

# Health and Nutrition

Better health and healthy living environment contribute to the improvement of family life, human welfare and ultimately contributes to economic growth. To attain productive human capital resources, the federal government has shown its commitment to prevent the spread of diseases and save the lives and cost of health care. Public sector expenditures in preventive measures and health facilities are progressive at provincial and regional levels. The government subsidizes the health care facilities for people and pays whole or part of the cost of health care services. In order to achieve a substantial improvement in health sector, a number of vertical programmes are operative in Pakistan. These federally funded vertical programs include Lady Health Worker Programme, Malaria, TB and AIDs Control Programmes, Food and Nutrition programmes. The government's spending in these sub sectors is more effective as these facilities are free for all and there is no household out of pocket expense involved. However, despite a lot of efforts and investment, the desired health outcomes has not been achieved as yet and the gap between availability and requirements still remain large due to some specific socio-economic factors like faster urbanization, industrialization, growing immigration of people to cities, poverty, uneven distribution of health benefits and unhygienic environmental condition. However, the seventh National Finance Commission Award and 18th Amendment to the Constitution are now in place and provincial and local governments now with their empowered status render huge responsibilities to develop their own policies, streamline functions, raising funds and to ensure that existing facilities run smoothly. The rising population pressure on state health institution has allowed the private sector to bridge the gap between rising demand and public provision of health care. The private

sector role in the provision of services delivery has increased enormously.

The federal government is also in the process of launching a "Prime Minister's National Health Insurance Program" to improve the health status of the population in the country by ensuring access to quality health care especially enhancing coverage and access to secondary and priority treatments of the poor and vulnerable population with the objectives of reducing out-of-pocket catastrophic health expenditures by insured families for impatient care. In Phase-I, the project would cover 3.3 million families in 23 districts at national level followed by another 3.3 million families in 23 districts in Phase-II followed by universal coverage in all districts of Pakistan of 189.00 million population in 22 million families. The scheme would cover secondary healthcare including daycare and maternity services. Priority treatment list for inclusion consists of cardio vascular diseases, diabetes, burns, road traffic accidents, renal diseases and dialysis, TB, hepatitis, treatment of HIV chronic liver diseases, chemotherapy, radiotherapy and surgical oncology.

## Millennium Development Goals (MDGs)

MDGs provide countries with time bound objectives for achieving human development. Less than half year is short of the deadline 2015, Pakistan's progress on health related MDGs vary across different goals. Lady health workers coverage to be universalized by 2015 has increased significantly and the target seems to achievable. The under five mortality rate has declined moderately to 85.5 versus its targeted reduction of 52/1000 deaths. However, Pakistan's progress on maternal and child mortality rates is not suffice to meet the MDGs targets on account of a number of factors like illiteracy, food insecurity, inadequate nutrition and low financial allocation. The overall lack of

progress can also be traced back to specific problems. Rising security expenditures and IDPs exerted high cost on the economy.

However, Pakistan remained steadfast to its MDGs commitment.

**Table: 11.1 Pakistan Progress on MDGs**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Target 2015
Life Expectancy at birth , total (year)	64.7	64.9	65.2	65.4	65.6	65.8	66.0	66.1	66.3	66.4	66.6	-
Infant Mortality Rate (Per 1000)	83.0	81.6	80.1	78.8	77.5	76.1	74.8	73.4	72.1	70.6	69.0	40.0
Under 5 Mortality Rate (Per 1000)	105.5	103.4	101.4	99.4	97.5	95.6	93.6	91.8	89.9	87.8	85.5	52.0
Maternal Mortality Rate Per 100000	-	-	230.0	-	-	-	-	190.0	-	-	170.0	140.0
Population Growth Rate (%)	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.7	1.7	1.9	-

Source: World Bank.

### Health Indicator

Human development indicator are associated with variety of socio-economic factors like education, environment and economic. The table below reflects the comparative position of

regional countries health development. Although life expectancy and living standard have improved in the last decade but this growth is not uniform across countries and there exists stake disparities in the health outcome.

**Table: 11.2 Regional Countries Human Development Indicator**

Country	Life Expectancy 2013	Infant Mortality Rate Per 1000 2013	Under 5 Mortality Rate Per 1000 2013	Maternal Mortality Rate Per 100000 2013	Population Growth Rate(%) 2013
Pakistan	66.6	69.0	85.5	170.0	1.92
India	66.5	41.4	52.7	190.0	1.24
Bangladesh	70.7	33.2	41.1	170.0	1.22
Sri Lanka	74.2	8.2	9.6	29.0	0.76
Nepal	68.4	32.2	39.7	190.0	1.17
Bhutan	68.3	29.7	36.2	120.0	1.62
China	75.4	10.9	12.7	32.0	0.49
Malaysia	75.0	7.2	8.5	29.0	1.62
Indonesia	70.8	24.5	29.3	190.0	1.21
Philippines	68.7	23.5	29.9	120.0	1.73
Thailand	74.4	11.3	13.1	26.0	0.34

Source: World Bank

### Health Expenditure

The share of health expenditure in total public sector expenditure is the most significant variable effecting health status in a country. Cross countries analysis shows that infant and child mortality become lowest in a country with a high share of health care spending devoted to primary health care. Public sector expenditures

in health facilities are progressive across the country. An amount of Rs.20.48 billion was provided to Health sector in Federal PSDP 2014-15 and utilization of approx. Rs.22.4 billion (This includes Rs: 10.8 billion as foreign Aid for Program for elimination of Polio) by the end of March 2015. Currently Pakistan is spending 0.42 percent of its GDP on health care services

**Table 11.3: Health & Nutrition Expenditures (2000-01 to 2014-15)**

(Rs. billion)

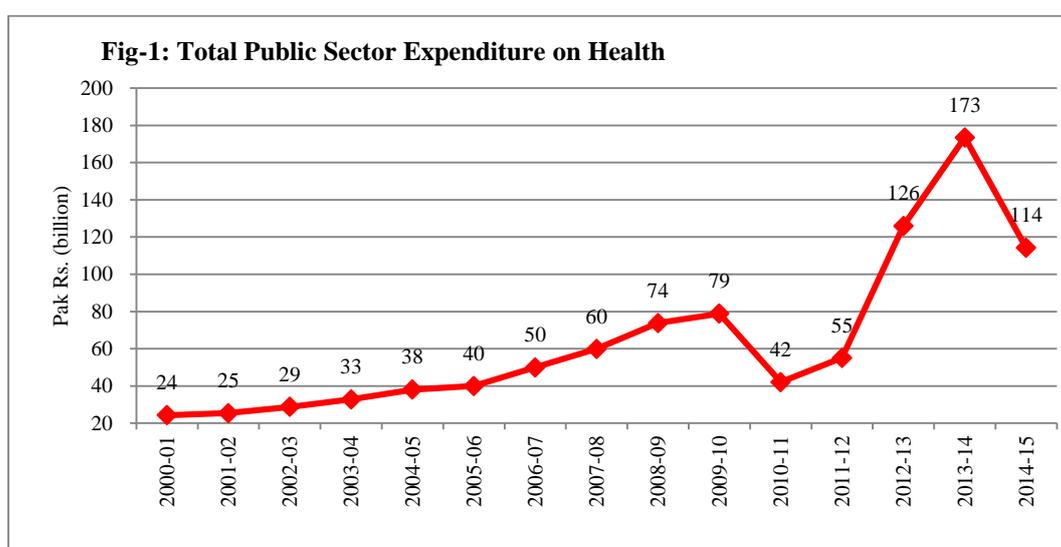
Fiscal Years	Public Sector Expenditure (Federal and Provincial)			Percentage Change	Health Expenditure as % of GDP
	Total Health Expenditures	Development Expenditure	Current Expenditure		
2000-01	24.28	5.94	18.34	9.98	0.58
2001-02	25.41	6.69	18.72	4.63	0.57
2002-03	28.81	6.61	22.21	13.42	0.59

**Table 11.3: Health & Nutrition Expenditures (2000-01 to 2014-15)** (Rs. billion)

Fiscal Years	Public Sector Expenditure (Federal and Provincial)			Percentage Change	Health Expenditure as % of GDP
	Total Health Expenditures	Development Expenditure	Current Expenditure		
2003-04	32.81	8.50	24.31	13.85	0.58
2004-05	38.00	11.00	27.00	15.84	0.58
2005-06	40.00	16.00	24.00	5.26	0.49
2006-07	50.00	20.00	30.00	25.00	0.54
2007-08	59.90	27.23	32.67	19.80	0.56
2008-09	73.80	32.70	41.10	23.21	0.56
2009-10	78.86	37.86	41.00	6.86	0.53
2010-11	42.09	18.71	23.38	-46.63	0.23
2011-12	55.12	26.25	28.87	30.96	0.27
2012-13	125.96	33.47	92.49	128.51	0.56
2013-14	173.42	58.74	114.68	37.68	0.69
2014-15*	114.22	31.93	82.29	11.62	0.42

\*Expenditure figure for the year 2014 are for the period (Jul-Mar 2014-15)

Source: Finance Division (PF Wing)



### Health System

The health system in Pakistan consists of public and private sectors. The private health care sector has developed considerably and has spread across the country and provides a varying level of care. While the subject of Pakistan public health sector was devolved to the provinces with passage of 18<sup>th</sup> Amendment, along with necessary resources through NFC award as well as allocation of funds through Federal PSDP for health programme.

### Health Facilities

The health system in Pakistan is comprised of a mix of publicly financed health delivery with privately financed market delivery. Pakistan's

public health care system comprises health work force, physical infrastructure, equipments, supplies and a host of health activities. At present, there are 118041 hospital beds in the country which give a population-bed ratio of 1593. The number of registered doctors 175223 whereas the number of dentists available in the country is 15106 while the number of nurses and qualified health visitors 90276 and 15325. Thus there is one doctor for 1073 and one dentist for 12447 person. The number of hospitals is 1142 while the number of dispensaries and other outlets 5499. Since majority of hospitals and doctors are located in big cities, the rural population has much lower health facilities.

<b>Health Manpower</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Registered Doctors	152,368	160,880	167,759	175,223
Registered Dentists	11,649	12,692	13,716	15,106
Registered Nurses	77,683	82,119	86,183	90,276
Population per Doctor	1,162	1,123	1,099	1,073
Population per Dentist	15,203	14,238	13,441	12,447
Population per Bed	1,647	1,616	1,557	1,593

Source: Pakistan Bureau of Statistics

### Physical Targets and Achievements during 2014-15

The achievements for the health sector during 2014-15 included 3500 new doctor, 350 dentist, 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 2014-15. Till date 4500 HIV positive cases have been reported to the National and Provincial AIDS Control Programs. The total numbers of TB cases are 63470, whereas the absolute number of cases is 211500 up to the third quarter of 2014 and the treatment success rate remained 91%.

<b>Sub Sector</b>	<b>2014-15</b>			<b>Targets (2015-16)</b>
	<b>Targets</b>	<b>Achievements</b>	<b>(%)</b>	
<b>A. Hospital Beds</b>	5000	3900	97.5	2500
<b>B. Health Human Resource</b>				
Doctors	5000	3500	70	9000
Dentists	500	350	70	1000
Nurses	4000	3300	73	4500
Paramedics	5500	4500	82	5500
TBAs	550	450	90	500
Training of LHWs	10000	8000	80	10000
<b>C. Preventive Programme</b>				
Immunization (Million)	8	6	75	8
Oral Rehydration Salt (ORS) (Million Packet)	23	20	87	23

Source: Ministry of Planning, Development & Reforms

### 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, in pursuance to decision of Council of Common Interest (CCI) and upon request of the provinces, funding for these vertical programmes during the currency of 7<sup>th</sup> NFC Award shall be catered by federal government. Following programs and projects are funded through the Federal PSDP and implemented by the provincial and area governments:

#### i) Programme for Family Planning and Primary Health Care (LHWs Programme)

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. A 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 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 Programme of 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 governments but Federal EPI cell currently took the responsibility of the procurements, coordination and technical guidance where provincial EPI cell are largely responsible for implementation of the program. World Bank along with other financial partners i.e. WHO and JICA have largely contributed towards smooth implementation of the program. Still the issues of routine immunization in the out reached areas of FATA and Baluchistan needs attentions.

#### ii) Malaria Control Programme

Malaria, the 2<sup>nd</sup> most prevalent and devastating communicable disease in the country, has been the major cause of morbidity in Pakistan. More than 90% of disease burden in the country is shared by 56 highly endemic districts, that are located in Baluchistan (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 flaciparum 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:

- Early diagnosis and prompt treatment
- Multiple prevention
- Improved detection and response to epidemics
- Developing viable partnerships with national and international partners.
- Focused operational research and
- National commitment

#### iii) TB Control Programme

Pakistan is ranked 6<sup>th</sup> 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 all at 231/100,000 population and prevalence of about 300 cases per 100,000 population. TB Control Program has achieved over 80% Directly Observed 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 (ASCM).

#### iv) HIV/ AIDS Control Programme

The number of injecting drug users has posed a threat of increasing number of total cases of HIV/AIDs in Pakistan. Still the prevalence of HIV/ AIDs is considered to be as low as 1%, hence not consider 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 infection (STIs), supply of safe blood and capacity building of various stakeholders. Till date 4500 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.

#### v) Maternal and Child Health Programme

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 region. It is envisaged that successful implementation of this project will bring these indicators in a respective range with improved health status of mothers and children.

#### **vi) Prime Minister's Programme 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.

#### **vii) Cancer Treatment Programme**

Cancer has been considered as one of the deadliest forms of non-communicable disease and the number of cases is increasing alarmingly. Pakistan Atomic Energy Commission (PAEC) Cancer Hospitals in four provinces are already providing diagnosis and treatment facilities to cancer patients. Up till now, PAEC has established eighteen (18) nuclear medical centers throughout the country, while, few more are in planning phase. Advance state-of-the-art facilities are available at these nuclear medical centers for diagnostic and treatment of the patients. Recently, Positron Emission Tomography (PET/CT) and Cyclotron facility have been added at Institute of Nuclear Medicine and Oncology (INMOL), Lahore in nuclear medicine department. Mobile Breast Care clinics are not only providing diagnostic services in remote areas, but also pursuing a public awareness campaign as cancer being a curable disease.

Nuclear medical centers aim to provide best quality care to the patients with cancer and committed to eliminating cancer through research, education, advocacy and service. Teaching programs are being organized for undergraduates and postgraduates medical students as well as other health care workers, run research projects in various aspects of cancer and conduct cancer awareness and outreach activities to provide information and education about all cancers, especially high incidence of breast cancer at these centers.

Awareness programs arranged/observed throughout the year in collaboration with national and international organizations/agencies to raise awareness about cancer, to share information about the disease and to provide greater access to service. Literature/pamphlets containing information about cancer symptoms, preventive measures and treatment are distributed among general public at large. PAEC in collaboration with IAEA, WHO and other national and international organizations through Programme of Action for Cancer Therapy (PACT) is focusing on establishing national cancer control program and has established PAEC Cancer Registry Programme at nuclear medical centers and head office. During the period July-December, 2014, nuclear medical centers had the following to report;

- a) About 4,17,180 patients were provided nuclear medicine, radiotherapy and diagnostic treatment.
- b) 22 research projects with national/international universities/organizations were continued.
- c) 67 professionals attended national/international trainings.
- d) 33 research papers were published in different national and international journals.
- e) Various programs for awareness of health care providers and general public such as World Cancer Day, Mammography Day, No Smoking Day etc were arranged.

#### **Drug Abuse**

The drug production in Afghanistan is the main factor influencing the drug situation, not only in Pakistan but world over. Afghanistan is producing almost 74% of the total world opium

and is the second largest producer of cannabis. 40% of Afghan drugs transit through Pakistan. Being a transit country, Pakistan is subjected to domestic spread/ use of drugs.

About 25% of the illicit drugs traded through Pakistan are either retained or consumed within the country. The misuse of sedatives and tranquilizer is of particular concern, and so is the illicit use of drugs a major public health concern.

To address the narcotic drugs, issue, National Anti-Narcotics Policy 2010 was prepared and is being implemented in collaboration with provincial government, law enforcement

agencies (LEAS), NGOs and Community Organizations.

The Anti-Narcotics Force Department of Narcotics Control Division has taken numerous initiatives to fight drug hazards, including, increase in ANF Police stations from 25 to 28 at various places, establishment of canine brigade and state of the art ANF academy for the training of Law Enforcement Agencies (LEAs).

Narcotics Control is currently implementing the following 06 development projects including 5 Area Development Projects with total capital cost of development projects Rs.6153.544 million.

S.No.	Name of Project	Total Capital Cost
1	Establishment of Drug Demand Reduction Cell in the Ministry of Narcotics Control.	59.975
2	Kala Dhaka Area Development Project	1,770.968
3	Kohistan Area Development Project	1,317.155
4	Khyber Area Development Project	1,235.351
5	Mohmand Area Development Project	859.079
6	Bajaur Area Development Project	911.016
	<b>Total</b>	<b>6,153.544</b>

#### a. Narcotics Seizures

Various narcotics seizures made during the period July, 2014 to March, 2015 are as under:-

Details	July, 2014 to March, 2014
Cases Registered	152
Persons Arrested	167
Opium	8330.200 Kgs
Heroin/ Morphine	8697.513 Kgs
Hashish	49327.995 Kgs
Cocaine	1.180 Kgs
Amphetamine (Ice)	5.340Kgs
Mathamphetamine (Ice)	3.140 Kgs
Acetic Anhydride (AA)	993.500 Liters
Marijuana	0.360 Kg
Xanax Tabs	3000x (0.380 Kg)
Apocyum	13.5 Kg

#### Polio

Polio is the most notorious and fatal disease and spreads from person to person. There is no cure but there are safe and effective vaccines. Therefore, the strategy to eradicate polio is based on preventing infection by immunizing

every child to stop transmission and ultimately make the World Polio Free. Polio incidence has dropped more than 99 percent since the launch of global polio eradication efforts in 1988. According to global polio surveillance data, 23 cases have been reported in 2015; 22 from Pakistan and 1 from Afghanistan.

Polio incidence has almost stopped around the world. However, Pakistan, Nigeria and Afghanistan are the only three countries in the world where polio remains endemic. According to WHO 22 cases have been reported in Pakistan in 2015. Tribal Areas have recorded six polio cases in the current year. The repeated immunization indicates that the programme (Immunization) is going in right direction and the situation has improved a lot. World Health Organization (WHO) in collaboration with Government of Pakistan is trying to ensure vaccination of all children below five years of age. The only solution to eradicate polio is mass immunization. FATA and KPK has been declared hub of polio virus. The UAE, Bill and Melinda Foundation and other donors are helping FATA and KPK in eradication of polio.

**Food & Nutrition**

Food is a basic need of every human being for growth and development and is one of fundamental right. Pakistan being an agricultural country is producing sufficient food to meet food and nutrition security requirements. According to National Nutrition Survey 2011 multiple factors that involve several sectors contribute to food insecurity and under nutrition with different levels of causalities: immediate, underlying and structural causes. Specific interventions for food security, along with nutritional awareness and safety nets required to address the nutritional issues.

Pakistan Vision 2025 seeks a healthy and hunger-free Pakistan; the target is to reduce malnutrition up to 50 percent. To decrease the level of malnutrition in the country, Pakistan joined Scaling up Nutrition (SUN) Movement in 2013 to overcome malnutrition problem along with UN and other countries efforts. A multi-sectoral strategy has been adopted by provinces to reduce malnutrition.

The availability of essential food items trend is assessed through food balance sheets every year. The availability of essential food items for last five years is given in the following Table:

**Table 11.8: Food Availability Kg Per Capita per Annum**

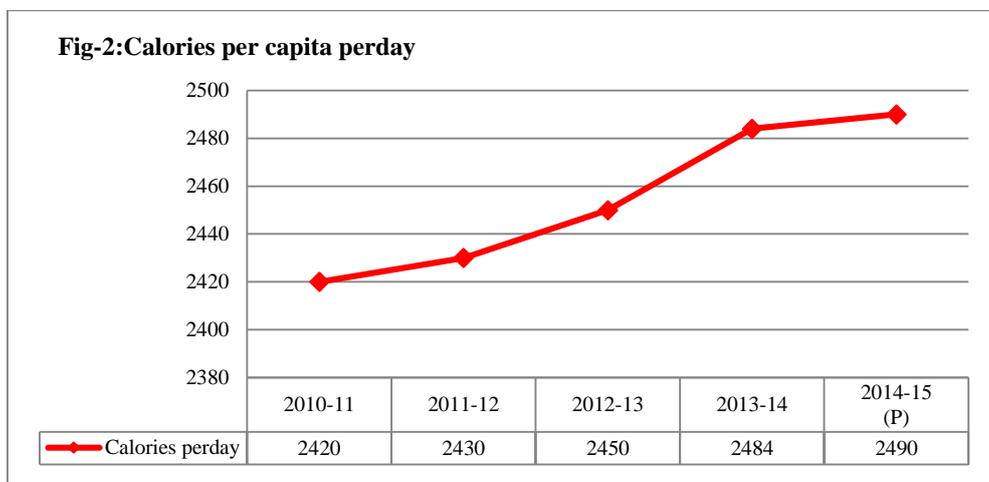
Items	Year/ Units	2010-11	2011-12	2012-13	2013-14	2014-15 (P)
Cereals	Kg	159	160	160	161	162
Pulses	Kg	7	7	7	6.5	7.0
Sugar	Kg	27	30	31	32	32.5
Milk*	Ltr	113	97.0	100	135	170
Meat	Kg	21	22	19	21	21.5
Eggs	Dozen	6	6	6	6	6
Edible Oil/Ghee	Ltr	13.0	13.0	13.5	12.6	13.0

Source: Ministry of Planning, Development & Reforms

P: provisional, \* Milk availability has been revised according to FAO criteria

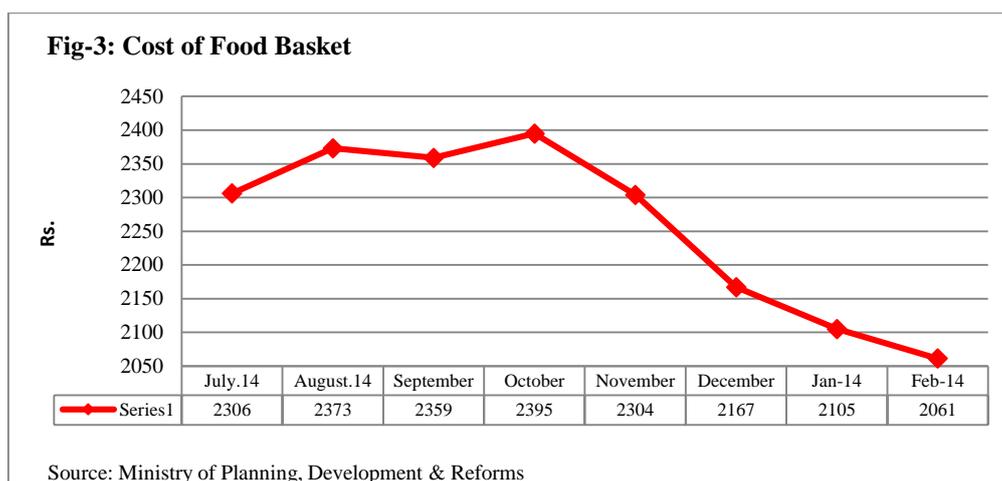
The average calories estimated based on food availability has been 2490 per capita

per day during 2014-15 year detailed is given bellow:



A food basket is maintained as a tool, based on minimum essential food items drawn from the consumption surveys. The average cost of food basket based on minimum 2150 calories for the

fiscal year 2014-15 (July 2014- February, 2015) remained fluctuating and gradually decreased from Rs.2306 to Rs.2061 at national level detail is given below:



**The nutrition related activities/programs are summarized as:**

- UN Scaling up Nutrition (SUN) is a Global Nutrition Movement providing a single combined platform to the government and relevant stakeholders for enhanced mutual coordination, collaboration, resource allocation, and monitoring & evaluation mechanism to overcome malnutrition.
- In the light of Pakistan Vision 2025 and SUN Movement, Multi-sectoral strategy has been adopted by the provinces to reduce malnutrition.
- The Government of Punjab and Khyber Pakhtunkhwa (KP) developed and approved integrated PC-Is in Health Sector having Nutrition component. Nutrition Support Programme for Sindh (NSP) costing Rs.4117.92 million for 9 districts has been approved and going to start implementation. Baluchistan Nutrition Programme for Mothers and Children (BNPMC) costing Rs.1492.620 million for 7 districts also approved for implementation. The overall objectives of these projects are to improve the nutritional status of male and female children under 5 years age, including reproductive age women by improving the coverage of effective nutrition interventions.
- Wheat flour fortification program (iron and folic acid) is being revitalized in Pakistan and in AJK. This activity has been launched by the National Food Fortification Alliance through private sector with the support of WFP and Micronutrient Initiative (MI).
- Universal Salt Iodization (USI) program has been expanded up to 110 districts throughout the country with necessary Quality Management System (QMS) and sustainability of Potassium Iodate through private sector with the support of MI, Global Alliance for Improved Nutrition (GAIN), WFP and UNICEF.
- Micronutrient supplementation to address Anemia, Vitamin-A deficiency in children under five, women of child bearing age, growth monitoring, counseling of breastfeeding & weaning practices and awareness has been streamlined in health sector.
- Benazir Income Support Program (BISP) services are effective as Social Safety Net Measures by providing cash incentives to the poor segments of the population to improve household food security.
- M/o. National Food Security and Research started National Zero Hunger Program with the collaboration of UN agencies particularly WFP to overcome hunger and malnutrition in the country. In this regard, a PC-II is going to be prepared to start pilot implementation.
- National Nutrition Strategy is going to be devised on the basis of approved provincial strategies to overcome malnutrition.