

Health and Nutrition

Good health is pivotal to mankind's well-being and happiness that contributes significantly to prosperity and even economic progress, as healthy population is more productive, earn more income and live longer. A balanced diet, good hygienic habits, staying in a proper shelter and getting enough sleep are the basic requirements for a healthy life cycle. Good health and nutrition play a pivotal role in socio-economic development of a country, whereas malnutrition and poor health are considered as barriers to socio-economic development. Human welfare directly depends on good health and is also one of the main components that determine income levels. The present government is fully committed to provide improved health services to its citizens with special focus on upgrading and strengthening primary and secondary healthcare facilities in the country.

The COVID-19 pandemic has tested country's health infrastructure and identified need for more investment in health sector especially for diagnostic facilities, disease surveillance, disease prevention and spread, training of health personnel and their protection from pandemic, vaccine development, up-grading health care infrastructure, emergency rooms, intensive care units, isolation wards and public awareness.

Regional Comparison

Socio-economic factors such as health, education, income, employment etc., are closely interlinked with Human Development Indicators. Pakistan has shown improvement in health indicators over the last three years. Life expectancy is increased from 66.9 years in 2017 to 67.3 years in 2019, but is still behind in the region. The infant mortality rate, maternal mortality and population growth rate have been decreased during the last three years. Comparative position of regional countries' in health indicators development is given in Table 11.1:

Table 11.1: Regional Countries Health Indicators

Country Name	Life expectancy at birth, total (years)			Infant Mortality Rate (per 1,000 live births)			Maternal Mortality Ratio (Per 100,000)			Under 5 Mortality Rate (Per 1,000)			Population growth (annual %)		
	2017	2018	2019	2017	2018	2019	2015	2016	2017	2017	2018	2019	2017	2018	2019
Pakistan	66.9	67.1	67.3	58.8	57.2	55.7	154.0	143.0	140.0	71.6	69.4	67.2	2.0*	2.0*	1.9*
Afghanistan	64.1	64.5	64.8	49.6	48.0	46.5	701.0	673.0	638.0	64.9	62.5	60.3	2.6	2.4	2.3
India	69.2	69.4	69.7	31.4	29.7	28.3	158.0	150.0	145.0	38.5	36.3	34.3	1.1	1.0	1.0
Bangladesh	72.1	72.3	72.6	28.0	26.7	25.6	200.0	186.0	173.0	33.9	32.3	30.8	1.1	1.1	1.0
Sri Lanka	76.6	76.8	77.0	6.7	6.4	6.1	36.0	36.0	36.0	7.8	7.4	7.1	1.1	1.0	0.6
Nepal	70.2	70.5	70.8	27.4	26.5	25.6	236.0	200.0	186.0	33.2	31.9	30.8	1.3	1.7	1.8
Bhutan	71.1	71.5	71.8	25.5	24.7	23.8	203.0	193.0	183.0	30.6	29.6	28.5	1.2	1.2	1.1
China	76.5	76.7	76.9	7.9	7.3	6.8	30.0	29.0	29.0	9.2	8.5	7.9	0.6	0.5	0.4

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Country Name	Life expectancy at birth, total (years)			Infant Mortality Rate (per 1,000 live births)			Maternal Mortality Ratio (Per 100,000)			Under 5 Mortality Rate (Per 1,000)			Population growth (annual %)		
	2017	2018	2019	2017	2018	2019	2015	2016	2017	2017	2018	2019	2017	2018	2019
Indonesia	71.3	71.5	71.7	21.7	20.9	20.2	192.0	184.0	177.0	25.7	24.8	23.9	1.2	1.1	1.1
Malaysia	75.8	76.0	76.2	7.1	7.2	7.3	30.0	29.0	29.0	8.3	8.4	8.6	1.4	1.4	1.3
Philippines	71.0	71.1	71.2	22.7	22.2	21.6	127.0	124.0	121.0	28.7	28.0	27.3	1.4	1.4	1.4
Thailand	76.7	76.9	77.2	8.4	8.1	7.7	38.0	37.0	37.0	9.9	9.4	9.0	0.3	0.3	0.3

Note: Above data is given in a calendar year

*: National Institute of Population Studies (NIPS), Government of Pakistan

Source: World Development Indicators (WDI) of World Bank

Health Status

In order to make substantial progress on Goal 3 of Sustainable Development Goals (Good Health and Wellbeing), Government of Pakistan has given priority to strengthen health sector to further resolve and address the outbreak of COVID-19 pandemic. Enhanced effective coverage of skilled birth attendants, improved public sector health facilities, increased number of Basic Health Units (BHUs) and Rural Health Clinics (RHCs) equipped with essential services are the reflection of these priorities. To enable effective family planning, pre- and post-pregnancy care and neonatal care, the Lady Health Workers (LHW) programme revitalized through adequate training, support and a revised service structure.

Pakistan's Infant Mortality Rate (IMR) has declined from 62.1 deaths per 1,000 live births in 2015 to 55.7 in 2019, while Neonatal Mortality Rate declined from 45.2 deaths per 1,000 live births in 2015 to 41.2 in 2019. Percentage of birth attended by skilled health personnel is increased from 58 percent in 2015 to 68 percent in 2020 (PSLM, 2019-20). Maternal Mortality Ratio fell from 276 maternal deaths per 100,000 births in 2006, to 189 in 2019 (Table-11.2).

Government is committed to increase its critical workforce from 1.45 to 4.45 per 1,000 persons, in line with World Health Organization (WHO) guidelines. With a population growth rate of 1.9 percent, Pakistan's contraceptive prevalence rate in 2019 stayed stagnant at 34.0 percent. Pakistan's tuberculosis incidence is of 263 per 100,000 population and HIV prevalence rate is 0.1 per 1,000 population in 2019 while, mortality from non-communicable diseases (NCDs) is 59.9 percent. Pakistan is exploring dedicated actions to curb the rising burden of NCDs, although, many of its efforts have been severally affected by COVID-19 pandemic repercussions.

Table 11.2: Health Indicators of Pakistan	2015	2019
Maternal mortality Ratio (per 100,000 births)*	276 ⁽²⁰⁰⁶⁾	189
Neonatal mortality rate (per 1,000 live births)	45.2	41.2
Mortality rate, infant (per 1,000 live births)	62.1	55.7
Under-5 mortality rate (per 1,000)	76.1	67.2
Incidence of tuberculosis (per 100,000 people)	270	263
Incidence of HIV (per 1,000 uninfected population)	0.10	0.12
Life expectancy at birth, (years)	66.6	67.3
Births attended by skilled health staff (% of total)**	58.0	68.0 ⁽²⁰²⁰⁾
Contraceptive prevalence, any methods (% of women ages 15-49)	32.0 ⁽²⁰¹⁴⁾	34.0

*: Pakistan Maternal Mortality Survey (2019), (NIPS).

** : Pakistan Social and Living Standards Measurement (PSLM) District Level Survey, 2019-20, Pakistan Bureau of Statistics.

Source: World Development Indicators (WDI) of World Bank

Due to increasing demand in public health service delivery, the health services delivery infrastructure has expanded significantly. By the year 2020, national health infrastructure comprised of 1,282 hospitals, 5,472 BHUs, 670 RHCs, 5,743 Dispensaries, 752 Maternity & Child Health Centres and 412 TB centres, while the total availability of beds in these health facilities have been estimated at 133,707. There are 245,987 registered doctors, 27,360 registered dentists and 116,659 registered nurses in these facilities together. The detail is presented in table 11.3 below:

Health Manpower	2013	2014	2015	2016	2017	2018	2019	2020 (P)
Doctors	167,759	175,223	184,711	195,896	208,007	220,829	233,261	245,987
Dentists	13,716	15,106	16,652	18,333	20,463	22,595	24,930	27,360
Nurses	86,183	90,276	94,766	99,228	103,777	108,474	112,123	116,659
Midwives	32,677	33,687	34,668	36,326	38,060	40,272	41,810	43,129
Lady Health Visitors	14,388	15,325	16,448	17,384	18,400	19,910	20,565	21,361

Note: Above data is given in a calendar year, P: Provisional

Source: Pakistan Bureau of Statistics

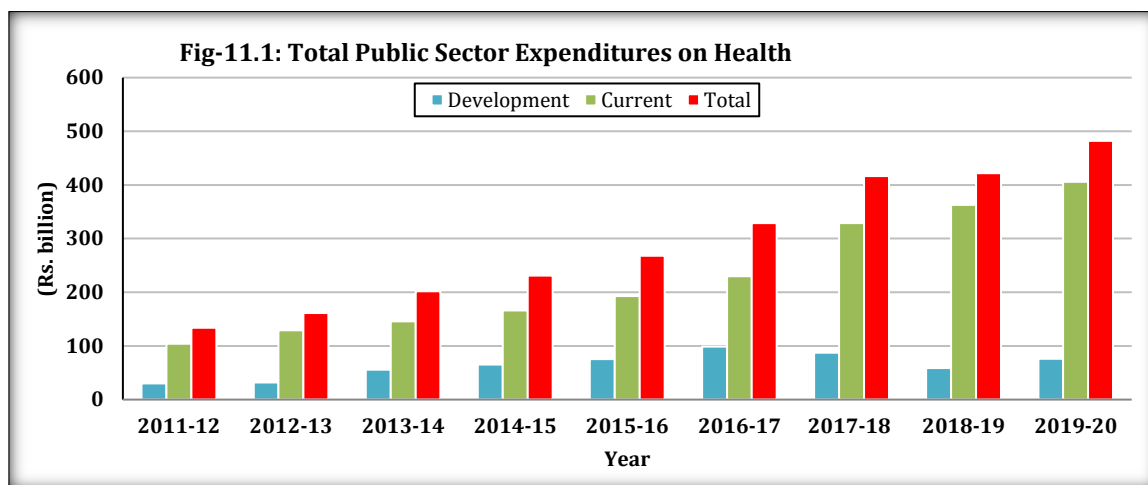
Health Expenditures

Health expenditures have increased gradually since 2011-12. The health-related expenditure increased by 14.3 percent from Rs 421.8 billion in 2018-19 to Rs 482.3 billion in 2019-20. Public sector expenditure on health was estimated at 1.2 percent of GDP in 2019-20, as compared to 1.1 percent in 2018-19. The health expenditure details are given in Table 11.4 and Figure 11.1:

Fiscal Years	Public Sector Expenditure (Federal and Provincial) Rs million			Health Expenditure as % of GDP
	Current Expenditure	Development Expenditure	Total Health Expenditures	
2011-12	104,284	29,898	134,182	0.7
2012-13	129,421	31,781	161,202	0.6
2013-14	146,082	55,904	201,986	0.7
2014-15	165,959	65,213	231,172	0.7
2015-16	192,704	75,249	267,953	0.9
2016-17	229,957	99,005	328,962	1.0
2017-18	329,033	87,434	416,467	1.2
2018-19	363,154	58,624	421,778	1.1
2019-20 (P)	406,011	76,254	482,265	1.2

P: Provisional

Source: PRSP Budgetary Expenditures, (EF-Policy Wing), Finance Division, Islamabad.



Health Sector Projects of Federal PSDP during FY2021

After the passage of 18th constitutional amendment, provision of health services is the mandate of the provincial governments however, the Federal Government has supported various health related projects through Public Sector Development Programme (PSDP), for fulfillment of Sustainable Development Goals (SDGs) and overall health status in the country. During FY2021, PSDP allocations of Rs 20,193.9 million were made for 71 health sector projects. The details are given in table 11.5 below;

S. No	Name of Ministry/Organization	No of Projects	Total Cost	PSDP Allocation 2020-21
1	Ministry of National Health Services Regulations and Coordination (NHSRC)	51	91,759.470	14,508.180
2	Cabinet Division	01	306.000	306.000
3	Defense Division	01	25.000	25.000
4	Federal Education & Professional Training Division	01	21.058	7.000
5	Higher Education Commission	07	10,303.930	958.002
6	Kashmir Affairs & Gilgit Baltistan Division	04	9,975.373	2,207.714
7	Pakistan Atomic Energy Commission	03	7,729.469	2,019.370
8	Planning Development and Special Initiatives	02	1,201.917	121.974
9	Science & Technological Research Division	01	50.170	40.646
Total		71	121,372.387	20,193.886

Source: Ministry of Planning, Development and Special Initiatives (Health Section)

In addition, government has introduced an especial programme with an outlay of Rs 70 billion to mitigate the impact of COVID-19 pandemic. The programme is focusing on upgrading health care facilities, sewerage system, solid waste management, clean drinking water and education.

The salient features of PSDP programmes related to health sector are as follows:

i) Sehat Sahulat Programme

Government of Pakistan has started a landmark health care initiative, “Sehat Sahulat Programme” with an objective to lead a path towards Universal Health Coverage (UHC) in the country. Sehat Sahulat Programme is not only a social health protection initiative which is providing a path to achieve “National Health Vision 2016-2025” but also acting as a game changer, through which, government is providing health care services to general public both from public and private hospitals. In brief, it is a scheme for the poor enabling them to access required health-care services in a swift and dignified manner without any financial obligations.

Sehat Sahulat Programme is being implemented in phases and its first phase (2016-2018) was implemented in 38 districts, covering 3.2 million families. In second phase (2019-2020) the programme is being implemented in 91 districts, providing services to 8.5 million families and the number of beneficiaries of the programme are increasing day by day.

ii) "Ehsaas" Programme, Family Planning and Primary Healthcare Programme (FP&PHC)

FP&PHC programme with intensification through Ehsaas Programme, is striving to control population growth. Pakistan has a Total Fertility Rate (TFR) of 3.7 percent and Contraceptive Prevalence Rate (CPR) of 34.0 percent (PSLM, 2018-19). Pakistan has demonstrated ongoing efforts towards the promotion of family planning. Each province has drafted its plan for family planning. Family planning task forces comprising of public and private sector stakeholders have been constituted. The government is committed to ensure easily accessible range of methods in the country and has trained mid-level service providers in public and private sectors to provide Intra Uterine Devices (IUDs) and implants. Additionally, to promote acceptability of family planning, the government is collaborating with family elders and religious leaders as part of its social mobilization efforts. Punjab, Sindh and Khyber Pakhtunkhwa governments have established health centres specifically for adolescents. To continue promoting strong government commitment, government is making its efforts to strengthen collaboration among regions, in order to reach 6.7 million additional users of contraception and increase CPR to 50 percent.

iii) Expanded Programme for Immunization

Pakistan became the first country in the world to include Typhoid Conjugate Vaccine (TCV) in its compulsory Expanded Programme for Immunization (EPI). The EPI is now providing immunization to children against eight (08) Vaccine-Preventable Diseases i.e., childhood tuberculosis, poliomyelitis, diphtheria, pertussis, neonatal tetanus, measles, hepatitis B and typhoid. The government is committed to address hurdles for improving vaccine coverage programme through better management, effective monitoring and evaluation (M&E), upgraded performance management in service delivery, logistics control, human resource management (HRM) and financing. It is quite encouraging that the proxy indicator for fully immunized-child i.e. coverage for Measles-1 is currently at 88 percent in the country. For EPI, government has allocated an amount of Rs 2.2 billion in PSDP 2020-21.

The Federal EPI in consultation with provinces has been meticulously working on optimization of immunization cold chain through development of operational deployment plans for the supply of cold chain equipment. After successful deployment of 6,802 Cold Chain Equipment Including Ice Lined Refrigerators (ILRs) and Solar Direct Drives (SDDs) in 2018 and 4,475 Equipment by September 2020, deployment plan for another 2,301 ILRs, 1,049 SDDs and 89 Cold Rooms is being finalized.

iv) Polio Eradication Initiative (PEI) Programme

Almost 38 million children were vaccinated during March, 2021 through the National Immunization Day (NID) campaign across the country. Pakistan is one of only 2 remaining countries in the world with ongoing wild poliovirus transmission, along with Afghanistan. The number of polio cases declined from 306 in 2014 to 54 in 2015, 20 in 2016, 8 in 2017 and 12 in 2018. However, in 2019, the programme witnessed a significant spread of the virus and reported 147 polio cases across the country. In 2020, 84 cases have been reported (Punjab 14, Sindh 22, Khyber Pakhtunkhwa 22 and Balochistan 26). The government is fully committed for polio eradication efforts to ensure that Pakistan achieves polio-free status.

Provinces/Region	2015	2016	2017	2018	2019	2020	2021
Punjab	2	0	1	0	12	14	0
Sindh	12	8	2	1	30	22	0
Khyber Pakhtunkhwa	33	10	1	8	93	22	0
Balochistan	7	2	3	3	12	26	1
Gilgit-Baltistan	0	0	1	0	0	0	0
Azad Jammu & Kashmir	0	0	0	0	0	0	0
ICT	0	0	0	0	0	0	0
Total	54	20	8	12	147	84	1

Source: End Polio Pakistan (www.endpolio.com.pk)

v) National Health Emergency Preparedness & Response Network

National Health Emergency Preparedness & Response Network (NHEP&RN) was established in 2011 with the aim to: i) coordinate and liaison with other national stakeholders to maximize efficiency ii) formulate and disseminate health related updates and information iii) coordinate need based delivery iv) coordinate with provinces/districts for collection of information on essential medicines v) coordinate with WHO/provinces/districts for collection of disease data on daily basis. During 2020, NHEP&RN in collaboration with JHPIEGO (Johns Hopkins Program for International Education in Gynecology and Obstetrics) conducted training sessions of quarantine facilities staff on infection prevention and standard precautionary measures regarding COVID-19.

vi) Safe Blood Transfusion Services (SBTS) Programme

The Safe Blood Transfusion Services Programme was established by the Ministry of Health, with the collaboration from Government of Germany, to restructure the blood transfusion system and to promote a modern national blood transfusion system. The strategy involved gradually replacing the existing unsafe fragmented system with the

internationally recommended centralized model. Since its establishment, the SBTS has delivered a series of outputs which have significantly contributed to improvement in blood safety standards and establishment of strong bonds among the federal and provincial governments. The government is taking necessary measures to prevent and control widespread of communicable diseases in the country through blood transfusion by scaling up of SBTS Programme. In this regard, government has allocated Rs 235 million in PSDP 2020-21 for ongoing SBTS project, entitled “Establishment of Safe Blood Transfusion Services in ICT”.

vii) Malaria Control Programme

According to Directorate of Malaria Control, Pakistan remains one of the highest burden sharing countries in Eastern Mediterranean Region (EMR), with an estimated one million malaria cases annually. Efforts were made to reduce malaria burden particularly in 60 high-risk districts of the country (mostly from Balochistan & Khyber Pakhtunkhwa), by providing free of cost diagnostic and treatment services in more than 5,000 health care centres, distribution of Long Lasting Insecticide Treated Nets (LLITN) among people, capacity building of the health care personnel, spraying in outbreak situation and epidemic prone areas and raising awareness campaign about malaria in the community.

Around 7 million suspects are screened for malaria every year. Whereas around 350,000 confirmed malaria cases are treated as per national treatment guidelines. More than 6 million LLITNs have been distributed in Balochistan, Khyber Pakhtunkhwa (including merged tribal areas) and Sindh province to prevent population from malaria. In addition, malaria diagnostic and treatment services will be further expanded to achieve universal coverage in high risk districts of Pakistan.

viii) Tuberculosis (TB) Control Programme

According to WHO, Pakistan ranked fifth highest burden country of tuberculosis worldwide, with an estimated 510,000 new TB cases emerging every year. The incidence and mortality per 100,000 population per year from TB in Pakistan is 263 and 19 respectively. With the guidance of WHO, Pakistan has developed a National TB Control Programme (NTP) to prevent population from TB. The programme includes universal access to quality TB care in the country, expanding partnerships and multi-sectoral approaches by engaging all stakeholders. NTP strives for TB free Pakistan by reducing 50 percent prevalence of TB in general population by 2025 in comparison to 2012, through universal access to quality TB care and achieving Zero TB death.

ix) Human Immunodeficiency Virus (HIV) / Acquired Immunodeficiency Syndrome (AIDS) Control Programme

National AIDS Control Programme is a part of Common Management Unit for AIDS, TB & Malaria. HIV / AIDS control programme aims for the Behavior Change Communication (BCC) strategy, services to high-risk population groups, treatment of Sexually Transmitted Infections (STIs), the supply of safe blood for transfusions and capacity building. Asian Epidemic Modeling has estimated that at present, there are 197,943 people living with HIV/AIDS in Pakistan. In treatment Programme, there have been 49

HIV Treatment centres (Punjab 25, Sindh 16, Khyber Pakhtunkhwa 4, Balochistan 2 and ICT 2) and 11 PPTCT (Prevention of Parents to Child Transmission of HIV) established across the country. Till December 2020, about 24,362 HIV patients were taking Antiretrovirals (ARVs) medicines to control HIV infection. For prevention programme, there are 17 CBOs (Community based Organizations) working to prevent HIV transmission in key population (Transgender, Male & Female sex workers).

x) Civil Registration and Vital Statistics (CRVS)

For estimation of health related indicators and generation of vital statistics, Federal Government is fully committed for acceleration and enhancement of CRVS system in the country. For CRVS, a number of milestones were achieved ranging from national assessment studies, organization of country-wide advocacy seminars, drafting of National Policy to Revamp and Reform CRVS in Pakistan, thematic area meetings for the development of a robust National CRVS Strategic Framework. A project has been launched to transform ICT into model CRVS district. In this regard, ICT will be converted into a model CRVS district where revamped and reformed processes for vital events registration will be deployed to achieve universal civil registration. An amount of Rs 22 million has been allocated in PSDP 2020-21 for strengthening of CRVS system.

Challenge of COVID-19 Outbreak

The World Health Organization (WHO) declared the emergence of the novel coronavirus (2019-nCoV) a Public Health Emergency of International Concern (PHEIC) in January, 2020. In Pakistan, the first case of COVID-19 was confirmed on 26, February 2020, when the first patient in Karachi tested positive while returning from Iran. The first wave of COVID-19 claimed 6,795 lives, infected 332,186 and left behind 632 on ventilators. The government announced a second wave of COVID-19 on 28 October, 2020, when there was sudden increase in active cases from 6,000 to 11,000 and 93 hospitalized patients were put on ventilators. The third wave of COVID-19 in Pakistan started on 17 March, 2021, when daily cases reached to 3,000 with positivity rate of 10 percent. Till 04th June, 2021, 928,588 confirmed cases with 856,005 recoveries and 21,105 deaths recorded in the country. Punjab has recorded the most number of cases i.e, 341,390 followed by Sindh with a number of 321,425 cases, Khyber Pakhtunkhwa 133,746 and Balochistan 25,476 cases. Based on reported cases, the mortality rate is approximately 2.3 percent. The government is employing available public sector capacity and private community to rapidly scale up the health system to prevent the spread of COVID-19.

The government has constituted a high-level National Command and Operation Centre (NCOC), which is nerve centre to synergize and articulate unified national effort and to implement the decisions of National Coordination Committee (NCC) on COVID-19. The government response for the prevention of COVID-19 includes, deploying interventions for strengthening clinical management, infection prevention and provision of Personal Protective Equipment (PPEs) to frontline health workers, availability of laboratory diagnostic capacity, biosecurity/biosafety surveillance & reporting, health workforce preparedness and emergency response. In addition, social sector programmes, development partners, financial institutions and civil societies all are currently engaged in different capacities to fight against the pandemic.

National Deployment and Vaccination Plan for COVID-19 Vaccine

Pakistan formally launched the coronavirus vaccination drive on 03 February, 2021. The detailed plan of action for introducing the vaccine in Pakistan was initiated by the NCOC. Economic Coordination Committee (ECC) had approved a proposal of the M/o NHSR&C for the provision of technical supplementary grant amounting US\$ 150 million for the purchase of COVID-19 vaccine. ECC had also approved the technical supplementary grant of US\$ 130 million to ensure timely procurement of COVID-19 vaccine. The amount will be utilized for the purchase of 10 million doses of vaccine during the month of June, 2021. Earlier, China has donated 1.5 million doses of Sinopharm vaccine, which has an efficacy of 79 percent. Till 02nd June, 2021, a total of 13.0 million doses of vaccine have been received by the Government of Pakistan. The local manufacturing of vaccine has also been started at National Institute of Health and soon the vaccine will be available at the vaccination centres through local production.

Table 11.7: Top Manufacturers of COVID-19 Vaccine

Name	AstraZeneca	Pfizer	Sinopharm	Moderna
Origin	UK	USA	China	USA
Clinical Trials	Phase III (62-90%)	Phase III (95%)	Phase III (78%)	Phase III (94.5%)
Storage	2-8°C	-70°C	2-8°C	-20°C
Production Capacity	3 billion in 2021	1 billion in 2021	1 billion in 2021	1 billion in 2021
Production Time	Q2 2021	Q1 2021	Q1 2021	Q2 2021

Source: Ministry of National Health Services, Regulation & Coordination

As a pre-requisite for introducing COVID-19 vaccine in Pakistan, NCOC constituted an Expert Committee on vaccines and immunization, which will guide the M/o NHSR&C on the target populations that would be prioritized for vaccination (in phases) and vaccine characteristic to be preferred for use in Pakistan. Besides this committee, a National Vaccine Task Force (VTF) has also been formed with a wider participation of all local stakeholders and vaccine experts to take timely decision and oversee the preparation process of vaccine deployment.

Box-I: Regional Comparison of COVID-19, Policy Response and Vaccine Rollout

In almost every country, health-care delivery has been disrupted by mistaken initial assumption that health systems would quickly win the fight against COVID-19. Now, it is clear that pandemic will persist much longer than anticipated. It was estimated that at least half of the world's 7.8 billion people lacked access to essential health services. But now COVID-19 has increased these numbers and eroded access to health care.

The COVID-19 pandemic is the defining global health crisis of our time. It continues to ravage the health sector and economies in the South Asian region over the time. The infected cases are rapidly rising in India, compared to other countries like Pakistan, Bangladesh, Sri Lanka, which have seen a less devastating impact from the virus. Pakistan and Sri Lanka has so far coped reasonably well with the pandemic as compared to other regional countries. Iran is the worst in the region as having the second highest fatality rate of 2.7 percent after Afghanistan and 96.0 deaths per 100 thousand of population as explained below:

Country wise Cases and Mortality (as on 04-06-2021)				(Nos.)
Country	Confirmed Cases	Deaths	Case-Fatality	Deaths/100k Pop.
India	28,570,000	340,702	1.2%	24.7
Pakistan	928,588	21,105	2.3%	9.6
Iran	2,950,000	80,658	2.7%	96.0
Bangladesh	805,980	12,724	1.6%	7.7
Sri Lanka	195,844	1,608	0.8%	7.5
Afghanistan	75,119	3,034	4.0%	7.8

Source: Our World in Data

The situation calls for mass-vaccination drives on a global scale, the recent start of deliveries under the COVID-19 Vaccine Global Access (COVAX) mechanism for vaccine finance and deployment is very encouraging. But at the same time, equitable distribution has remained the challenge due to the shortage of vaccine. Beside the accessibility, people's reluctance to get a vaccine jab is disrupting vaccination drive. Pakistan has administered 7,953,574 doses of vaccine but vaccination rate is 3.60 per 100 members of the population.

Vaccination Rollout by Country (as on 04-06-2021)			(Nos.)
Country	Doses Administered	People Vaccinated Per Hundred	
India	218,340,000	15.82	
Pakistan	7,953,574	3.60	
Iran	3,140,000	3.74	
Bangladesh	10,020,000	6.08	
Sri Lanka	2,120,000	9.89	
Afghanistan	626,290	1.61	

Source: Our World in Data

On health care policy front, policy makers have attempted to overcome the disruptions caused by COVID-19 through preventive & control measures and campaigns at national levels. Obsolete procedures have been replaced with advanced technologies, from remote consultations to voice-transcription from online shopping to digital payments; from more prevalent online learning to work from home in all the regions. Some countries have also provided insurance to health frontline workers like PMGKP Insurance Scheme in India. In Pakistan a special programme "COVID-19 Responsive and other Natural Calamities Control Programme" with an outlay of Rs 70 billion has been introduced to upgrade and strengthen the health sector and to support the less developed areas of the country. All measures helped to subside the worst impact of COVID-19 on health sector. Countries need to reassess their delivery strategies and make targeted investments in essential health services. Doing so will strengthen their resilience against similar health crises in the future.

Provincial Government Achievements/Initiatives in Health Sector

i) Government of Punjab

During FY2021, Government of Punjab allocated Rs 22.2 and 11.5 billion for specialized healthcare & medical education department and primary & secondary healthcare department respectively. This will help in the smooth and timely implementation of 173 development projects, which includes increasing number of 24/7 Basic Health Units (BHUs) & Rural Health Centres (RHCs) equipped with a basic package of services, staff and ambulance service, establishing training institutes for nurses and paramedical staff, upgrading secondary care facilities and building state of the art hospitals in the major urban cities of province.

Government of Punjab is also up scaling the Sehat Insaf Card Programme aiming to provide health insurance to 30 million families of the province, by December 2021. Punjab Government is managing a number of programmes aimed at controlling different types of diseases including Hepatitis Control Programme, AIDS Control Programme, EPI, TB Control Programme, Malaria Control Programme and Infection Control Programme. Punjab has 34 District Headquarter Hospitals (DHQs), 88 Tehsil Headquarter Hospitals (THQs), 293 RHCs, 2,461 BHUs and 23 Teaching Hospitals.

ii) Government of Sindh

Government of Sindh has allocated Rs 28.9 billion for 141 on-going and 51 new health schemes under ADP 2020-21. Efforts are being made for strengthening, upgrading, rehabilitation of teaching hospitals and establishment of new primary healthcare facilities in the province. Twenty three (23) healthcare centres are strengthened with dialysis services across the province, to meet the increasing demand of growing number of renal diseases. Four (04) Regional Blood Transfusion Centres (RBTC) have been established and made functional with the financial assistance of German Government. Moreover, a 196 bedded Sindh Infectious Diseases Control Hospital & Research Centre at Karachi has been established and made functional. Sindh has 6 teaching hospitals, 5 specialized institutions for chest, dermatological and mental illness, 11 DHQs, 27 major hospitals, 99 RHCs and 738 BHUs.

iii) Government of Khyber Pakhtunkhwa

The Health Department of Khyber Pakhtunkhwa (including merged districts) has a network of 106 RHCs, 940 BHUs, 9 teaching hospitals, 30 DHQs and 22 THQs. The Government of Khyber Pakhtunkhwa has initiated/executed up-gradation process of several BHUs to RHCs level in the province. The Government adopted a multi-year Accelerated Implementation Programme (AIP) 2019-2022, to address the key developmental gaps in the Merged Areas. AIP is the first 03 years development programme under the Tribal Decade Strategy that seeks to address the developmental disparity of the Merged Areas and bring the area at par with other areas of Pakistan. In this regard, government has allocated an amount of Rs 8.3 billion in ADP 2020-21. Moreover, Sehat Sahulat Programme is targeted to extend to 100 percent of the population of the province by June 2021.

iv) Government of Balochistan

Government of Balochistan has allocated an amount of Rs 7.1 billion for 63 on-going and 93 new health projects in the ADP 2020-21, spread over all the sub-sectors of health, namely Primary Health, Curative Health and General Health, to enhance health infrastructure/facilities across the province. In addition to ADP, major milestones in health sector are achieved by the health department includes formulation and approval of very first Balochistan Health Policy, posting of specialists and lady medical officers in all health care centres across the province and establishment of Balochistan Health Care Commission through BHCC Bill 2020. Balochistan has 27 DHQs, 10 THQs, 4 teaching hospitals, 82 RHCs and 549 BHUs.

Cancer Treatment Programme by Atomic Energy Cancer Hospitals

With the advent of modern technology in medicine, mortality associated with communicable diseases has been significantly reduced. Today, non-communicable diseases are responsible for majority of global deaths and cancer is ranked second leading cause of death worldwide. Pakistan Atomic Energy Commission (PAEC) has given high priority to the application of nuclear technology in the health sector, especially utilizing radiotherapy in the treatment of cancer.

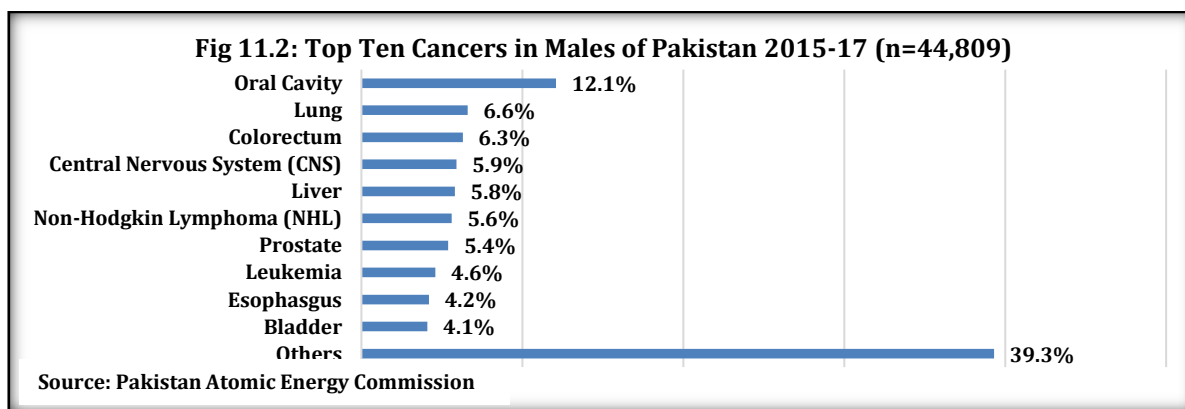
Currently, there are 18 operational Atomic Energy Cancer Hospitals (AECHs) dedicated to serve poor cancer patients, not only in major cities but also in remote areas of the country. These hospitals are diligently working to provide the latest and comprehensive diagnostic and treatment facilities to cancer patients. AECHs are operated by skilled teams of more than 2,500 professionals including doctors, scientists, engineers, paramedical, technical and other supportive staff.

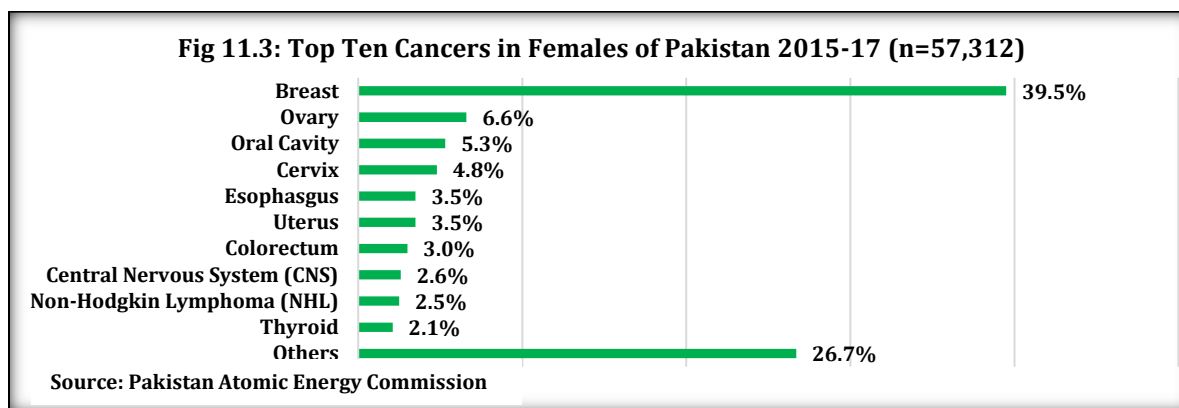
AECHs are equipped with advanced, sophisticated and modern diagnostic/therapeutic facilities. Major services provided at these hospitals are diagnostic and therapeutic Nuclear Medicine, Theranostics, Radiotherapy, Chemotherapy, Indoor wards facilities, Cancer screening/Filter clinics, Hormonal assays, Biochemistry, Hematology, Histopathology and diagnostic Radiology. Seminars, conferences and symposium for creating public awareness regarding cancer prevention and importance of early diagnosis are integral part of services at all AECHs.

Nuclear Medicine & Oncology (NM&O):

Management of cancer patient requires multidisciplinary approach and is an expensive affair. Hence, economic impact of cancer is significant and on the rise due to increasing cancer burden. Low and middle income countries have lack of necessary data to drive cancer policy. Pakistan also needs to develop international standard cancer registry that can project actual cancer burden in the country and in turn give insight to health sector to devise clear policy for cancer control & prevention.

NM&O Division of PAEC has published first Cancer Registry Report comprising new cancer cases reported in all AECHs, during period 2015-17. Breast cancer is the most common cancer diagnosed in women, while oral cavity cancers are at top among males. Most common types of cancer are shown in graph (Figure 11.2 & 11.3):





It is expected that this data will help in cancer research and assist oncologists to determine probable causes and treatments outcome. Health departments can further formulate appropriate cancer prevention & control policy/strategies conducting comprehensive epidemiological surveys of cancer related death.

Achievements

In addition to the management of patients, the following targets have been achieved in the current fiscal year:

- ▶ A medical linear accelerator (LINAC) has been installed at INMOL, Lahore
- ▶ Gamma camera for AECH, Gilgit (GINOR) along with Mammography and other Lab equipment have been installed
- ▶ Research work continued on various International Atomic Energy Agency Projects, with the collaboration of different international/national organizations
- ▶ Events and awareness campaigns for cancer prevention/control are a regular feature at all AECH. Over 50 such events were organized throughout the country which included seminars, webinar, workshops and walks for general public awareness
- ▶ Three mobile breast care clinics (INMOL, BINO and NIMRA) are also functional and continuously arranged monthly or fortnightly visits and camps in remote areas for awareness and screening purposes.

Special Projects

In order to provide better treatment facilities to the patients, PAEC continued working on the following new initiatives/projects:

- ▶ Establishment of cancer hospital in Azad Jammu & Kashmir for which land has been acquired and PC-1 is under consideration for approval
- ▶ Pakistan Atomic Energy Cancer Registry (PAECR) report for year 2019 is also being published
- ▶ Upgradation projects of AECHs Karachi (KIRAN & AEMC), Bahawalpur (BINO) and AECH, Lahore (INMOL) is under consideration for approval

- ▶ Pakistan Atomic Energy Cancer Registry (PAECR) report for year 2020 is under process for finalization.

Nutrition Security

Proper nutrition is considered as a foundation of human development. It is a cross cutting subject and is strongly linked with almost 12 SDGs. Malnutrition hinders the development with harmful consequences to the human body. Investing in nutrition is one of the smartest approaches to overcome the issue of malnutrition, boost economic growth and bring prosperity to the people and nation.

Almost one person in every nine people in the world is hungry, while one out of three is overweight. Most of the countries including Pakistan, experience the double burden of malnutrition. According to the National Nutrition Survey (NNS) 2018, 40 percent of children under age of 5 year are stunted, 18 percent wasted and 29 percent underweight. The proportion of overweight children under five is 9 percent. Similarly, more than half (57 percent) of adolescent girls and 42 percent Women of Reproductive Age (WRA) in Pakistan are anemic.

Food Availability and Consumption:

i) Food Availability: Food availability focuses on the supply of sufficient quantity of foods. It is directly linked with the state of food and nutrition security. Being an agrarian country, Pakistan produces enough quantity of food for its domestic consumption. However, import and export fulfills the shortfall and excess respectively. The availability of major food items has been estimated and remained satisfactory during 2020-21, to fulfil the food demand of the population (Table 11.8). The availability of calories through major food commodities is estimated 2,580 in 2020-21 as compared to 2,445 in 2019-20.

Food Items	2018-19	2019-20	2020-21 (P)
Cereals	133.0	137.0	149.0
Pulses	7.0	8.0	8.0
Sugar	24.0	26.0	27.0
Milk (Liter)	168.0	169.0	172.0
Meat (Beef, Mutton, Chicken)	21.0	22.0	23.0
Fish	3.0	2.0	3.0
Eggs (Dozen)	5.0	5.0	5.0
Edible Oil/Ghee	15.0	14.0	14.0
Fruits& Vegetables	56.0	54.0	55.0
Calories/Day	2,410	2,445	2,580

P: Provisional

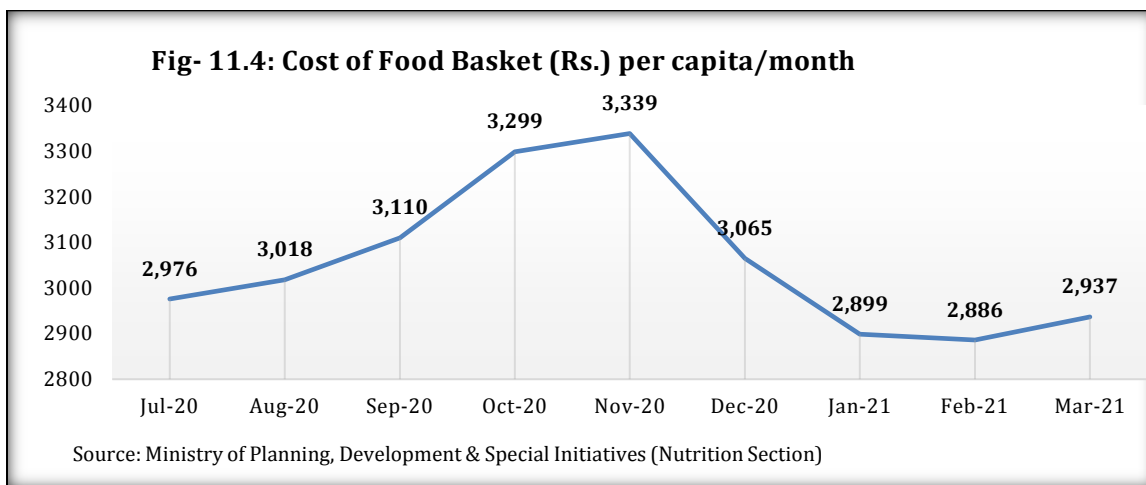
Note: The data for the year 2018-19 & 2019-20 has been revised on the basis of Population Census, 2017

P: Provisional

Source: Ministry of Planning Development & Special Initiatives (Nutrition Section)

ii) Cost of Food Basket: The cost of minimum food basket providing 2,150 calories and 66gm of protein/day is being calculated on the monthly basis by using food prices data from Pakistan Bureau of Statistics (PBS). The average monthly cost of food basket during FY2021 has been estimated at Rs 3,059 (Jul-Mar FY2021) (Figure 11.4). The cost

of food basket gradually increased from July, 2020 (Rs 2,976) till November, 2020 (Rs 3,339) and then declined to Rs 2937 in March, 2021.



Nutrition Interventions/Activities

Following are the interventions/activities which are underway to mitigate the malnutrition issues and its consequences at national and provincial levels.

National Initiatives/Programmes

- ▶ Under the Food Fortification Programme (Wheat flour, Edible oil & Salt), about 1,006 wheat flour mills across the country are covered and 2,333 micro feeders are installed.
- ▶ Nutrition specific PC-1 “Tackling Malnutrition Induced Stunting in Pakistan” costing Rs 312 billion aiming to address malnutrition and stunted growth among children, has been developed by the Ministry of National Health Services, Regulations and Coordination (NHSR&C) for 67 high burden malnutrition districts of the country.
- ▶ Urdu version of the revisited “Pakistan Dietary Guidelines for Better Nutrition” has been prepared for advocacy and awareness among all population groups.
- ▶ National Nutrition Thought Management Programme (NNTMP) is prepared with the objective to educate and sensitize all population groups on nutrition awareness for food choices to reduce malnutrition, particularly in vulnerable groups.
- ▶ Multi-sectoral Nutrition Management Information System (MNMIS) is being developed which will serve as a multi-sectoral data source and track nutrition indicators both physically and financially.
- ▶ Regular sessions of National Nutrition Forum (NNF) are being held and measures have taken regarding policy programming, coordination and research & development for nutrition improvement.
- ▶ Under Scaling Up Nutrition (SUN) Networks following activities are performed:
 - Meetings of the National Steering Committee (NSC) on Early Childhood Development (ECD) were organized. The NSC is a high level inter-ministerial

coordination and decision making authority to provide strategic direction and guide actions related to ECD.

- Conducted webinar in collaboration with Global Health Advocacy Incubator & SUN Academia and Research on “Impact of Sugar Sweetened Beverage on Obesity and Non-Communicable Diseases”.

Provincial Initiatives

- ▶ Stunting Reduction Programme, Human Capital Investment Programme and Ehsaas Nashonuma Programme are under implementation in Punjab.
- ▶ Khyber Pakhtunkhwa Stunting Prevention and Rehabilitation Integrated Nutrition Gain (Khyber Pakhtunkhwa SPRING) is under implementation in 4 districts of Khyber Pakhtunkhwa (Bannu, Tank, D.I Khan & Nowshera). A new project “Integration of Health Services Delivery” costing Rs 7.0 billion is under implementation throughout the province. The project will focus on Maternal, Newborn & Child Health and Nutrition.
- ▶ An Accelerated Action Plan (AAP) for Stunting Reduction and Malnutrition with the cost of Rs 5.6 billion is implementing in 23 districts of Sindh, where rate of stunting is above 40 percent.
- ▶ Balochistan Nutrition Programme for Mothers & children has been implemented in 7 districts of Balochistan and stands completed now.

Narcotics Control

Pakistan’s counter narcotics efforts revolve around the three main pillars highlighted in the National Anti-Narcotics Policy, 2019. These three pillars include i) Drug Supply Reduction, ii) Drug Demand Reduction and iii) International Cooperation. Counter narcotics efforts not only encompass the law enforcement side for drug supply reduction but also value equally importance of reducing the domestic demand for drugs.

Anti-Narcotics Policy

The Anti-Narcotics Policy of Pakistan aims to re-energize existing national drug law enforcement agencies, build the Anti-Narcotics Force capacity, develop an effective coordination and control mechanism and mobilize the people of Pakistan especially youth and institutions to ensure their active participation in eradicating drugs. This policy also seeks to promote international cooperation for mutual support and partnership against narcotics.

Policy Objectives:

1. Drug Supply Reduction

The main focus of drug supply reduction activities is to strengthen Law Enforcement Agencies (LEAs) at the federal, provincial and district levels to combat drug trafficking and to reduce the flow of drugs in Pakistan. The capacity of LEAs all over Pakistan and particularly in the provinces of Khyber Pakhtunkhwa and Balochistan is being improved so that they could effectively assist in disrupting illegal drug trafficking, money laundering and seizing drug generated assets.

1.1 Drug Supply Reduction Activities

Table 11.9 depicts the narcotics type and quantity seized by Anti-Narcotics Force during July 2020 to December 2020:

S. No.	Kind of Narcotics	Quantity of Drugs Seized (In Kgs/Ltrs)
1.	Cases Registered	1,102
2.	Persons Arrested	1,199
3.	Opium	6,412.6
4.	Morphine	5,726.0
5.	Heroin	3,943.9
6.	Crystal	17.0
7.	Hashish	19,797.7
8.	Cocaine	2.3
9.	Amphetamine (Ice)	90.9
10.	Methamphetamine	576.4
11.	Ecstasy Tabs	6.4
12.	Xanax Tabs	4.2
13.	Prazolam/ Benzo Diazepam	1.0
14.	Roche-2	10.7
15.	Lexotanil	0.01
16.	Alprazolam Tabs	5.4
17.	Acetic Anhydride (AA)	2,157.0
18.	Hydrochloric Acid (HCl)	400.0
19.	H2SO4	1,175.0
20.	Poppy Straw	0.1
21.	Weed	0.6
22.	Ketamine	40.0
23.	Suspected Substance	23.1

Source: Narcotics Control Division

2. Drug Demand Reduction

Various drug addicted patients treated under different Model Addicts Treatment & Rehabilitation Centre (MATRCs) throughout the country.

2.1 ANF Youth Ambassador Programme

The programme was launched in June, 2014 and has the participation of more than 5,000 active youth ambassadors. It aims at promoting mass awareness, highlighting emerging trends of drug abuse especially amongst youth. It provides a platform for projecting young talent to channelize the role of youth, thus serving humanity and society.

2.2 Awareness Activities

Mass awareness about harms of drugs amongst students, teachers and various administrative staff is being created through delivering lectures, talks in Schools, College & Universities. Details of lectures delivered for the period from July to December, 2020 is as under:

Punjab	Khyber Pakhtunkhwa	Sindh	Balochistan	Total
13	21	04	11	49

Source: Narcotics Control Division

3. International Cooperation

Illicit trafficking of narcotics and drug abuse is a global challenge. Pakistan is acting as a front line country in combating the menace of drugs. Government of Pakistan has taken number of initiatives to control spread and trafficking of illicit narcotics. However, country cannot fight this menace alone therefore international cooperation is important pillar of Pakistan's strategy against drugs. Ministry of Narcotics Control has signed 34 MoUs with different countries on unlawful narcotics, while 30 MoUs are under process.

4. Development of New Projects

A list of narcotics control development projects, at pre-feasibility level, is given in Table 11.11. The purpose of these projects is to impose an effective check in drug infested areas.

Sr.	Name of Projects	Duration of Project Implementation	Estimated cost (Rs million)
1.	PC-II for Construction of MATRC Islamabad	1-7-2020 to 31-12-2020	9.0
2.	PC-II for Construction of RD ANF Balochistan	1-7-2020 to 31-12-2020	12.2
3.	PC-II for Construction of PS Panjgur	1-7-2020 to 31-12-2020	2.4
4.	PC-II for Construction of ANF SIC Islamabad	1-7-2020 to 31-12-2020	8.3
5.	Acquisition of Land for ANF PS at Loralai	1-7-2020 to 30-06-2021	1.4
6.	Acquisition of Land for ANF PS at Jiwani	1-7-2020 to 30-06-2021	9.5

Source: Narcotics Control Division

Conclusion

In the recent history of mankind, the COVID-19 pandemic is the biggest global challenge for world health system and socio-economic fabric. The pandemic has exposed the complex global interdependencies, highlighted fault lines in societal structures that perpetuate ethnic, economic, social and gender inequalities. The government is fully cognizant of fact and provision of best health care services to the general public is its

foremost duty and priority. Federal and provincial governments are engaged in developing strategic partnerships for enhancing technical and institutional capacities, achieving UHC goals and multi-sectoral support, despite the COVID-19 crisis. Focus is on improving diagnostic facilities, surveillance, isolation wards, ICUs at public sector health care centres alongside complying with other international health regulations.

The government is fully committed to increase the health coverage to meet the emerging demand of increasing population. Areas which require support for achieving health related SDGs include realistic budgeting, training and management of health workforce with use of technology. For this purpose, public-private partnership needs to be further encouraged for better coverage of public health programmes like TB, Malaria, Hepatitis, EPI and other communicable diseases.
