Chapter 11 Health and Nutrition

Health is a crucial part of well being and has essential economic benefits. Pakistan is among the 115 countries in the world recognizes the constitutional right of health. With this mandate, Pakistan has pledged to improve the quality of care and to achieve the better health outcomes through a new vision for health outlined in the guideline of National Health Policy 2009. To reduce the burden of diseases, tame population growth, highlight ways to achieve health related MDGs by 2015 and greater role for private sector are some of the focused areas of immediate priorities. However, communicable diseases still take a heavy toll in burden of diseases and is likely to rise further with rapid urbanization, food insecurity, poor dietary habits, environmental dangers, lack of access to safe drinking water and illiteracy. All these factors reinforce the consequences of ill health.

The public health sector in Pakistan was provincialized as consequence of 18th amendment of the Constitution in June 2011 and all health responsibilities were devolved to provinces to ensure better delivery of health services. However, to arrest the post devolution fragmentation of health in Pakistan, the government has consolidated all key health institutions and health related function under the National Health Service, Regulation and Coordination Division (NHSRCD). The renamed Division would serve national functions in health in a consolidated manner. The new division will have two functions; regulation and coordination which are in line with spirit of the 18th amendment. The new health structure would consolidate all the key institutions scattered across 8 Divisions into renamed Division which will strengthen federal co ordination, thereby producing favorable impact on provincial services as well.

Progress on MDGs Targets:

MDGs is a global agenda of actions for human development. Inter-countries comparison of progress on MDGs targets from different South Asian countries confirms that there seems little possibility of meeting the MDGs. This is probably due to resource constraints and diversion of resources away from health to meet the pressing expenditures of energy, floods, food and security over the last few years which had a significant impact on the delivery of health services. Though Pakistan has registered a significant decline in its child and maternal mortality rates since 1990 through a coverage of essential intervention to combat the major diseases malaria, measles and HIV etc. However, slow progress in the indicators of maternal health and child mortality are major concerns in the progress towards Millennium Development Goals. Special efforts would be required to meet MDGs deadline of reducing the infant mortality rate to 40, under 5 mortality rate to 52 and maternal mortality to 140 by 2015.

		Infant Mortality Rate Per1000	Under 5Mortality Rate per 1000	Maternal Mortality Rate per 100000
Pakistan	1990 As MDGs Base Year	102	140	533
	MDGs Target by 2015	40	52	140
	Current Status	59	72	260
India	1990 As MDGs Base Year	80	125	437
	MDGs Target by 2015	26.7	42	109
	Current Status	47	61	200
Bangladesh	1990 As MDGs Base Year	92	146	574
	MDGs Target by 2015	31	48	143
	Current Status	37	46	240
Sri Lanka	1990 As MDGs Base Year	17.7	22.2	42
	MDGs Target by 2015	6	8	10.6
	Current Status	11	12	35
Bhutan	1990 As MDGs Base Year	90	123	560
	MDGs Target by 2015	30	41	140

Table 11.1: Progress on MDGs Targets

		Infant Mortality Rate Per1000	Under 5Mortality Rate per 1000	Maternal Mortality Rate per 100000
	Current Status	42	54	180
Nepal	1990 As MDGs Base Year	108	162	850
	MDGs Target by 2015	36	54	213
	Current Status	39	48	170

Table 11.1: Progress on MDGs Targets

Source: MDGs Annual Reports of the respective countries

Table-11.2 highlights gaps in well being and life chances in Pakistan in relation to other regional countries. Health outcomes in Pakistan are low versus other countries in South Asia. Some of the factors that account for this lack of progress is higher population growth at 2.0 percent in 2013, a much higher than elsewhere in South Asia. Life expectancy in Pakistan is 65.5 years in 2012. Indicators relates to child mortality and maternal health also shows low progress.

Table: 11.2 Regional Countries Human Development Indicator								
Country	Life Expectancy 2012	Infant Mortality Rate Per 1000 2011	Under 5 Mortality Rate Per 1000 2011	Maternal Mortality Rate Per 100000 2010	Population Growth Rate(%) 2012			
Pakistan	65.7	59	72	260	2.03*			
India	65.8	47	61	200	1.31			
Bangladesh	69.2	37	46	240	1.58			
Sri Lanka	75.1	11	12	35	0.91			
Nepal	69.1	39	48	170	1.77			
Bhutan	68.0	42	54	180	1.18			
China	73.7	13	15	37	0.48			
Malaysia	74.5	06	07	29	1.57			
Indonesia	69.8	25	32	220	1.03			
Philippines	69.0	20	25	99	1.87			
Thailand	74.3	11 + 2012 & UNICEE	12	48	0.54			

Source: Human Development Report 2013 & UNICEF

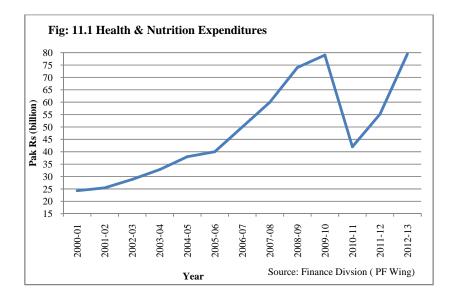
* National Institute of Population (NIP)

Health Expenditure

In Pakistan, health expenditure is as current and development expenditure. For the current on going year 2012-13, the current expenditure is as Rs. 62.12

billion and development Rs.17.34 billion. They together estimates as 79.46 billion which in term of percentage is 0.35 percent of GDP and has increase by 44.16 percent over last year of 2011-12.

Table 11.3: He	Table 11.3: Health & Nutrition Expenditures (2000-01 to 2012-13)(Rs. Billion)							
Fiscal Years	Public Sector E	xpenditure (Federal ar	nd Provincial)	Percentage	Health Expenditure			
	Total Health	Development	Development Current		as % of GDP			
	Expenditures	Expenditure	Expenditure					
2000-01	24.28	5.94	18.34	9.9	0.72			
2001-02	25.41	6.69	18.72	4.7	0.59			
2002-03	28.81	6.61	22.21	13.4	0.58			
2003-04	32.81	8.50	24.31	13.8	0.57			
2004-05	38.00	11.00	27.00	15.8	0.57			
2005-06	40.00	16.00	24.00	5.3	0.51			
2006-07	50.00	20.00	30.00	25.0	0.57			
2007-08	60.00	27.22	32.67	20.0	0.57			
2008-09	74.00	33.00	41.10	23.0	0.56			
2009-10	79.00	38.00	41.00	7.0	0.54			
2010-11	42.00	19.00	23.00	(-)47	0.23			
2011-12	55.12	26.25	28.87	30.97	0.27			
2012-13	79.46	17.34	62.12	44.16	0.35			
Source: Finance	Source: Finance Division (PF Wing)							



Health Facilities:

The health sector in Pakistan suggests that the number of Doctors has increased to more than 1,60289, Dentists 12544, 82119 Nurses and 13678 Lady Health Visitors (LHV). The current ratio of population density versus health facilities is at 1127 person against one doctor, 14406 per dentist and availability of one hospital bed for 1786 person compares well with some regional countries like

Bangladesh and India. Pakistan has also a large market for private health care delivery. The private sector provides varying levels of care and constitutes a diverse group of doctors, nurses etc. Most of the facilities have been established in urban areas. Despite a substantial growth in the number of health institutions, facilities and services, the desired health outcomes could not be achieved due to rapid growth of population.

Table 11.4: Healthcare Facilities							
Health Manpower	2010-11	2011-12	2012-13				
Registered Doctors	144,901	152,188	160,289				
Registered Dentists	10,508	11,584	12,544				
Registered Nurses	73,244	77,683	82,119				
Population per Doctor	1,222	1,164	1,127				
Population per Dentist	16,854	15,288	14,406				
Population per Bed	1,701	1,647	1,786				
Source: Pakistan Bureau of Statistics							

Health Insurance

Protection against illness is the goal of most countries, and they are making struggle to achieve it on fast track. Health insurance in Pakistan is a component of social protection strategy. It provides security to the most health insecure sections of society in the country. The existing health protection mechanism in Pakistan include Zakat and Bait-ulmal. Pakistan Bait-ul-mal provides financial assistance to the poor against health impoverishment. The health related targeted programmes for the benefits of poor include Individual Financial Assistance (IFA), Child Support Programs (CSP) and Special Friends of PBM. Through IFA, poor and disadvantaged are supported for medical treatment. An amount of Rs.4207.536 million has been disbursed to benefit 52,870 individuals country wide during last 04 years. Under the special Friends of PMB, the Pakistan Bait-ul-mal is providing wheel chairs to disabled in the country. Up till now, 60000 wheel chairs, 2026 tricycles, 2500 white canes and 800 hearing aids have been disbursed. Total amount disbursed so far to special friends is Rs 199779860 and for hearing aids Rs. 10828646. 40000 wheel chairs donated by China were also added to the inventory.

Year	2008-09	2009-10	2010-11	2011-12	Total		
Rupees Million	642.86	1236.18	1810.21	518.29	4207.54		
Beneficiaries	8888	17301	20604	6077	52870		
Source: Pakistan Bait-ul-Mal							

While zakat fund is utilized for assistance to the needy, poor and indigent for their subsistence and rehabilitation. Zakat fund is provided either directly through respective zakat committee or indirectly through hospitals and social institutions. The beneficiaries of these schemes are different. However, the coverage of existing mechanism relative to the needs necessitates to make the scheme wider. The fund provides assistance to limited number of cases to cover medical treatment cost. As consequence of 18th amendment, the subject of zakat has been devolved to the provinces and other areas. In 2012-13, Rs.3951.667 million were disbursed to provinces and other areas as under.

Table 11.6: Zakat Disbursement(Million Rupee)								n Rupee)
Provinces	Punjab	Sindh	KPK	Balochistan	FATA	ICT	G.B	Total
Disbursed amount	2108.01	871.35	507.89	187.80	128.05	97.20	51.37	3951.67
Source: Pakistan Bait-ul-Mal								

Physical Targets and achievements during 2012-13:

The achievements for the health sector during 2012-13 include an addition of 4200 hospital beds, establishment of 7 Rural Health Centers (RHCs) 32 Basic Health Units (BHUs) and upgradation of 10 existing RHCs and 37 BHUs along with the addition of 4400 new doctors, 430 dentists, 3300 Nurses, 4500 paramedics and 450 Traditional Birth Attendants. Under the preventive program, about 6 million children were targeted to be immunized and 20 million packets of ORS were to be distributed during 2012-13.

Table 11.7: Physical Targets/Achievements 2012-13				
Sub Sector		2012-13		
	Targets	Achievements	(%)	
A. Rural Health Programme				
New BHUs	40	32	80	
New RHCs	10	7	70	
Strengthening/Improvement of BHUs	45	37	82	
Strengthening/Improvement of RHCs.	15	10	67	
B. Hospital Beds	5000	4200	84	
C. Health Manpower				
Doctors	5000	4400	88	
Dentists	500	430	86	
Nurses	4000	3300	73	
Paramedics	5500	4500	82	
TBAs	550	450	90	
Training of LHWs	10000	8000	80	
D. Preventive Programme				
Immunization (Million)	8	6	75	
Oral Rehydration Salt (ORS) (Million Packet)	23	20	87	
Source: Planning Commission of Pakistan				

Health Programmes

To improve health status of the people and to reduce burden of disease a series of programs and projects are on track. Although vertical programmes in health sector have been devolved to the provinces, however, upon request of the provinces and in pursuance to decision of CCI, funding for these vertical programmes during the 7th NFC Award shall be catered by federal government. An amount of Rs. 20.5 billion was provided in Federal PSDP 2012-13 and there is utilization of approx. Rs. 12 billion by the end of March 2013. Although allocation for health care have substantially increased yet the same are not in commensurate with the needs of health sector. Beside effective utilization of fund is also a big constraint

Following programs and projects are funded through the Federal PSDP and implemented by the Provincial and area governments.

Programme for Family Planning and Primary Health Care;

The program has recruited more than 100,000 Lady Health Workers (LHWs). The total population covered under this program spread over 60 % in Balochistan to more than 80 % in Punjab. LHWs services have visible impact on the health status of women and children in particular through improved hygiene, birth spacing, iron supplementation, greater immunization coverage and through Ante-natal and post-natal coverage of the pregnant women. The new PC-I of provincial as well as area governments are under the process of approval in which salary packages of the staff of this program have been increased through regularization of their services in compliance of the orders of the Honorable Supreme Court of Pakistan. These proactive steps will definitely lead towards greater commitment and better health service delivery at the door steps of the vulnerable. Still overarching issues of governance and monitoring needs attention at the district and sub districts level.

Expanded Program for Immunization:

EPI Program provides immunization to children against the seven vaccine-preventable diseases under one year of age i.e. childhood tuberculosis, poliomyelitis, diphtheria, pertussis, neonatal tetanus, measles and hepatitis B. New vaccines like pentavalent vaccine have been introduced with the help of UNICEF. Though after devolution this has become largely the responsibility of the provincial/area governments but federal EPI cell currently took the responsibility of the procurements, coordination and technical guidance whereas provincial EPI cell are largely responsible for implementation of the program. World Bank along with other financial partners WHO and JICA have largely contributed towards smooth implementation of the program. Still the issues of routine immunization in the out reach areas of FATA and Balochistan needs attention.

Malaria Control Program:

Malaria is a preventable and treatable disease. However, it is the 2nd most prevalent and devastating communicable disease in the country. More than 90% of disease burden in the country is shared by 56 highly endemic districts, mostly located in Balochistan (17 out of 29 districts), FATA (7 agencies), Sindh (12 districts) and Khyber Pakhtunkhwa (12 districts). Most of the reported cases from these districts are due to falciparum malaria which is the most dangerous form of malaria. Federally Administrated Tribal Areas (FATA) is the second highest malaria affected belt of the country which accounts for 12-15% of the total case load of the country. National strategy for Malaria Control is based on the following 6 key RBM elements:

(i) Early diagnosis and prompt treatment. (ii) Multiple prevention (iii) Improved detection and response to epidemics. (iv) Developing viable partnerships with national and international partners.
(v) Focused operational research and (vi) National commitment.

Despite a significant progress over the years, malaria continues to exert significant health cost and burden worldwide . WHO is promoting the effective use of T3 strategy (test, treat and track) for malaria prevention and control. The WHO new initiative T3 urges malaria –endemic countries to move towards universal access to diagnostic testing and anti - malaria treatment to build control and surveillance system. International funding for malaria prevention and control has steadily increased and reached US \$ 1.84 billion in 2012. Every year April 25th is observed as malaria day around the world.

TB Control Program:

Pakistan is ranked 6th amongst 22 high disease burden countries of the world. 40% of the burden of disease in Pakistan is in the form of communicable diseases such as malaria and TB. Incidence of TB stands at 231/100,000 population and prevalence of about 300 cases per 100,000 population The total number of absolute cases is 211500 upto the third quarter of 2012 and the treatment success rate remained 91%. TB Control Program has achieved 80% Directly Observed over Treatment System(DOTS) coverage in public sector and in the last five years the programme has provided care to more than half a million TB patients in Pakistan. The programme is moving steadily to achieve the global targets of 70% case detection. There are areas where NTP has to improve suspect management, contact management, quality bacteriology services, engaging all care providers through public private partnership, inter-sectoral collaboration, monitoring and supervision, research for evidence based planning and advocacy communication and social mobilization.

HIV/AIDS Control Program:

Prevention and treatment of HIV/AIDS remain among the most important condition for resumption of human development activities across much of the regions. The objectives of the HIV/AIDS prevention programme are to prevent HIV/AIDS transmission and to promote safe blood transfusion. The number of injecting drug users has posed a threat of increasing numbers of total cases of HIV/AIDS in Pakistan. Still the prevalence of HIV/AIDS is considered to be as low as 1%, hence not considered a high risk country. The focus of the program is on behavior change communication (BCC), services to high-risk population groups, treatment of sexually transmitted infections (STIs), supply of safe blood and capacity building of various stakeholders. Till date 4,500 HIV positive cases have been reported to the AIDS Control Programs at federal and provincial levels. The program is technically supported by the UN agencies and Global Fund against AIDS, TB, and Malaria.

Maternal & Child Health Program:

Mother and Child health has been one of the priority areas of Public health in Pakistan. This program has been launched by the government in order to improve Maternal and Neonatal Health services for all particularly the poor and the disadvantaged at all levels of health care delivery system. It aims to provide improved access to high quality Mother and Child Health and Family Planning services, train 10,000 community midwives. comprehensive Emergency Obstetric and Neonatal Care (EmONC) services in 275 hospitals/health facilities, basic EmONC services in 550 health facilities, and family planning services in all health outlets. Despite these modalities, Pakistan has shown a modest improvement in this segment and the Infant mortality rate and Child mortality rates are still very high as compared to the other countries in the It is region. envisaged that successful implementation of this project will bring these indicators in a respective range with improved health status of mothers and children.

Prime Minister's Program for Prevention and Control of Hepatitis in Pakistan:

All forms of hepatitis are of concern within a public health framework. The program envisages meeting the challenges posed by the high prevalence of viral hepatitis in the country. The program aims at 50% reduction in new cases of hepatitis B and C by 2015 through advocacy and behavior change communication, hepatitis B vaccination of high risk groups, establishment of screening, diagnosis and treatment facilities in 150 teaching and DHQ hospitals, Safe Blood Transfusion and prevention of hepatitis A and E. A long awaited Safe Blood Transfusion project with the technical cooperation of GIZ and Kfw has been revived and is in the implementation process in all four provinces that will bring down the incidence of hepatitis in the country.

Drug Abuse:

Illicit drugs use, its production and trafficking has emerged as serious issue. According to the UNODC's "World Drug Report-2012", the illicit drug use continues to be rising in several developing countries. Pakistan being a neighboring country to Afghanistan which is producing about 90% of world's opium; has been affected in many ways. It is estimated that around 25% of the illicit drugs traded though Pakistan have been consumed within Pakistan.

National Anti-Narcotics Policy-2010 is already in place. It is implemented in collaboration and cooperation of all international and national stakeholders in coordination with all provincial governments, Law Enforcement Agencies (LEAs), NGO and community organization.

Currently, there are 11 ongoing development projects in the fields of area development, drug demand and drug supply reduction and addicts, outreatment and rehabilitation, which are being implemented at a total cost of Rs.4.30 billion including local cost of Rs. 1.75 billion and Foreign Aid of Rs. 2.55 billion.

The seizures of Narcotics by Anti-Narcotics Force (ANF) during the period July 2012- January, 2013 are given in the table as below;

Table 11.8: Drug Seizures						
S.No.	Kind of Narcotics	Quantity of Drugs Seized (in Kgs)				
i	Opium	4,498.750				
ii	Hashish/ Charas	17,299.825				
iii	Heroin	1,991.331				
Source	Narcotic Control Division					

Cancer Treatment:

Cancer has been considered as one of the deadliest forms of non-communicable disease. The incidence of cancer is increasing worldwide, specially in developing countries including Pakistan. Pakistan Atomic Energy Commission's (PAEC) Cancer Hospitals in four provinces are already providing diagnosis and treatment facilities to cancer patients, Nine new cancer hospitals are in the process of construction. Federal Breast Cancer Screening program have been launched in 2013 in Islamabad at PIMS for early diagnosis and screening of women.

Pakistan Atomic Energy Commission (PAEC) is using the nuclear and advanced techniques for diagnosis and treatment of cancerous and allied diseases It has established so far 15 cancer hospitals in various cities throughout the country while three others are in final stages of completion and expected to start functioning by June 2013.

PAEC cancer Hospitals are equipped with advanced, sophisticated and modern diagnostic facilities. Major services provided at these hospitals are Diagnostic and Therapeutic Nuclear Medicine, Hormonal Assay, Radiotherapy and Cancer Prevention and Awareness Programs.

PAEC hospitals are manned by skilled teams of more than 2000 professionals, including doctors, scientists, engineers and paramedical staff Besides treating about 2,66,899 patients in the reported period (July to December 2012), the PAEC continued working on the following projects:

03 Hospitals in KPK Province have been almost completed. These are expected to start full functioning by June 2013.

Addition of latest and advanced Diagnostic & Therapeutic facilities to come at par with international standard is also under progress and PET/ CT facility at PAEC Cancer Hospital (INMOL), Lahore has been added and patients throughout Pakistan are being benefited.

PEAC Cancer Registry Program (PCRP), started in 2007 is now in final phase and is expected to be completed by August 2013.

Patients in remote areas also benefited with Mobile Breast Care Clinics being arranged on fortnightly and monthly basis for awareness, diagnosis and treatment of patients.

Food and Nutrition:

Food security and supply impact the nutritional well being and improvement of human resources. The increased food prices in recent past results in high food cost having impact on nutrition status of the people and attainment of MDG relevant targets. It is still assumed that lack of food is the only reason for malnutrition. Hence, the problem of food insecurity deserve to be tackled through a strategic approach by taking the demand, supply and its distribution factors into account.

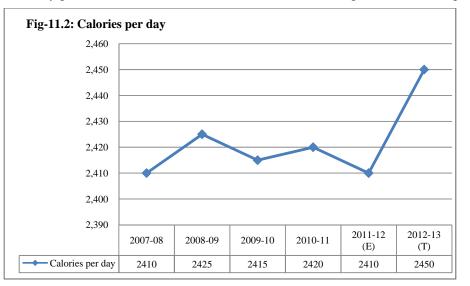
Food availability and consumption are the indicators to assess food adequacy. According to food balance sheet, the availability of essential food items has been at adequate level to meet national food needs. The average calories estimation through food balance sheets during last five years remained above 2400 calories and protein 70gm per capita per day. During the fiscal year 2012-13 it has been around 2450 calories per capita per day. The five year overview of food availability pattern for major food items is given in Table 11.9 and Fig-11.2.

Table 11.9: Food Availability per capita															
Items	Year/ units	2007-08	2008-09	2009-10	2010-11	2011-12 (E)	2012-13 (T)								
Cereals	Kg	158.1	160.3	158.8	158.7	159.0	160.0								
Pulses	Kg	7.2	5.8	6.8	6.7	6.4	6.7								
Sugar	Kg	30.0	25.6	26.1	26.5	30.4	31.0								
Milk	Ltr	165.4	167.2	169.1	169.8	169.0	170.0								
Meat	Kg	20.0	20.0	20.5	20.9	20.4	21.0								
Eggs	Dozen	5.5	5.6	5.8	6.0	6.0	6.0								
Edible Oil	Ltr	12.8	12.5	12.6	12.6	12.7	13.0								
Calories per d	lay	2410	2425	2415	2420	2410	2450								
Protein per day (gm)		72.0	72.5	71.5	72.0	71.5	72.5								
Courses Dlenn	in a Commission	of Dolviston					Source: Planning Commission of Pakiston								

Source: Planning Commission of Pakistan

The national costs of malnutrition are very high: a vicious intergenerational cycle of poor health, high death rates, poor quality of life, decreased mental

capacity and reduced worker productivity. Thus improvements in nutrition and food adequacy are



important for a healthy productive life as well as for sustained economic growth and development.

The overall supply of major food items sustained on one hand, but average retail prices of essential items over the period have an overall increasing trend impacting consumption of essential food items. The cost of the minimum food basket for the fiscal year 2012-13 (July-12 to February-13) remains fluctuating however, a cumulative increase of about 3 percent from Rs.1,875 to Rs.1,928 was noted.

To address and overcome malnutrition problems in provinces and federal territories, an effective multisectoral approach has been adopted, and an Integrated Nutrition Policy Guidance Notes and Strategic & Operational Planning for Development of a National Nutrition Policy and formulation of plans for five years have been completed. The micronutrient deficiencies are being addressed through food fortification/ supplementation and awareness programs remained in progress mainly through LHW covering more than 60% of population.

Universal Salt Iodization (USI) expansion along with the improvement in Quality Management System (QMS) is being focused and a generic safety and quality manual has been prepared. It will assist the salt producers, regulatory and monitoring authorities to overcome quality issues. Institutionalization of internal and external quality of fortified food products has been taken up across provinces.

A National Zero Hunger Program, collaboration of public sector and UN agencies is being finalized to address hunger and malnutrition in the country. This program aims to reach to most food insecure and vulnerable sections of society across the country particularly malnourished children, primary school children and pregnant women, by provision of nutritious and fortified food commodities.

Food security and social safety net measures in terms of Benazir Income Support Program (BISP) and Pakistan Bait-ul-Mal constantly provided cash incentives to the poorest of the poor households to reduce the impact of food inflation and to improve nutritional status of population.

New initiative for Management of Severe Acute Malnutrition & Nutrition Surveillance has been initiated and under process of progress. Regional training and development of the manual for management of Severe Acute Malnutrition has been developed for implementation.

Conclusion:

The chapter attempts to highlight health practices and activities carried out during the on going fiscal year as well as to present the prevailing situation regarding the provision of health facilities in Pakistan. The role of public and private institutions toward provision of health coverage to the overall population is discussed in a comprehensive way. The chapter also discusses the progress on the status of MDGs targets among the regional countries with focus on health related indicator. The chapter is mainly based on data from Pakistan Bureau of Statistics (PBS), Planning and Development Division (P&D), Narcotics Control Division and other public data depositories. A fair detail is provided on health programmes implemented by Federal, Provincial and Local governments. The

efforts are also made to indicate the contribution of donors in the provision of health facilities. Various estimates and comparison highlights some prominent findings like the health of the people has improved but the rate of improvement in health out comes in some respects has been slow compared to its neighboring countries. The pace of improvement is not satisfactory due to various reasons like resources constraints and rapid growth of population.