Indicators of maternal, neonatal and child health

Indicator	Punjab	Sindh	KP	Balochistan	Pakistan
Total fertility rate (per woman)	3.9	4.3	4.3	4.1	4.1
Knowledge of contraceptives (%)	96.9	97.3	91.9	88.2	95.7
Contraceptive prevalence rate (%)	33.2	26.7	24.9	14.4	30
Median age of marriage (years)	21	19.2	19.9	20.1	20.5
Neonatal mortality rate (deaths per 1000 live births)	58	53	41	30	54
Infant mortality rate (deaths per 1000 live births)	81	81	63	49	78
Under-five mortality (deaths per 1000 live births)	97	101	75	59	94
Children fully immunized (%)	52.6	37	46.9	35.2	47.3
TT vaccination (%)	59	51.2	43.2	29.7	53
Pre-natal visit (%)	60.9	70.4	51.3	40.7	60.9
Deliveries assisted by skilled birth attendants (%)	37.7	44.4	37.9	23	39
Post-natal check-up (%)	39.9	60	27.4	40.5	43
Maternal mortality ratio (maternal deaths per 100 000 live births)	227	314	275	785	276

Table A2. Nutrition indicators based on the National Nutrition Survey 2011

Indicator		Province/administrative area					Urban/rural		Sex	
	Pakistan overall (%)	Balochistan (%)	KP (%)	Sindh (%)	Punjab (%)	AJK (%)	Urban (%)	Rural (%)	M (%)	F (%)
Stunted	43.6	52.2	47.8	49.8	39.2	31.7	36.9	46.3	44.2	43.1
Wasted	15.1	16.1	17.2	17.5	13.6	17.6	12.6	16.1	15.9	14.3
Underweight	31.5	39.6	24.1	40.5	29.8	25.8	26.7	33.3	32	31

Indicator		Province/administrative area							Urban/rural	
	Pakistan overall (%)	Balochistan (%)	KP (%)	Punjab	Sindh	AJK	FATA	Gilgit	Urban	Rural
Exclusive breastfeeding under 6 mos	64.7	63.6	88.7	57.5	68.6	58	50	71.2	59.5	68.1
Introduction of semisolid food 6–8 mos	52.1	48.6	36.1	49.8	64.2	36.8	55.2	52.1	69.8	45.3

Annex 2

HEALTH SECTOR AID

Overview of external aid flow and development

Historically, external assistance has played an important role in the development of Pakistan. Pakistan received US$ 15.7 billion in assistance from multilateral and bilateral sources between FY2003 and FY2007 with an annual average of over US$ 3 billion. This included project aid, budget support, and assistance for relief and rehabilitation after the earthquake of October 2005. Over time, the proportion of project aid in total external assistance has declined, reflecting increased budget support operations financed mainly by multilateral development partners. Asian Development Bank and the World Bank are the most important development partners in Pakistan, accounting for about 70% of the annual external assistance in FY 2007. In addition to other multilateral and bilateral development partners, international nongovernmental organizations and their local partners have provided extensive assistance over the years to improve livelihoods and reduce poverty.

The Government of Pakistan has significantly increased development spending in the recent years. The annual development expenditure of the federal government has risen by over 235%, from PKR 129.2 billion in FY2003 to PKR 434 billion in FY2007. The government planned to further increase development spending to PKR 520 billion in FY 2008, but a deteriorating fiscal situation forced it to slash the public sector development programme by PKR 70 billion in February 2008. Still, development expenditure came to a robust total of PKR 452 billion in FY 2008. The increase in development spending is not confined to the federal government; in Punjab, for example, the annual development programme tripled in just 3 years—from PKR 50 billion in FY 2006 to PKR 150 billion planned in FY 2008.

The Official Development Assistance (ODA) from the members of the Development Assistance Committee of the OECD rose to US$ 119 billion in 2008, an increase of 10% in real terms over 2007. However, the share of ODA in the Gross National Income of the developed countries which rose from 0.28% in 2007 to 0.30% in 2008 remained below 0.33% in 2009, largely as a result of debt relief granted to Iraq and Nigeria.

In addition to the fall in the overall target for ODA, there is also a serious problem of distribution or ‘coverage’ of ODA among the recipient countries. The distribution of ODA across countries is highly skewed in favour of countries in which the loaners perceive a political stake. Pakistan, which like Iraq and Afghanistan is an ally in the war on terror, received a small fraction of the ODA per capita received by the other two countries. In 2007, the per capita ODA receipts of Iraq, Afghanistan and Pakistan were US$ 311, US$ 150 and US$ 13, respectively. An equally serious problem related with ODA, from the viewpoint of the recipient country is aid volatility, which makes it difficult for the country to use these resources in their development plans. Some components of aid, such as humanitarian assistance and debt relief, are inherently unstable; but even longer-term development assistance has often proved volatile, even when donor countries are not facing serious economic difficulties. Pakistan has been a particular casualty of this volatility and unreliability. For example, the budget for 2009–2010 announced in June 2009, included a

component of US$ 2.3 billion as expected aid from a number of donor sources – which later became a banner group called the Friends of Democratic Pakistan – and Pakistan's development strategy for the year was predicated on receiving these funds. However, for numerous reasons, the money did not come through and eventually huge reductions had to be made in the public sector development programme. Similarly, the Kerry-Lugar-Berman Act approved by the United States has scheduled large payments to Pakistan for five years, and the Government of Pakistan has been waiting for this aid to come through so that it can be used for development purposes. The uncertainty of even promised and agreed aid can make MDG targets further out of reach of countries who hope to fill this gap through multilateral and bilateral assistance.

Major partners

While American development assistance once constituted the lion's share of aid to Pakistan, the major multilateral development banks now provide more than half of all donor aid to Pakistan. Of the US$ 4 billion in development assistance recorded by the State Bank of Pakistan in 2009, US$ 2.6 billion came from multilateral organizations and development banks. Several non-OECD countries, most significantly China and Saudi Arabia, now give significant amounts of aid. Some bilateral donors and nearly all of Pakistan's major multilateral partners have drastically increased their funding to Pakistan in recent years (State Bank Pakistan 2009 Report).

However, the United States still remains the largest source of bilateral aid to Pakistan. For FY2010, the United States has budgeted approximately US$ 1.2 billion in economic assistance through the Kerry-Lugar-Berman Act to Pakistan, with another US$ 300 million pending through the president's supplemental request. Of this aid, US$ 176 million is anticipated for health sector support.

Coordination, organization and management mechanisms of external aid

It has become clear to the federal and provincial departments as well as development partners that unless current efforts are significantly expanded in a coordinated manner, it is unlikely that Pakistan will achieve many of its health targets and the MDGs. There is growing awareness that health outcome-related targets cannot be achieved and sustained without adequate "coordinated investment" in the systems that underpin health service delivery; that increased financing for priority disease interventions based on country priorities and sound health plans is necessary; that investment in health needs to be embedded in broader social and economic development; that countries need long-term predictable aid from development partners; that partners need to see a clear link between financing and results; and that mechanisms are needed to hold all partners accountable for their performance.

The 18th amendment devolution scenario provides an opportunity to revisit the need for coordination and to plan systematically. There are also international initiatives such as IHP+ that can be explored to help provide a platform to bring together the national and provincial governments and other stakeholders for a unified country strategy, monitoring framework and budget overview.

Needs assessment and resource mobilization

It is apparent by the review of resource allocations by donors and source that the government mobilizes few external resources for the health sector. Initial estimates indicate that Pakistan mobilizes only about 11% of total expenditure from external sources, whereas the average for low-income counties is over 14% and in Bangladesh it is more than 22% (World Bank 2009 report).

Resource mobilization and other means of health financing should be seen as tool, not just an input. The ministry and departments of health do not have health care financing units and have few if any health economists. They do relatively little to mobilize additional resources for the sector and have little understanding that financing can be used as a tool to direct the sector through the resource mobilization, risk pooling and purchasing functions.