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Health and Nutrition

Good health is identified as a vital component of a good quality of life, and access to good health is recognized as a basic human need and a fundamental human right. A healthy population is more productive and efficient component of the society.

In order to address enduring failures of human development, Millennium Development Goals has been drafted for reducing poverty, gender equality and among other advancing opportunities for health and education. Pakistan being a signatory of MDGs is fully aware of its commitments and particularly focusing of meeting three out of eight groups which relates to health sector such as reducing child mortality, in focusing maternal health and combating HIV/AIDs, TB, Malaria and other diseases.

The National Health Policy of Pakistan 2009 in conformity with its commitment seeks to improve the health indicators of the country by delivering a set of basic health services for all. This will be done by improving health and using reliable health information to guide program effectiveness and design, and strategic use of emerging technologies. The health status of the population can be enhanced by achieving policy objectives of enhancing coverage and access of essential health services, measurable reduction in burden of diseases and protecting the poor and under privileged population subgroups against risk factors. Several programs are under way with major thrust to improve health care and training.

Currently a total of 82 development schemes with PSDP allocation of Rs.16.9 billion for year 2010-11 are executing through ministry of health. Against this allocation, Rs.7.411 billion has already been released by the Planning Commission during July-January, 2011. Out of

the released amount, Rs.6.3 billion has been utilized by the programmes/ projects upto January, 2011 which is 85% against the released amount. Despite financial constraints, the government has shown its resolve to continue investments in social sector in order to improve Human Development Index.

Health Indicators

Child and maternal health is perhaps the most significant index of social development in a country and is considered to reflect the level of nutrition, education and access to health services. Table-I below compares Pakistan's performance with that of other regional countries for the year 2010. Despite the fact that Pakistan has made progress during last couple of years towards achieving these health targets yet the pace has been sluggish. Pakistan still suffers from a high infant and maternal mortality, a double burden of diseases, and inadequate health care facilities with high population growth. Mortality, morbidity and slow progress of indicators in the maternal and child health are major concerns in the progress towards achieving Millennium Development Goals. Pakistan is lagging behind from other developing countries in these indicators. However, life expectancy at birth is a good indicator of health and here Pakistan has done better. The average life expectancy at 67.2 years estimated for 2010 is well comparable with Bangladesh, Nepal and Thailand but the mortality rate for children under age five and infant mortality still remains high due to birth related problems, immunizable diseases, malnutrition and unhealthy dietary habits and low female literacy rate. Pakistan is working towards universal immunization, diseases prevention, health promotion and curative services. There are several programmes underway to improve health care and coverage.

Table 11.1: Indicators

Country	Life Expectancy (2010)	Infant Mortality Rate per 1000 (2010)	Mortality Rate under 5 per 1000 (2010)	Population Avg. Annual (%) Growth (2010)
Pakistan	67.2	63.3	89	2.1
Bangladesh	66.9	50.7	54	1.6
China	73.5	16.1	21	0.5
India	64.4	47.6	69	1.3
Indonesia	71.5	27.1	41	1.1
Malaysia	74.3	15.0	6	1.6
Nepal	67.5	44.5	51	1.6
Philippines	72.3	19.3	32	1.9
Sri Lanka	74.4	9.7	15	0.9
Thailand	69.3	16.4	14	0.6

Source: United Nation Human Development Report 2011

Health Expenditure:

The government's health budget has been progressively increasing over the last several years. The share of health expenditure in total expenditures/GDP is the most significant variable affecting health status in a country. Notwithstanding the increase in absolute terms its ratio to GNP/GDP remained more or less static at around 0.5-0.7 percent. The analysis of health financing of last decade 2000-10 indicates that major share of the financial resources in public

sector are provided by the government. With reference to the ratio between development and non-development budget, comparison of last several years shows a major dominance of non development budget. The gap appears to have been widening over years partly due to resource constraints. However, the overall trend is comparatively favorable. For 2011, total health care expenditure is estimated at 0.23 percent of GDP. The following figures give development versus non-development budget in the country of health sector.

Table 11.2: Health & Nutrition Expenditures (2000-01 to 2009-10) (Rs. Billions)

Fiscal Years	Public Sector Expenditure (Federal and Provincial)			Percentage Change	Health Expenditure as % of GDP
	Total Health Expenditures	Development Expenditure	Current 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	0.57
2007-08	60.00	27.22	32.67	20	0.57
2008-09	74.00	33.00	41.10	23	0.56
2009-10	79.00	38.00	41.00	7	0.54
2010-11	42.00	19.00	23.00	(-47)	0.23

Source: Planning Commission

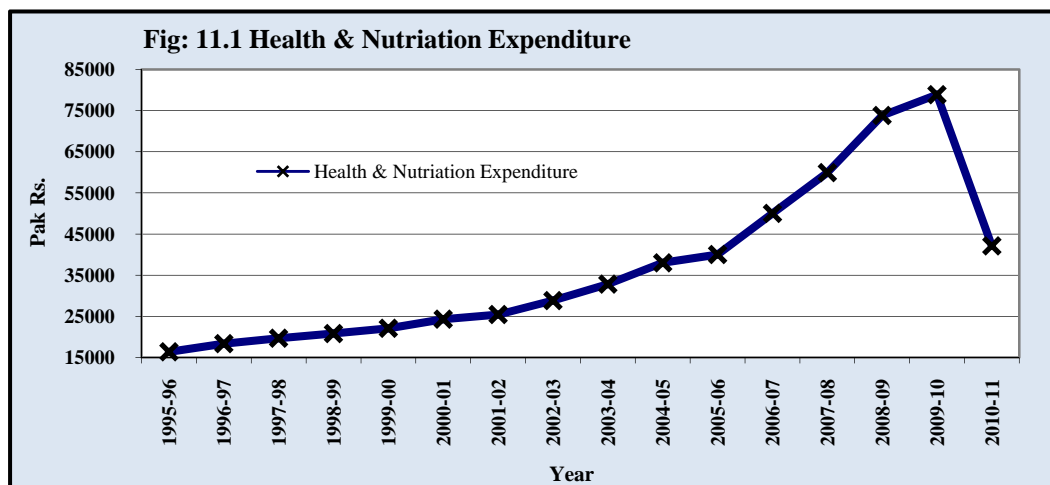
Health Facilities:

In Pakistan investment in the Health sector are viewed as an integral part of the government's poverty alleviation endeavour. There has been a noticeable improvement in some health indicators

over the years. The health care personnel-doctors, dentist, nurses and paramedics etc in public sector have also increasing considerably over time in the country. Upto the year 2010, there are 144,901 physicians, 10508 dentists, 73,244 nurses, and 27.153 midwives. Besides, there are 972 hospitals

in the country with total of 104,137 hospital beds, 4,842 dispensaries and 5,344 basic health units (BHUs) mostly in rural areas. Special attention has been given to the training of nurses, and several training centers are in operation. The government hospitals used to provide most

services free. In certain places medicines are also provided free of charges. According to the available health data, the population versus health facilities ratio works out 1222 person per doctor and availability of one dentist for 16,854 people and one hospital bed for 1701 people.



The new vision for health outlined in the government's national health policy provides guidelines for provision of better services in 2010. The recent promising initiative is the lady health

worker (LHW) community based program which bring some basic health care and family planning services to women's doorstep charges.

Table 11.3: Healthcare Facilities

Health Manpower	2008-09	2009-10	2010-11
Registered doctors	133,925	139,555	144,901
Registered dentists	9,013	9,822	10,508
Registered nurses	65,387	69,313	73,244
Population per Doctor	1212	1183	1,222
Population per Dentist	18,010	16914	16,854
Population per Bed	1575	1592	1,701

Source: Ministry of Health

11.4 Physical Targets and Achievements During 2010-11

Targets for the health sector during 2010-11 included establishment of 15 Rural Health Centers (RHC), 40 Basic Health Units (BHUs) and up-gradation of 45 existing RHCs and 900 BHUs. The manpower target included the addition of 5000 new doctors, 450 dentists, 3500 Nurses, 5500 paramedics and 500 traditional birth attendants. Under the preventive program, about 8.5 million children were targeted to be immunized and 25 million packets of ORS were

to be distributed during 2010-11. Till date 4500 HIV positive cases have been reported to the National and Provincial AIDS Control Programs. It includes 3050 full blown AIDS cases. Around 1030 are receiving free treatment through 12 AIDS Treatment Centers. Total number of TB cases reported are 62,321. Whereas the absolute number of cases is 209,714 up to the third quarter of 2010 and the treatment success rate remained 91 percent. The percentage of TB case-detection rate is 81 percent and cure rate is 74 percent.

Physical targets, achievements for 2010-11 are given in the table 11.4:

Table 11.4: Physical Targets and Achievements During 2010-11

Sub-Sector	Targets (Nos) 2010-11	Estimated Achievements (Nos)	Achievements (%)
A. Rural Health Programme			
i. New Basic Health Units (BHUs)	40	35	87
ii. New Rural Health Centres (RHCs)	15	13	86
iii. Upgradation of existing RHCs	45	40	88
iv. Upgradation of existing BHUs	900	850	94
B. Beds in Hospitals/RHCs/BHUs	4500	4300	95
C. Health Manpower Development			
i. Doctors	5000	4500	90
ii. Dentists	450	400	80
iii. Nurses	3500	3200	90
iv. Paramedics	5500	5000	90
v. TBAs	500	450	-
vi. Training of LHWs	100,00	96,000	96
D. Preventive Programme			
i. Immunization (Million Nos)	8.5	8	94
ii. Oral Rehydration Salt (ORS) (Million Packets)	25	24	96

Source: Planning Commission

11.5 Health Programs

The government is implementing many health programmes focused on developing sustainable health care system to combat diseases and other major health concerns.

a) Expanded Programme on Immunization (EPI)

The government has allocated Rs.2716.3 million (GoP Rs.2315.7) & GAVI Rs. 400.6) for the current year 2010-11 to improve the health status of children and their mothers. This ensures the commitment of the government for provision of vaccines, syringes, cold chain equipment, operational vehicles, printed material and promotion of health education/ motivation campaign through electronic media. The programme has been able to attain major achievements such as:

- Surveillance for acute flaccid paralysis (AFP) has met global standards nationally.
- Three round of Medical Nutrition Therapy (MNT) have been completed in six high risk districts of Punjab. Two rounds have also been conducted in one high risk district of

Sindh (Tando Allahyar) during 2010 with the overall coverage of 95 percent & 92 percent, respectively to bring down the Number Needed to Treat (NNT) cases and achieve maternal and neonatal elimination level in the country.

- Mass vaccination campaign in 40 high risk districts has been completed during Sept-Oct 2010 whereas 2nd Phase in 30 districts is underway. Remaining districts will be covered during March-April 2011 as elimination level could be achieved.
- Government has brought Global Alliance for Vaccines and Immunization (GAVI) support for introduction of pneumococcal vaccine for the country under co-financing mechanism. Global Alliance for Vaccines and Immunization (GAVI) will pay US\$ 680 million and the country will bear US\$ 20 million under GAVI Phase-2 support.
- Pakistan has made tremendous progress towards achieving polio targets and global experts have re-affirmed that country could be the next polio free country in the world. The number of cases has been reduced from thousands to just 140 cases in 2010 and polio

remains in just a few strongholds across the country.

b) AIDS Control Programme

The trend of HIV epidemic has shifted from a low-prevalence state to concentrated state. Based on the surveillance data and epidemiological modelling, the National Aids Control Programme (NACP) has estimated that there are about 90,000-100,000 HIV positive people, approximately 0.1 percent of the general population.

However, as the epidemic is unfolding the situation among high-risk groups especially, injection drug users are becoming worse. The results of the recent survey among these high risk groups indicate an average HIV prevalence of 20 percent among injection drug users. Furthermore, there has also been a recent reporting of HIV outbreak in Jalal-Pur Jattan (Punjab), where a detailed fact finding outbreak investigation by Centre for Disease control (CDC) Atlanta-USA in collaboration with National and Punjab AIDS Control Program is under progress. The preliminary reports prepared so far clearly indicates that the HIV infection in the area is an old phenomenon and it is the awareness and availability of testing services that has revealed the situation. The principle services that have been provided by the programs in most areas include;

- HIV Prevention and Control services including provision of new syringes, counselling and testing services, and treatment and care services for AIDS cases among high-risk groups ;
- HIV Prevention among general public through a nation-wide behaviour change communication campaign;
- Services to prevent HIV transmission through blood and blood products by providing HIV, Hepatitis B and C screening kits in all public sector blood banks;
- Successfully secured 3-years WHO grant for provision of blood screening kits to Blood Banks in Pakistan.
- Establishment of 13 HIV treatment and 07 prevention of parent to child areas and

Provinces, providing free of cost Anti Retroviral Therapy (ART).

- Implementation of health education campaign on both electronic and print media.

c) Malaria Control Programme

In 2010 (Jan-Dec) the total number of confirmed malaria cases in Pakistan reported from all the districts were 220,870 including 143,136 or 75 percent cases due to P.vivax infection and 73857 due to P. falciparum infection and 3,877 were mixed infection. It is estimated that about 70-80 percent of the population goes to private sector for treatment, therefore, according to an estimate, the actual malaria burden could be four to five times higher. The currently approved PC-I for 2007-2012 are a step towards achieving the WHO global RBM target of 50 percent reduction in the malaria burden by the year 2010 in Pakistan. Falciparum cases will be kept less than 40 percent of all malaria infections. The National Strategy for Rolling Back Malaria (RBM) is based on the following key elements:

- Early Diagnosis and prompt treatment at general health facilities and community based approaches towards home treatment.
- Multiple prevention measures including promotion of insecticide treated bed nets & materials, targeted use of residual insecticide spraying, and introduction of biological and environmental vector management approaches.
- Intensive and comprehensive public education activities with appropriate Information, Education and Communication (IEC) material to enhance public knowledge of malaria, treatments, and prevention.
- Improved detection and response to epidemics and malaria emergency situations.
- Developing viable public and private partnerships in the country to combat malaria.

d) National T.B. Control Programme (NTCP)

Pakistan ranks 8th amongst the countries with the highest burden of TB in the world. TB is responsible for 5.1 percent of the total national disease burden in Pakistan. Efforts have been

made to expand partnerships and bring all stakeholders on board in order to control this disease more effectively. The National T.B. Control Programme (NTCP) is responsible for overall TB control activities in the country i.e. policy guideline, technical support, coordination, monitoring and evaluation, and research where as the PTPs are responsible for the actual care delivery process including programme planning, training of care provides, case detection, case management, monitoring and supervision.

The overall objective of NTP is to reduce mortality, morbidity and disease transmission so that TB is no longer a public health problem. The National targets are in line with the Millennium Development Goals (MDGs). To cure 85 percent of detected new cases of sputum smear positive pulmonary TB and to detect 70 percent of estimated cases once 85 percent cure rate is achieved.

NTP has taken many new initiatives including a nation wide formative research for identifying risky behaviours, development of a behavioural change communication strategy, initiation of mass media campaign, awareness seminars at provincial levels and advocacy activities at the district level. Operational research is carried out and steps are taken to enhance the research capacity at national provincial and district levels and design the carryout researches. NTP has completed and published 10 research projects. A number of researches are in progress.

e) National Programme for Prevention and Control of Blindness

The programme is in line with “VISION 2020”, the global initiative of the WHO for elimination of preventable causes of blindness by the year 2020. Core objective of the Programme to be achieved include Prevention of blindness in two (02) million people, restoration of vision in two (02) million people and restoration of useful vision in 15,000 children. While the program has targeted to establish seven (07) Centres of Excellence in Ophthalmology and to strengthen and up-grade 20 Tertiary Teaching Hospital (TTH) Eye Departments. Besides, 63 District Eye Units

(DHQ Hospitals) are targeted to be strengthened and upgraded.

f) National Programme for Family Planning (FP) & Primary Health Care (PHC)

It is a countrywide Programme for provision of Family Planning (FP) and Primary Health Care (PHC) services with community participation. The programme constitutes deployment of Lady Health workers (LHWs). Each LHW serves a population of 1,000 people that form approximately 150 families. The health services provided by the LHWs are through monthly home visits and static health houses established within their residence The major objective of Programme is to increase utilization of effective promotive, preventive and curative services at the community level particularly women and children in poor and underserved areas. Other main objectives of the programme are to:-

- Develop the necessary health manpower by selection, training and deployment of LHWs throughout the country.
- Provide promotive, preventive, curative and rehabilitative services to which the entire population has effective access.
- Bring about community participation through creation of awareness.
- Expand family planning services availability in urban slums and rural areas of Pakistan.

g) National Maternal, Newborn and Child Health Programme (MNCH Programme)

Maternal, newborn and child health (MNCH) is a priority agenda of the government. Pakistan is a signatory of many international development strategies, including MDGs and the government is committed to achieve a reduction in Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR) by 2015. To address this issue, government is committed to increase the proportion of deliveries by skilled birth attendants from 40 percent to 90 percent and also to increase the Contraceptive Prevalence Rate (CPR) from 30 percent to 55 percent.

To strengthen the resource gaps in the existing service delivery for improving health of Mother,

newborn and child health and to achieve Millennium Development Goals (MDG's) 4 & 5 goals, the government has already launched the National Maternal, Newborn and Child Health Programme (NMNCH) in 2006. The goal of the program is community based approach to improve the status of mothers, newborns and children particularly those in poor and marginalised households. The Program Objectives include:

- Reduction of maternal Mortality from 276 to 175/100,000 live Births.
- Reduction of Neonatal Mortality Rate from 54 to 40/1000 live Births.
- Reduction of Infant Mortality rate from 72 to 55/1000 live Births.
- Reduction of Under 5 Mortality rate from 94 to 65 per 1000 live births.
- Increase in the proportion of deliveries attended by Skilled Birth attendants at home or in health facilities to 90 percent from 39% (current).
- Increase in Contraceptive Prevalence Rate (CPR) from 30 to 55 percent.

Devastating floods of August-September 2010 have affected more than 20 million people, destroying infrastructure of rural and urban areas and agricultural lands of Pakistan. This has adversely impacted the overall economy and achievement of many of the MDG targets, which in the current scenario remains an ambitious target to achieve.

h) Cancer Treatment Programme

The incidence of the cancer is growing world wide as well as in Pakistan and the Pakistan Atomic Energy Commission (PAEC) has so far established 14 cancer hospitals in various cities throughout the country. These hospitals are equipped with advanced and sophisticated diagnostic/ therapeutic facilities and using the nuclear and other advanced techniques for diagnosis and treatment of cancerous and allied diseases and is actively involved in the national cancer prevention, diagnosis and treatment program. The program in diagnosis of different kinds of cancer and allied disease has great

success. These Nuclear Medicine & Oncology (NM&O) Hospitals are equipped with most modern equipment, and manned by skilled teams of doctors, engineers, scientists, physicists and paramedical staff. Presently, there are 2000 professionals and supportive staff working at these hospitals. Nuclear Medicine and Oncology Hospitals besides treating about 286,000 patients in the period under report, the following targets have also been achieved :

- Research work continued on various IAEA TC/RCA Projects and other research projects in collaboration with different international/ national organizations.
- Four new NM&O Hospitals are at different stages of construction i.e. Swat 60 percent, D.I. Khan 80 percent, Bannu 60 percent and Nawabshah 80 percent.
- Launching of cancer awareness and control campaign especially for breast cancer awareness for early diagnosis and better prognosis through arranging lectures, seminar, and workshops in remote areas and through printing and electronic media.
- up- gradation of Nuclear Medicine & Oncology (NM &O) hospitals by adding latest medical diagnostic and treatment equipment to provide state of the art diagnostic and treatment facilities for all types of cancers to bring these hospitals at par with international institutes.
- Human resource development through academic training of existing doctors/ technicians and through hiring of experts in all relevant fields.
- Participation of provincial governments in the development of NM &O hospitals in their respective provinces.

i) Drug Abuse

Drug Abuse has emerged as a global issue and this menace is also wide spread in our society and affected Pakistan in many ways. It is entailing heavy social and economic costs on our already over-burdened and financially constrained economy. Trafficking of Afghan drugs into and throughout Pakistan and the smuggling of

precursor chemicals to Afghanistan, continue to pose serious challenges to Pakistan's Law Enforcement Agencies (LEAs) and health care system

To address the drug issue from Pakistan's perspective and in view of the changes in global narcotics environment; the National Anti Narcotics Policy-2010 has been prepared which is based on three pronged strategy i.e. Drug Supply Reduction, Drug Demand Reduction and International Cooperation. In drug supply reduction, the focus will be on strengthening the law enforcement agencies (LEAs) at the federal and provincial/ district levels in an effort to combat drug trafficking and reduce the flow of drugs into Pakistan. Capacity of LEAs in high intensity drug trafficking areas like Khyber Pakhtunkhwa province and Balochistan will be increased to assist in disrupting money laundering and seizing drug generated assets. Poppy cultivation will be discouraged to maintain Pakistan's Poppy free status. As far demand reduction strategy, drug demand reduction efforts will be enhanced through education, community mobilization and awareness campaigns, effective and accessible drug treatment and rehabilitation systems. As regards international cooperation, the government is to promote and actively participate in bilateral, regional and international efforts to combat drugs. Demand reduction in destination countries needs to be an important part of international efforts.

A new Drug Control master Plan (2010-14) has been prepared to reduce the health, social and economic costs associated with drug trafficking and substance abuse in Pakistan. The plan includes short, medium and long-term initiatives for implementation of the National Anti-Narcotics Policy-2010.

Currently, there are 19 on-going development projects which are being implemented at total cost of Rs.5321.590 million including local cost Rs.2,712.4 million and foreign aid of Rs.2,609.2 million.

Pakistan is one of the top three countries where confiscation rate, seizure, of narcotics drugs and precursor chemicals is high. Seizures of narcotics

drugs by Anti Narcotics Force (ANF) during the course of year are given in the table as below:

Table 11.5: Seizure of Drugs

S.No.	Kind of Narcotics	Quantity of Drugs (Seized in Kgs)
1	Opium	879.6
2	Morphine	3,456.5
3	Heroin	725.4
4	Hashish	20,567.5

Source: Ministry of Narcotics Control

Food and Nutrition

Nutrition is an important poverty determinant, biological requirement for individual growth and maintenance. Food is a fundamental right of the people. In spite of adequate production and sustained availability of foods, malnutrition is persistently prevalent in the country. According to the available data, about 38 percent of children less than five years of age are underweight and 12 percent are severely under weight, reflective of wide spread malnutrition among women during adolescence. In addition, micronutrient deficiencies such as iron, iodine, zinc and vitamin-A are widespread, particularly among pre-school children.

Macro indicators, such as availability of basic food items remained satisfactory during the fiscal year. Domestic food inflationary trends have resulted in price increase having impact on overall family food intake. The availability of essential food items over the period is briefly given in Table 11.6:

Major programs/ initiatives taken to overcome nutritional problems/ issues in public and private sector are briefed as under:

- The new Project "Improvement of Nutrition through Primary Health Care and Nutrition Education/ Public Awareness" has been approved to address general malnutrition, micro nutrient, malnutrition and education communication.
- Expanded Benazir Income Support Program, providing cash assistance to about four

- million poor families at a rate of Rs.1000/- per month throughout the country;
- Pakistan Bait-ul Mall –Food Support Program provided Rs.3000/- to targeted about 2 million poorest of the poor families in the country.
- Food Quality Control System- Reference Laboratory has been established at National Institute of Health (NIH), Islamabad;
- Food productivity enhancement as part of the Food Security Program remained continued by M/o Food and Agriculture.
- Nutritional Counselling and micronutrient supplementation are being provided by the primary health care system and lady health workers;
 - Micronutrient supplementation to women of child bearing age;
 - Vitamin A supplementation to children under five years of age and the coverage has been about 95 percent.

Table 11.6: Food Availability per capita

Items	Year/ units	1949-50	1979-80	1989-90	1999-00	2007-08	2008-09	2009-10 (E)	2010-11 (T)
Cereals	Kg	139.3	147.1	160.7	165.0	158.1	160.3	158.8	158.7
Pulses	Kg	13.9	6.3	5.4	7.2	7.2	5.8	6.8	6.7
Sugar	Kg	17.1	28.7	27.0	26.4	30.0	25.6	26.1	26.5
Milk	Ltr	107.0	94.8	107.6	148.8	165.4	167.2	169.1	169.8
Meat	Kg	9.8	13.7	17.3	18.8	20.0	20.0	20.5	20.9
Eggs	Dozen	0.2	1.2	2.1	5.1	5.5	5.6	5.8	6.0
Edible Oil	Ltr	2.3	6.3	10.3	11.1	12.8	12.5	12.6	12.6
Calories per day		2078	2301	2324	2416	2410	2425	2415	2420
Protein per day		62.8	61.5	67.4	67.5	72.0	72.5	71.5	72.0

- The Micro-nutrient deficiency control program in private sector is being implemented for Iodine, Iron, Vitamin-A are:
 - Salt Iodization production and mass awareness has been expanded in more than 102 districts;
 - Wheat flour fortification with Iron has been increased to 175 flour mills along with quality control and mass awareness;
- The policy of Infant Young Child Feeding (IYCF) has been developed, approved and adopted. Health staff training on Baby Friendly Hospital Initiative (BFHI) and breast feeding counselling has been started as regular capacity building feature;
- National Nutrition Survey 2011 has finalized and underway by Health Division.
- Consultation process initiated to holistically address malnutrition through multisectoral approach.