Punjab Health Sectoral Plan 2014-18

Improved Social Outcomes leading to Economic Growth

Final Draft dated: Oct 14, 2014

Government of the Punjab

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ACRONYMS

1. Contextualizing the Sectoral Plan

The parameters of Punjab Health Sectoral Plan 2014-18 have been defined by two key documents; Pakistan Vision 2025 and Punjab Growth Strategy 2018. Pakistan Vision 2025 envisions the investments in social sector including Health and nutrition as key to enhance human capabilities. Pillar 1 of the Framework for Growth and Development of the Vision 2025 acknowledges the necessity to scale up the investments in social sector including health. These investments in turn would ensure social inclusion and equal access to opportunities particularly by the marginalized and disadvantaged sections of the society. The Vision views this as mandatory condition for the inclusive growth which is one of the pillars of the long term strategy, as the healthy and educated population is more likely to have access to the economic opportunities. Under this pillar, targets under 3 relevant indicators have been provided to be achieved by 2025:

i. Increase proportion of population with access to improved sanitation from 48% to 90%
ii. Reduce infant mortality rate from 74 to less than 40 (per 1000 births) and reduce maternal mortality rate from 276 to less than 140 (per 1000 births)

Taking lead from this macro framework, the Punjab Growth Strategy 2018 places equal emphasis on accelerating economic growth and social outcomes. By doing so it recognizes the inseparable link between the two. The Health Sectoral Plan is embedded into the Punjab Growth Strategy 2018 and the later provides clear direction and broad parameters that are to be followed by the Sectoral Plan.

Box 1: Key Parameters of Growth Strategy related to Health

- **Health Sector stream to include health, population welfare, and water & sanitation sub-sectors**
- **Efforts to achieve related MDG Targets by 2015 but not later than 2018**
- **Critical governance and institutional measures outlined**
- **Budgetary allocations in MTDF to follow Strategy guidelines**
- **Sectoral Plan activities to be geared towards achieving 8% growth target**

The Growth Strategy 2018 also provides the key instruments to be followed for its implementation. The public funds committed under the MTDF are the first source to fund the activities under the Sectoral Plan. Secondly the option of Public-Private-Partnership (PPP) is to be explored for such activities which can be undertaken in this mode.

2. Health Outcomes and Economic Growth

The link between GDP and health outcomes is well established and many research studies point that increase in GDP improves funding for health sector which in turn improves the health outcomes including child and maternity health. There is also growing evidence suggesting that there is a positive impact of improved health outcomes on the economic growth. Below is a quick review of some of the studies:

Table 1: Studies Indicating Impact of Health Outcomes on Economic Growth

Author	Study	Main Finding(s)
Amirie & Gerdtham (2013)	**Impact** of Maternal and Child Health on Economic Growth: New Evidence Based Granger Causality and DEA Analysis – Study of 180 countries	• In majority of countries, changes in under-five mortality (U5MR) have an impact on GDP and vice versa. • In 40% of countries, changes in maternal mortality rate (MMR) have an impact on GDP and vice versa.
Gupta & Mitra (2004)	**Economic** growth, health and poverty: an exploratory study for India	**Investments** to improve health, and specifically, to reduce infant mortality rates are appropriate to increase economic growth and to reduce poverty
Bloom et al (2004)	**The effect** of health on economic growth: a production function approach	**The results** indicate that better health has a positive effect on growth of output and that an extra year of life expectancy enhances the productivity of workers and increases output (real GDP) by 4%.
Jamison et al (2003)	**Health's** contribution to economic growth in an environment of partially endogenous technical progress	• Increases in the average adult survival rate in 1965 and 1990 increased income growth by 0.23% per year. • Also indicates that better health accounts for about 11% of the economic growth overall during the period 1960–1990.
Ranis et al (2000)	**Economic** growth and human development	• The change in life expectancy 1960–1982 was positive on GDP per capita growth 1970–1992. • A 10% higher initial life expectancy gives 0.3–0.9% higher yearly growth. • A 10% change in life expectancy over a 20-year period increased annual growth by 1.2–1.7%.

(Source of last 4 studies only is Wilhelmson, Gerdtham. Impact on economic growth of investing in maternal–newborn health, WHO2006)

The economic argument for investment in health and consequent improved maternal, newborn and child health starts from saving money in more than one way. The household are less likely to spend money on healthcare when the women and children are healthier. This is especially important for poor people, because in a developing country like Pakistan it often means selling of assets including productive assets and thus increasing the poverty of the household. The saving is just one aspect, as the healthier people can work more productively. It also saves the work days lost during illness. More productivity means more contribution into economy. Similarly the investment in children health results into an increase in the proportion of the population that survives to working age, which in turn contributes to economic growth.

3. Millennium Development Goals (MDGs) as Health Outcomes

The Strategy provides that relevant Millennium Development Goals (MDGs) will be the outcomes for health. Efforts will be made to achieve the MDG targets by 2015 but not later than 2018. Consequently the following table provides the outcomes, outcome indicators, baseline, and targets.

Table 2: Health Outcomes and Outcome Indicators

Outcomes	Outcome Indicators	Baseline	Target
Reduced Child Mortality	Prevalence of underweight children under 5 years of age (%)	30	<20
	Under 5 Mortality Rate (Deaths per 1000 Live Births)	104	52
	Infant Mortality Rate (Deaths per 1000 Live Births)	82	40
	Proportion of Fully Immunized Children 12-23 Months (%)	86	>90
	Proportion of Children Under 5 Who Suffered from Diarrhea in the Last 30 Days (%)	9	<10
Improved Maternal Health	Lady Health Worker's Coverage (% of target population)	48	100
	Maternal Mortality Ratio (Maternal Deaths per 100,000 Live Births)	227	140
	Proportion of Births Attended by Skilled Birth Attendants (%)	53	> 90
	Contraceptive Prevalence Rate (%)	41	45
	Total Fertility Rate (Average # of children per woman)	3.8	3.3
	Proportion of woman 15-49 years who had given birth during last 3 years and made at least one antenatal care consultation (%)	71	100
Reduced Incidence of HIV/AIDS, Malaria and other diseases	Prevalence of TB cases (%)	0.3	0.1
	Prevalence of Hepatitis B and C (%)	0.7	0.45
	Prevalence of HIV/AIDS cases among vulnerable groups (%)	0.03	0.015
Access to improved water sources and sanitation	Proportion of Population with Access to Improved Water Sources (%)	95	95
	Proportion of Population with Access to Sanitation (%)	78	90

(Source: UNDP MDG Report 2013 - except for Targets)

The following four departments are responsible for the achievement of targets under the health outcomes:

i. Health department
ii. Population Welfare Department (PWD)
iii. Public Health Engineering Department (PHED)
iv. Local Government & Community Development Department (LGCDD)

Health department is responsible for first three outcomes whereas relating to child and maternal health and incidence of specific diseases. Population Welfare departments is responsible for only two indicators of the second outcome. The responsibility here is specific and measureable by different outcome indicators. PHED and LGCDD are responsible for the fourth outcome related to water and sanitation. In this case the outcome indicators are the same and hence there is a need of clear responsibilities and increased coordination.

It is important to note that there are outside factors not part of Sectoral Plan that affect the outcomes. Two most important factors are education and income that affects the MMR and U5MR. Increase in education level of mothers and family income are linked to lower MMR and U5MR. Similarly the increase in level of education of mothers is linked to reduce TFR.

4. Health Sub-sector

4.1. Policy Directions in Growth Strategy

The overarching policy proposal as contained in the Strategy states that Health sector strategy 2020 and Health Roadmap will be implemented and Health budget will be aligned to this Strategy to focus on MDG goals and equity of access. The following table shows how the department will follow the policy proposals contained in the Strategy through programs provided in Medium Term Development Framework (MTDF). The MTDF allocations also follow the Health Sector Strategy aimed to achieve MDGs.

Table 3: Linkage between MTDF and Policy Proposals contained in Growth Strategy

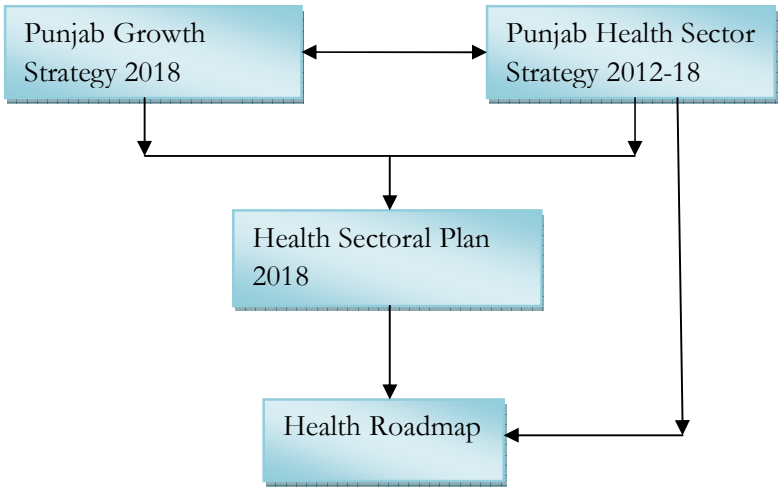
Policy Proposals (as contained in Growth Strategy)	Key Programs (MTDF)	Timeline	Cost (Rs. In m)
Shifting focus to Primary & Secondary Health Care and from non-communicable to infectious diseases to reduce the burden of disease	Upgradation of Basic Health Units (BHUs); establishment and upgradation of Rural Health Centres (RHCs) ; and strengthening of Tehsil Head Quarter (THQ) and District Head Quarter (DHQ) hospitals benefitting 112 health facilities in the province	2014-18	34,157
	Enhanced HIV / AIDS Control Programme Punjab (Phase-III)	2014-18	1,265
	Prevention and Control of Hepatitis in Punjab	2014-17	660
	Strengthening of Expanded Programme on Immunization (EPI)	2014-18	3,621
	T.B. Control Programme	2014-15	92
	National Blood Transfusion Service Project	2014-17	123
	Punjab Thalassemia Prevention Program	2014-16	106
	Integrated Reproductive Maternal New Born & Child Health (RMNCH) & Nutrition Program	2014-18	9,592
	Provision of Ambulances for DHQ's /THQ's and Ambulances for Cardiac Patients	2014-15	364
	Establishment of Referral System in Punjab	2014-15	100
	Centre for disease control in Punjab	2014-15	30
Sub-Total			**50,110**
Improving management of the health system, through delegation of duties from Provincial to lower levels and sharing of responsibilities through public private partnership – such as contracting-in or outsourcing BHUs to private sector.	Performance Management System in Health Department	2014-15	8
Linking Health provision with social protection programs such as health insurance for vulnerable groups.	Health Insurance Card	2014-15	4,000
Creating a Health	Strengthening of Health Management	2014-16	85

Information System to allow community-based workers and both public and private facilities to enter data, leading to a disease surveillance system. Using PITB's successful Dengue Surveillance System as a model.	Information System in Punjab		
Ensuring uninterrupted supply of essential medicines at all public health facilities by improving the medicine and equipment supply chain.	Establishment of Procurement Cell in the Health Department	2014-15	32
	Establishment and upgradation of Drug Testing Laboratories (3 projects)	2014-15	183
Sub-total			**215**
		Grand Total	**54,423**

4.2 Inter-linkages among different Strategies and Plans

The department believes that the different strategies and plans should act in tandem for maximum impact. It is imperative that approach and focus of Growth Strategy 2018, Health Sector Strategy 2012-20, Health Sectoral Plan 2018, and Health Roadmap should complement each other. To achieve this objective the department views the relationship among these documents as shown in figure 1.

Fig.1 Inter-linkages among Health related Strategies and Plan



The basic premise of Health Sector Strategy is that all activities contained in the document lead to the achievement of Millennium Development Goals (MDGs) targets. Health Roadmap is a focused and prioritized approach adopted for the improvement of health service delivery. It has the advantage of element of flexibility as the course correction can be done at regular intervals on the basis of feedback. However, the Health Roadmap activities stems from Health Sector

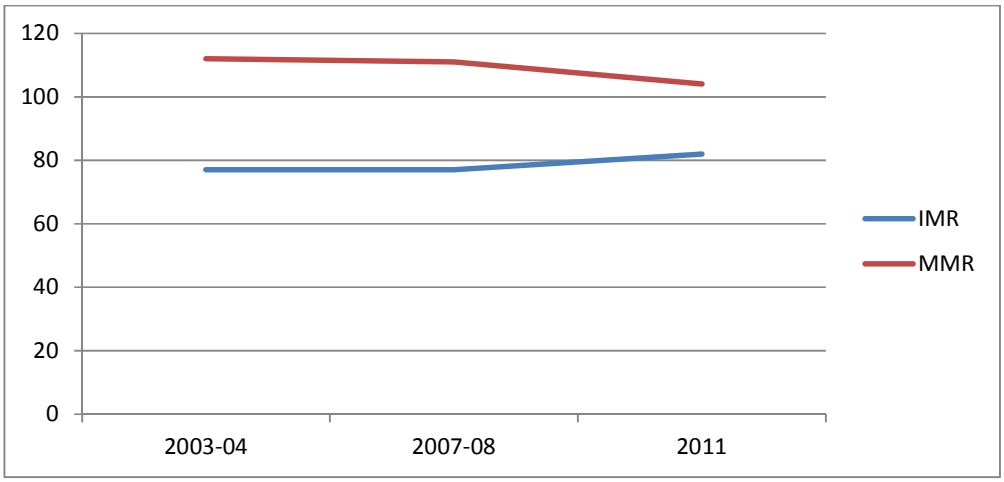
Strategy. In this context the Health Sectoral Plan, which is a medium term plan, contains broader activities. The complete menu of major activities to be undertaken under Sectoral Plan is contained in Annexure A.

4.3. Plan for Health Sub-Sector

4.3.1. Current Status

Government of Punjab is not only conscious of its international obligations but is equally dedicated to its duty towards people of the province. Its efforts are focused on the reduction of child and maternal mortality as provided under goals 4 and 5 of the MDGs. The situation is improving but not at a desired rate, as the figure below shows:

Figure2: Trend of IMR and MMR over years



Source*: Different MICS reports*

Though Punjab is showing better progress as compared to other provinces, yet its performance against regional countries (India, Bangladesh, Nepal and Sri Lanka) is lagging. This is particularly informative as these countries share similar levels of socio-economic conditions as that of Punjab but have been performing better than the province, indicating that the province can also fare better with the right policies and strategies.

4.3.2. Challenges in service delivery

The key challenges to an efficient quality service delivery are well documented. There is a general consensus among the provincial government and key donors on these challenges. The important challenges and issues in the primary and secondary health delivery are summed up as under:

1. The sector is suffering from lack of health professionals including doctors and nurses. The issue is profound in rural areas where the doctors and nurses especially female doctors are reluctant to go due to issue of safety. In general the health professionals tend to avoid the remote area assignments even in their early stage of career not only due to safety issue but also due to poor facilities and access issues. The young professionals are also averse to man the basic health facilities as the time spent at these facilities does not

count towards eligible experience required for higher education. Linked with the non-availability issue is absenteeism. Many basic health facilities are without doctors due to unavailability and still many suffer due to absenteeism where doctors go for couple of days a month.

2. Frequent stock out of medicines especially at Basic Health Units (BHUs) and Rural Health Centres (RHCs) level is a critical issue. Multiple reasons contribute to this situation. Essential Drugs List exists but is not reviewed periodically to take into account the changing circumstance. A mismatch is often found between the Essential Health Services Package and required drugs at health facilities. The procurement of drugs often takes long time due to issues related to poor understanding of procurement rules, centralized purchases, and budget releases.
3. Immunization coverage across districts varies and generally has not attained the required level. The main reasons for this discrepancy are involvement of immunisation staff in other activities and poor monitoring. Record is also not maintained in a systematic manner as targets given to immunization staff are based on the projections on the population census of 1998, which in many cases differ greatly from the ground conditions. Parents are usually not aware of the touring program of the vaccinator or availability of vaccination at BHU.
4. The primary and secondary health care is the responsibility of the district level health managers but the district level health sector does not enjoy the essential authorities in terms of human resource management especially related to contract recruitments, transfers and discipline; and financial management in terms of budget formulation, releases and execution. Decentralisation to provide sufficient autonomy to district managers for improvement of service delivery by adopting a flexible approach according to local conditions lacks. There is also a need to integrate the different vertical programs at district level. The absence of robust Monitoring & Evaluation system is affecting planning and decision making.

All these factors are contributing to poor service delivery in general and poor performance on child and maternal health in particular.

4.3.3. Key activities

A comprehensive menu of activities to address the issues for the sub-sector is provided at Annexure A. However, following activities are expected to address the issue of child and maternal mortality in a focused manner:

1. In order to decrease the under 5 child mortality rate improved immunisation, improved nutritional status of the children, and prevention and treatment of diarrhoea and pneumonia are necessary. In order to improve the immunisation several steps will be taken. These include provision of cold chain equipment to districts; ensuring uninterrupted supply of vaccines through improvement in logistics; and capacity building of Expanded Program for Immunisation (EPI) staff. The districts will also be supported by providing information on gaps on the basis of data analysis. Linkage between Lady Health Workers (LHW) and EPI staff will also be established for effective immunisation campaigns. The vaccination staff will be increased systematically to improve coverage

and manage work load. The activity will be supported by public awareness campaign to create awareness and demand.

2. For the improvement of maternal health and reduction of maternal mortality rate, it is essential to focus on antenatal care and delivery by skilled birth attendants. Steps to improve the nutritional status of mothers are also important. It is planned that 24/7 maternal and new born health services will be provided at the selected BHUs. The basic health facilities will be linked with secondary and tertiary care health facilities through Rural Emergency Ambulance Services. The gynae and labour rooms at District Headquarter (DHQ) and Tehsil Headquarter (THQ) hospitals will be improved to provide quality services. Comprehensive Emergency Obstetric and New Born (EmONC) care will be strengthened at all THQ and DHQ Hospitals. The recruitment of essential HR such as Gynaecologist, Anaesthetist, Blood Transfusion Officers (BTOs) will be allowed on flexi contracts to enhance their availability. Wherever possible they will be hired by the districts. Community Midwives will be trained and deployed in all the districts. The coverage of LHWs will be increased to cover the entire province.

5. Population Welfare Sub-sector

5.1 Policy Directions in Growth Strategy

Mainly the federal government had been providing the funds to population welfare department for its activities. After the 18th Constitutional Amendment the subject is now with the provincial government. The allocations for the activities of the department will be provided in the provincial budget. The following table shows how the department will follow the policy proposals contained in the Strategy through programs provided in MTDF.

Table 4: Linkage between MTDF and Policy Proposals contained in Growth Strategy

Policy Proposals (as contained in Growth Strategy)	Key Programs (MTDF)	Timeline	Cost (Rs. In m)
Enhancing resource allocations for an accelerated fertility decline, by strengthening ongoing Population Welfare Program and making it essential part of the Punjab budget; and ensuring Contraceptive procurement after 2015 including logistics and storing, from Provincial budget.	Establishment of Provincial Warehouse Punjab & Procurement of Contraceptive and General Medicines	2014-16	470
Capacity building and training of Population Welfare Department and its regional training institutes to make up for human resource deficiency. In addition, expanding Department coverage in remote and uncovered areas and expanding RHS A and B type centers.	Establishment of Directorate of Training & Research	2014-16	47
	Expansion of family Welfare Centres & Revival of Village Based Family Planning Workers	2014-16	1,000
	Construction of 12 Family Health Clinics	2014-16	216
	Regional Training Institutes at Multan & Lahore: Restructuring & Reorganization	2014-16	90
	Upgradation of 12 Family Health Clinics	2014-15	95
Sub-total			1,448
Communications and social mobilization strategy to spearhead a coordinated multi-sectoral program			
		Grand Total	**1,448**

5.2. Plan for Population Welfare Sub-Sector

The plan for the population sub-sector generally follows the Growth Strategy and the Population Policy 2014 as approved by the provincial government.

5.2.1. Current Status

The population of Punjab doubled during the period 1981-2011 and it is expected to be doubled by 2050 if the current growth rate is not checked. But more importantly the factors that cause the high population growth rate such as high Contraceptive Prevalence Rate (CPR), Total Fertility Rate (TFR), and high unmet need for contraception also result into high maternal mortality rate. The progress on these factors is essential for improving the maternal health as well. The table below shows the progress against relevant indicators.

Table: Progress against family planning indicators (%age)

#	Indicator	PDHS 2006-07	PDHS 2012-13
1	Contraceptive Prevalence Rate (CPR)	33.2	40.7
2	Total Fertility Rate (TFR) per child bearing woman	3.9	3.8
3	Unmet Need for Contraception	22.8	17.7

Source: Pakistan Demographic and Health Survey 2006-07 & 2012-13

It is evident from the above table that progress against the indicators has not been very promising.

5.2.2. Key Challenges and Plan

Any planning for fertility decline needs to take into account the fact that many factors contribute towards fertility decline and family planning is only one of them. Other contributing factors are social, economic and education. Status of the women, her age at the time of marriage, her education level are important determinants of fertility behavior as are social and religious pressures. Punjab has shown high risk fertility behavior and use of modern contraceptive methods are now considered as the most cost effective measure to rectify the situation.

The Family Planning Program has been funded by the federal government funds but after passing of 18th Amendment in Constitution of Pakistan, this responsibility has been devolved to provinces. Punjab is in the process of development of required organizational structure and outreach to better equip itself for the task ahead. The sub-sector is however facing some serious challenges. Firstly there is an issue of lack of adequate funding to support the initiatives of the department. The federal funding which will stop from the current financial year has been marred with reduced and delayed funding. Ban on recruitment affected departmental activities as many positions in the province remained vacant affecting the already limited outreach. This situation further resulted into low coverage and accessibility. The counseling to clients has been weak due to less skillful professionals due who need regular trainings and upgrading of skills. Community presence of the family planning is almost non-existent. Department has been able to offer little services in terms of provision of contraceptives resulting high unmet demand. This means that even undesired pregnancies occurred and raised the fertility rate further.

As a first step the department formulated the Punjab Population Policy 2014 to ensure that future activities are governed under focused policy guidelines. It further plans to improve the situation with the following key activities during the Plan period:

1. Demand Generation

2. Service Delivery
3. Organisational Restructuring

The importance of demand generation is central to any effective family planning program. This will be a systematic and organized activity. Communication campaign will be the key part of this activity which will be focused on small family norms. Comprehensive multi-media strategy will be prepared to promote idea of small family. Civil society will be sensitized through promotional material. Information kits will be prepared to educate rural population through agriculture workers. Counseling will be made more effective by training and refresher training of the staff. Population with high unmet demand and young couples will be the main target. Keeping in view the social set up, the efforts will be directed on more male involvement. Advisory Call Centre will also be established to improve the accessibility. To generate demand at the community level the concept of village based family planning workers will be revived.

For the improvement of service delivery some major steps will be taken which will include maintaining supply chain of quality contraceptives to reduce the unmet demand and ensuring community based services. Provincial warehouse will be established for contraceptive procurement and distribution. The Regional Training Institutes at Multan and Lahore will be reorganized to develop and promote quality standard protocols and skill development. Special training packages will be developed for effective family planning services. Pre-service and refresher training courses will also be available at the institutes. Surgical contraceptive facilities will be strengthened by establishment of 12 Family Health Clinics (FHCs) and training facilities will be provided at those FHCs which are attached with tertiary hospitals. Mobile service units will be revived to improve outreach in remote areas of the province.

Key organizational restructuring activities include restructuring of management tier to strengthen the monitoring and for this purpose divisional directorates will be established and district offices will be restructured. The critical areas of communications, procurement, logistics, training and research will be supported through restructuring of Directorate General Office and by establishing Directorates of Information, Education and Communication (IEC); Procurement and Logistics; and Research & Training. The restructuring will help in effective monitoring and evaluation and lessons learning leading to course correction where necessary.

The complete list of activities is placed at Annexure 2.

6 Water & Sanitation Sub-sector

6.1 Policy Directions in Growth Strategy

The Growth Strategy contains the comprehensive policy guideline for this sub-sector. Two departments namely Public Health Engineering Department (PHED) and Local Government and Community Development Department (LGCDD) have the joint responsibility to implement this policy proposal

Table 5: Linkage between MTDF and Policy Proposals contained in Growth Strategy

Policy Proposals (as contained in Growth Strategy)	Key Programs (MTDF)	Timeline	Cost (Rs. In m)
Improving water, sanitation and hygiene (WASH) services by increasing investment in sanitation especially in rural areas, where open defecation and absent sewerage systems are a major problem.	**LGCDD**		
	Elimination of ponds from major villages of Punjab to improve sanitation / eradication of vector diseases through bioremediation benefitting 500 villages	2014-17	1,047
	Pilot project for solid waste management in rural areas of Punjab benefitting 6 villages	2014-15	350
	Sub-total		**1,397**
	PHED		
	Provision of safe drinking water through installation of 1479 filtration plants under Saaf Pani Project	2014-17	12,139
	Open Defecation Free (ODF) project	2014-15	400
	Implementation of 78 water supply schemes including 41 urban schemes and 37 rural schemes	2014-17	3,222
	Implementation of 95 sanitation schemes including 53 urban and 42 rural schemes	2014-17	3,180
	Rehabilitation of 172 dysfunctional schemes	2014-15	1,000
	Sub-total		19,941
	Grand Total		**21,338**

6.2 Plan for Water & Sanitation Sub-Sector

The importance and impact of improved water and sanitation on health outcomes in general and child and maternal health in particular, is well documented. Research shows that reproductive, maternal, neonatal and child health (RMNCH) can be greatly benefitted by sustainable access to safe water and improved sanitation and hygiene (WASH). If WASH practices are adopted in health facilities as well as in communities then the maternal and child mortality can be effectively checked. It is estimated that 10-15 % maternal deaths in developing countries are due to unhygienic conditions during labour and birth. Similarly almost half a million children deaths can be attributed to diarrheal disease every year caused by unsafe water and poor sanitation and hygiene practices[1].

[1] PMNCH Knowledge Summary # 30 Water, Sanitation and Hygiene – the impact on RMNCH

Unsafe drinking water can lead to several diseases such as diarrhea, typhoid, intestinal worms and hepatitis. Inadequate quality of drinking water and poor sanitation facilities are associated with water related illness.

LGCDD

The Local Government & Community Development Department (LGCDD) plans to undertake two major innovative initiatives in this sub-sector.

1. As per one estimate [2] 7,700 villages in the province have ponds which have turned into a major source of health hazards. The source of water in these ponds is village waste water and storm water. These ponds have become source of water borne and vector diseases. Besides down percolation of waste water is contaminating the sub-soil water and resultantly causing more health hazards as in many cases the water pumps are the source of drinking water for these villages. The Pakistani standards of permissible level of waste water pollution are 150 mg/liter in case of Chemical Oxygen Demand (COD) and 80 mg/liter for Biochemical Oxygen Demand (BOD). The pollution levels of various ponds are much higher – sometimes six times higher than the permissible limit[3]. The department will undertake drainage of waste water and earth filling of 500 ponds in the next 3 years. The villages will be selected on the basis of population and availability of state land. In the first phase the villages with population of 10,000 or above are selected. In phase II, the villages with population of 5,000 and above will be selected. In the third phase the villages with population of less than 5,000 will be selected. A total of 500 villages with total population of one million are expected to be benefitted. The reclaimed land will be handed over to district administration for use as playgrounds, school, parks, or health facility. The expected benefits include reduction in vector water borne diseases, and reduction in pollution of ground water.

2. The department plans to implement an innovative solution for rural sanitation which includes institutional development and capacity development component as well. Currently Tehsil Municipal Administrations (TMAs) are responsible for rural sanitation. Due to capacity constraints in terms of finances and HR, this function is completely neglected. Resultantly the villages of Punjab have highly insanitary conditions where the house and shop refuse is thrown in the streets and solid waste can be seen in heaps in the streets or around village. However recyclables are picked by scavengers. An innovative solution is planned to be piloted in 6 villages of the province. Under the pilot model capital cost and six months Operations & Maintenance (O&M) cost will be borne by the government. Lahore Waste Management Company (LWMC) will install the biogas plants. Village Sanitation Committee (VSC) will be formed and registered under Societies Registration Act. The framework for their operations in the form of byelaws has been prepared. After six months VSC will run the plant and bear the cost of O&M by selling gas to households, manure to farmers and recyclables to vendors. The model will be studied, refined and replicated in other villages.

[2] Department Record
[3] Ibid

PHED

1. Pakistan Approach to Total Sanitation (PATS) has been followed by the department in which all steps of sanitation are covered including basic sanitation, liquid waste management and treatment, and solid waste management. Improvement of sanitation facilities at the household level in rural areas through community led total sanitation approach is the big initiative in this sub-sector. As a result of which the target villages are declared Open Defecation Free (ODF) villages. Currently project is implemented in 9 districts with the help of international organisations including UNICEF, Plan International, and Water & Sanitation Program (WSP) etc. It is expected that 3228 villages will be declared ODF villages as a result of this intervention[4].
2. Two innovative models are also piloted for waste water treatment in the rural areas. In one model the waste water is treated through wetlands and the project is implemented at Layya and Muzzaffargar districts. In the second pilot project, solar based small scale sewerage treatment units have been installed in two ODF villages in District Rahim Yar Khan. The department will refine the model and replicate it in more villages.

Complete list of activities is placed at Annexure 3.

[4] Punjab Water and Sanitation Rural Agenda 2014

Areas for further Research

(To be provided by IGC as separate support has been arranged by them)

Annexes

Annexure 1

Implementation & Monitoring Framework of Health Department

Implementation and Monitoring Framework consists of two matrixes which are interlinked and present a detailed activity wise framework with timeline and targets. Resultantly it is convenient to know how inputs/ activities are linked with outputs and outcomes.

The IMP for health sub-sector is mainly based on the Health Sector Strategy. The basic premise of sector strategy is that all activities contained in the document lead to the achievement of MDGs targets. The Implementation & Monitoring Framework and Performance Monitoring matrix are based on this premise.

Table 1: Implementation & Monitoring Framework (IMF) of Health Department [5]

Outcome 1: Reduced Child Mortality		
Outcome 2: Improved Maternal Health		
Outcome 3: Reduced Incidence of HIV/AIDS, Malaria and other diseases		
Interim Outcomes	**Outputs**	**Activities**
1. Improved access and quality of health care	1.1. Essential Health Services (EHS) Package for primary, secondary and tertiary level healthcare facilities instituted	1.1.1. Development of EHSP with costing
		1.1.2. Prepare priority list of primary and secondary healthcare facilities.
		Ensure provision of EHSP at these facilities.
	1.2. District level Health Complexes established	1.2.1. Upgradation of DHQ hospitals into District Health Complexes
	1.3. Urban Primary Health Care Strengthened	1.3.1. Develop urban primary healthcare network involving both public and private sector
		1.3.2.Operationalize and upgrade municipal health facilities in urban areas
		1.3.3. Enhance support to private sector for service delivery in urban areas through Punjab Health Foundation
		1.3.4. Develop communication strategy to raise awareness about urban primary healthcare
	1.4. 24/7 quality emergency services ensured	1.4.1. Strengthen and upgrade emergency care units at public sector facilities
		1.4.2. Prepare emergency readiness plans

[5] This matrix is developed on the basis of information contained in Punjab Health Sector Strategy 2012-20

		1.4.3. Develop mechanism for transportation of rural communities to health facilities
		1.4.4. Build integrated ambulance services for transportation of maternal emergencies
	1.5. Strengthened Maternal Neonate and Child Health (MNCH) at all levels as part of EPHS	1.5.1. Integrate MNCH at community and primary health facility level as part of EPHS
		1.5.2. Create referral backup for community-level health workers, like CMWs to cater maternal complications
		1.5.3. Strengthen routine immunization services for full immunization of all children and women
		1.5.4. Upgrade a minimum of one third of the BHUs to BHU-plus model for delivery of services on 24/7 basis in 20 low performing districts
		1.5.5. Ensure full package of 24/7 Basic Emergency Obstetric Neonatal Care (EmONC) at all RHCs
		1.5.6. Upgrade 2 RHCs to RHC-plus model for provision of 24/7 Comprehensive EmONC services in each of 20 low performing districts of Punjab
		1.5.7 Upgrade and strengthen all THQ and DHQ hospitals to provide full package of 24/7 Comprehensive EmONC services, including neonatal intensive care units with qualified staff
		1.5.8. Upgrade, strengthen and realign all tertiary care level hospitals to cater MNCH related management and referral
		1.5.9. Conduct training of staff at all levels on Integrated Management of Newborn and Childhood Illnesses (IMNCI) with a functional follow-up after training mechanism
		1.5.10. Redesign mobile health units structure and operations to meet the desired service delivery functions
	1.6. Prevention and management of infectious diseases, as part of EPHS strengthened	1.6.1 Build the capacity of facility-based and outreach staff on diagnosis and management of acute infections

		1.6.2. Functionalize oral rehydration therapy units in all primary healthcare level
		1.6.3. Establish diarrhoea and pneumonia treatment centres in medical/ paediatrics wards of all THQ and DHQ hospitals for effective management of these health problems
		1.6.4. Provide laboratory services for diagnosis of major infectious diseases including TB, Hepatitis B and C, HIV/AIDS, Malaria at all RHCs, secondary and tertiary hospitals
		1.6.5. Cover high risk adult population with Hepatitis B vaccination
		1.6.6. Strengthen inflection control and waste management practices at all public and private sector health facilities with implementation of standard protocols and regular assessment
	1.7. Prevention and management of non-communicable diseases (NCDs)as part of EPHS strengthened	1.7.1. Commission research on NCDs trends and associated risk factors, disaggregated for gender and geographical prevalence
		1.7.2. Build capacity of facility-based and outreach staff for diagnosis and management of NCDs
		1.7.3. Provide screening services for NCDs at all RHCs, secondary and tertiary hospitals
		1.7.4. Strengthen disease surveillance and epidemiological unit at the provincial and district level
	1.8. Preventive healthcare (vertical) programmes integrated	1.8.1. Ensure functional and managerial integration of vertical programmes under EPHS at primary level
		1.8.2. Optimize healthcare service delivery arrangements through adopting integrated models, like SRH-HIV and family planning service for reproductive health
	1.9. Minimum Service Delivery Standards (MSDS) implemented and hospitals and healthcare facilities are standardized as part of EPHS.	1.9.1. Revisit MSDS at primary and secondary level and develop MSDS for tertiary level hospitals in public sector and incorporate in EPHS
		1.9.2. Apply MSDS for private sector through Punjab Healthcare Commission and support its implementation through Punjab Health Foundation

		1.9.3. Integrate MSDS into EPHS and ensure application throughout the province
		1.9.4. Upgrade health facilities to achieve MSDS for both physical and human resources
		1.9.5. Develop guidelines on quality measures at provincial level and institute clinical audits and clinical assessments through Punjab Healthcare Commission
2. Efficient system of health sector governance, accountability and regulation	2.1. Department of Health restructured for stewardship and monitoring role	2.1.1. Functional review of Health Department
		2.1.2. Reorient departmental systems toward changing role
		2.1.3. Strengthen Punjab Health Sector Reform Program as a Strategy and Policy Unit
		2.1.4. Develop essential databases as decision support systems including health workforce, disease monitoring, programme monitoring, health monitoring, asset accounting, procurement and logistics, performance measurement and resource utilisation
		2.1.5. Develop mechanisms to assess expenditure efficiency with legally binding reporting requirements from all implementing agencies
	2.2. DGHS restructured to orchestrate implementation of health policy initiatives	2.2.1. Functional review of DGHS
		2.2.2. Create system of evidence based health programming monitoring reports, data analysis, technical studies and evaluations
		2.2.3. Provision of data analysis capacities through appropriate expertise and building data analysis capacity
		2.2.4. Develop response protocols to deal with disease outbreaks, emergencies, systemic failures and natural disasters
		2.2.5. Develop programme review guidelines to carry out periodic assessments of key health programmes

		2.2.6. Periodic and annual systemic reviews to assess response readiness and priming for service delivery for health organizations, autonomous health facilities and decentralized district departments
	2.3. Decentralisation to districts and autonomy to health facilities optimised	2.3.1. Strengthen health facilities and decentralize district health departments for service delivery by equipping them with appropriate mandates
		2.3.2. Create systems for setting health goals for decentralized entities, mentoring and accountability
		2.3.3. All districts and institutions to develop and report on annual work plans
	2.4. Punjab Healthcare Commission fully operationalised	2.4.1. Develop a system of rule based, comprehensive and responsive regulatory regime
		2.4.2. Develop healthcare commission field formations and mechanisms
		2.4.3. Create system for registration and licensing of health facilities
		2.4.4. Create system for registration and licensing of medical laboratories
		2.4.5. Establishment of Laboratory Certification System
		2.4.6. Application of Minimum Service Delivery Standards for both physical and human resources
		2.4.7. Development of patient rights statements with mandatory display and communication to patients
		2.4.8. Strengthen regulation and registration of all cadres of health workforce
3. Management system provides incentives for performance and ensures accountability	3.1. Comprehensive system for performance assessment and incentives developed	3.1.1. Institutionalise performance evaluation through mandated performance concepts, indicators, assessment methods and application schedules
		3.1.2. Implement contracting-in models to enhance performance of primary and secondary level facilities
		3.1.3. Build capacity to develop, procure and manage contracts within the department
		3.1.4. Customize performance management tools and processes to the health workforce requirement
		3.1.5. Develop performance evaluation systems for healthcare institutions and personnel

		3.1.6. Reorient promotion policy for all health service cadres by linking it to the performance
		3.1.7. Institute a favourable contractual policy for health professionals, which is non-permanent and non-pensionable
	3.2. Robust system of accountability for performance developed	3.2.1. Strengthen internal control for both financial and managerial functions
		3.2.2. Regularly review performance management of district managers based on indicators culled from policy and programmatic goals
		3.2.3. All institutions and districts to release annual review reports based on annual work plans
		3.2.4. Strengthen procurement systems through capacity building
		3.2.5. Strengthening financial management through capacity building or deployment of specialised personals.
4. Adequate and skilled workforce available to fulfil population health needs	4.1. Human Resource Planning and Development Unit established	4.1.1. Conduct a detailed workforce study to examine the current status and future workforce needs of the critical categories in the province by taking in account MSDS needs for production and absorption as well migration levels as per WHO Code of Practice for International Migration
		4.1.2. Develop automated database in the form of Human Resource Management Information Systems (HRMIS) for both public and private sector
	4.2. Vacant posts of healthcare providers at primary healthcare facilities, especially in rural and hard-to-reach areas filled	4.2.1. Enhance age bar for entry by 10 years for female health workers in recruitment by Punjab Public Service Commission
		4.2.2. Institute a special incentives package for RHCs where there are no WMOs, nurses or other female health staff, including both financial and non-financial incentives
		4.2.3. Provide market driven incentives to WMOs at THQ and DHQ hospitals to conduct the medico legal cases
		4.2.4. Incentivise training and deployment of CMWs to ensure safe delivery practices

	4.3. Vacant posts of specialists at secondary healthcare hospitals filled	4.3.1. Implement special incentives package/ flexible contract arrangements for specialists working in SHC facilities according to the local needs
		4.3.2. Recognise THQ and DHQ hospitals for placements of PG trainees
		4.3.3. Develop short certificate courses in deficient specialties through CPSP or UHS
	4.4. Health Services Academy for trainings of different categories of health workers developed	4.4.1. Upgrade and fully resource Provincial Health Development Centre (PHDC) to the level of Punjab Health Services Academy (PHSA)
		4.4.2. Strengthen District Health Development Centre (DHDC) network to conduct district level induction trainings and strengthen linkages with PHDC
		4.4.3. Update induction training manual "Training 2000" for implementation of training courses
		4.4.4. Conduct training needs assessment for various cadres and institutionalise all on job training with PHSA and DHDC network
		4.4.5. Develop category-focused and level-specific training courses with management training separate from clinical cadres, and link trainings with career advancements
		4.4.6. Developed linkages with renowned private sector institutions for leadership, management and other specialized trainings to improve quality of HR
	4.5. Faculty positions in all health personnel educational institutions for doctors, nurses and allied health professionals with trained and qualified teachers filled	4.5.1. Attract medical graduates/post graduates to areas where there is deficiency e.g. in basic sciences. Institute similar incentives for nurses and allied professionals faculty
		4.5.2. Fill all staffing positions in all medical colleges in Punjab according to PMDC regulations
5. A comprehensive, timely, accurate and functional information foundation developed for health policy and planning decisions	5.1. Community based information system strengthened and integrated with facility-based information system	5.1.1. Institute a mechanism for community-based workers to register all health-related events, specifically neonatal, infant, childhood and maternal deaths

		5.1.2. Conduct feasibility study for integration of DHIS and community-based MIS* taking into account the functional integration and development of IT linkages at district/provincial levels
	5.2. Private sector health facilities linked with provincial level information system	5.2.1. Link private facilities with provincial level information systems for priority infectious disease notification
		5.2.2. Validate quality of information collected through quality assurance activities of Punjab Healthcare Commission
	5.3. Capacity building of district health managers on use of information through support of Provincial and District Health Development Centres	5.3.1. Institute a regular training programme based on training need assessment on use of information by district health managers
		5.3.2. Build the capacity of PHDC/ PHSA and DHDC through technical assistance to conduct training programmes
	5.4. Comprehensive integrated Disease Surveillance System at provincial and district level established	5.4.1. Establish an Integrated Disease Surveillance System (IDSS) at provincial and district level by incorporating DEWS and other existing systems in the IDSS
		5.4.2. Build capacity of relevant staff on recording and reporting of diseases enlisted in IDSS/ DEWS
6. Uninterrupted supply of quality essential drugs for healthcare facilities and outreach workers	6.1. Existing logistics and supply chain management system enhanced	6.1.1. Establishment of a well-equipped, well-staffed procurement and logistics cell at provincial level
		6.1.2. Restructure medical store depots (MSDs) on modern lines and create a network of MSDs in all districts as part of the supply chain management
		6.1.3. Adapt and implement an integrated Vaccine Logistic Management Information System (VLMIS), and integrated warehousing and LMIS
		6.1.4. Automate system for quantification, procurement and distribution
	6.2. Regular review of Essential Drugs List (EDL)	6.2.1. Institute periodic review of the EDL on yearly basis
		6.2.2. Update the EDL while keeping in mind needs of the population and burden of disease

	6.3. Strengthen drugs regulation	6.3.1. Assess Provincial Quality Control Board (PQCB) for adequacy of resources and skills
		6.3.2. Monitor pharmacies to be operated by qualified pharmacists

The performance monitoring matrix is based on IMF and provides targets for 2018 against each performance indicator. The collection method and collection frequency of relevant data is also given.

Table 2: Performance Monitoring - Health Department [6]

Result Statements	Performance Indicators	Targets	Collection Methods	Collection Frequency
Outcome Results				
1. Improved Child Health	Infant Mortality Rate (IMR)(Deaths per 1000 Live Births)	40	MICS	4 years
	Under 5 Mortality Rate (Deaths per 1000 Live Births)	52	MICS	4 years
	Proportion of Fully Immunized Children 12-23 Months (%)	> 90	MICS	4 years
	Proportion of Children Under 5 Who Suffered from Diarrhoea in the Last 30 Days (%)	< 10	MICS	4 years
2. Improved Maternal Health	Maternal Mortality Ratio (Maternal Deaths per 100,000 Live Births)	140	MICS	4 years
	Proportion of Births Attended by Skilled Birth Attendants (%)	> 90	MICS	4 years
	Proportion of woman 15-49 years who had given birth during last 3 years and made at least one antenatal care consultation (%)	100	MICS	4 years
	Lady Health Worker's Coverage (% of target population)	100	Department M&E	Monthly
3. Reduced Incidence of HIV/AIDS, Malaria and other diseases	Prevalence of TB cases	0.10%	MICS	4 years
	Prevalence of Hepatitis B and C	0.45%	MICS	4 years
	Prevalence of HIV/AIDS cases among vulnerable groups	0.02%	PDHS	5 years
Interim Outcome Results				

[6] This matrix is developed on the basis of information contained in Punjab Health Sector Strategy 2012-20

1. Improved access and quality of health care	1.1. Percentage of health facilities ready to deliver EPHS as per their scope	95%	Health Facility Assessment	Annual
	1.2. Percentage of urban population (poor and disadvantaged) having access to subsidized primary healthcare	90%	MIS Report	Annual
	1.3. Number of districts having functional health complex	36	DoH Report	Annual
	1.4. Percentage of RHCs, THQ and DHQ hospitals with access to ambulance services for patient referral	100%	DoH Report	Annual
	1.5. Percentage of health facilities with fully implemented MSDS	80%	Health Facility Assessment	5 years
2. Efficient system of health sector governance, accountability and regulation	2.1 Reform and restructuring of DoH and DGHS completed	By 2014	DoH Report	One Time
	2.2 Number of districts reporting progress on basis of annual plans in regular review meetings	36	DoH Report	Annual
	2.3 Percentage of public health facilities registered/licensed by Punjab Healthcare Commission	100%	Punjab Health Commission Report	Annual
	2.4 Percentage of private health facilities registered/licensed by Punjab Healthcare Commission	80%	Punjab Health Commission Report	Annual
	2.5 Number of districts for whom a complete public and private sector facility data is available	36	Punjab Health Commission Report	Annual
3. Management system provides incentives for performance and ensures accountability	3.1 Number of districts with systemic change to P4P	36	DoH Report	Annual
	3.2 Number of districts whose annual review reports based on annual work plans are available on the website of PHSRP	36	DoH Report	Annual
	3.3 Punjab Health Contract Service instituted and functional through support of HRPD Unit	Completed by 2014	DoH Report	One Time
	3.4 Number of districts showing satisfactory performance on the basis of laid down performance indicators	36	DoH Report	Annual

4. Adequate and skilled workforce available to fulfil population health needs	4.1 A detailed report on future health workforce needs and strategies in Punjab published by the HRPD unit	Published by 2013		One Time
	4.2 Number of reports about HR trends and needs generated by the HRPD unit	4 per year	HRPD Unit Report	Quarterly
	4.3 Percentage increase in density of doctors relative to population	30%	MIS Report	Annual
	4.4 Percentage increase in density of nurses relative to population	50 %	MIS Report	Annual
	4.5 Percentage increase in density of allied health professionals relative to population	50%	MIS Report	Annual
	4.6 Percentage of RHCs where WMO positions are filled	50%	MIS Report	Annual
	4.7 Percentage of SHC facilities where specialists in all disciplines are available	100%	MIS Report	Annual
	4.8 Number of districts conducting induction training through network of DHDCs and PHDC	36	DoH Report	Annual
5. A comprehensive, timely, accurate and functional information foundation for health policy and planning decisions	5.1 An integrated Disease Surveillance System established at provincial and district levels	100%	DGHS Report	Annual
	5.2 Percentage of vertical programmes integrated with provincial MIS Cell	100%	MIS Report	Annual
	5.3 Percentage of private sector hospitals and healthcare facilities regularly reporting using PHIS	90%	MIS Report	Annual
	5.4 Number of districts preparing annual health plans of actions considering the health issues emerging from the information system	36	DoH Report	Annual
6. Uninterrupted supply of quality essential drugs for healthcare facilities and outreach workers	6.1 Percentage of BHUs having essential drugs available	100%	MIS Report	Annual
	6.2 Percentage of RHCs having essential drugs available	100%	MIS Report	Annual

	6.3 Percentage of lady health workers with stock-out of family planning commodities	5%	MIS Report	Annual
	6.4 Percentage of district having medical store depots available for storage of required supply of medicines and supplies	100%	DoH Report	Annual
	6.5 Number of districts having storage capacity to stock one month supply of vaccines required in the district	36	DoH Report	Annual

Annexure 2

Implementation & Monitoring Framework of Population Welfare Department

Implementation and Monitoring Framework consists of two matrixes which are interlinked and present a detailed activity wise framework with timeline and targets. Resultantly it is convenient to know how inputs/ activities are linked with outputs and outcomes. The basic premise is that all activities contained in the document lead to the achievement of MDGs targets. The Implementation & Monitoring Framework and Performance Monitoring matrix are based on this premise.

Table 1: Implementation & Monitoring Framework (IMF) of Population Welfare Department

Outcome 2: Improved Maternal Health		
Interim Outcomes	**Outputs**	**Activities**
7 a. Fertility Regulation 7b. Decreased Total Fertility 7c. Decreased High Risk Fertility Behaviour	7.1 Service availability at Community level	7.1.1. Expansion of Family Welfare Centres (FWCs)
		7.1.2. Recruitment of Community Based Family Planning Workers (CBFPW)
		7.1.3. Activation of Mobile Service Units (MSUs)
	7.2. Capacity building	7.2.1. Upgradation of Family Health Centres for training
		7.2.2. Reorganisation of Regional Training Institutes
	7.3. Improved access to safe and quality family planning services	7.3.1. Strengthening of existing Family Health Clinics
		7.3.2. Establishment of new Family Health Clinics
	7.4. Enhanced Contraceptive security	7.4.1. Establishment of provincial warehouse
	7.5. Enhanced institutional capacity	7.5.1. Establishment of Directorate of Research
		7.5.2. Reorganisation of Directorate General
		7.5.3. Establishment of 9 Divisional Directorates
		7.5.4. Expansion of District set up
		7.5.5. Expansion of Tehsil set up

The performance monitoring matrix is based on IMF and provides targets for 2018 against each performance indicator. The collection method and collection frequency of relevant data is also given.

Table 2: Performance Monitoring Matrix– Population Welfare Department

Result Statements	Performance Indicators	Targets	Collection Methods	Collection Frequency
Outcome Results				
2. Improved Maternal Health	Contraceptive Prevalence Rate (%)	45	MICS	4 years
	Total Fertility Rate (Average # of children per woman)	3.3	MICS	4 years
Outputs				
7.1 Service availability at Community level	7.1.1. Number of FWCs	3500	Department M&E system	Quarterly
	7.1.2. Number of CBFPW	2400	Department M&E system	Quarterly
	7.1.3. Number of activated MSUs	117	Department M&E system	Quarterly
7.2. Capacity building	7.2.1. Number of upgraded FHCs	17	Department M&E system	Quarterly
	7.2.2. Number of reorganised Training Institutes	2	Department M&E system	Quarterly
7.3. Improved access to safe and quality family planning services	7.3.1. Number of existing Family Health Clinics which are strengthened	117	Department M&E system	Quarterly
	7.3.2. Number of new Family Health Clinics	12	Department M&E system	Quarterly
7.4. Enhanced Contraceptive security	7.4.1. Establishment of provincial warehouse	By 2015	Department M&E system	Quarterly
7.5. Enhanced institutional capacity	7.5.1. Establishment of Directorate of Research	By 2015	Department M&E system	Quarterly
	7.5.2. Reorganisation of Directorate General	By 2015	Department M&E system	Quarterly
	7.5.3. Establishment of 9 Divisional Directorates	By 2015	Department M&E system	Quarterly
	7.5.4. Expansion of District set up	By 2015	Department M&E system	Quarterly
	7.5.5. Expansion of Tehsil set up	By 2015	Department M&E system	Quarterly

Annexure 3

Implementation & Monitoring Framework - PHED and LGCDD

Implementation and Monitoring Framework consists of two matrixes which are interlinked and present a detailed activity wise framework with timeline and targets. Resultantly it is convenient to know how inputs/ activities are linked with outputs and outcomes. The basic premise here is that all activities contained in the document lead to the achievement of MDGs targets. The Implementation & Monitoring Framework and Performance Monitoring matrix are based on this premise.

Table 1: Implementation & Monitoring Framework (IMF) – PHED & LGCDD

Outcome 4: Access to improved water sources and basic sanitation	
Outputs	**Activities**
8.1 Village water ponds causing contamination eliminated	8.1.1. Selection of villages as per selection criteria
	8.1.2. Construction of wetland for elimination of ponds by bioremediation
	8.1.3. Handing over to district administration
8.2 Solid waste management in villages	8.2.1. Selection of model villages
	8.2.2. Formation and registration of Village Sanitation Committees (VSC)
	8.2.3. Identification and mutation of land in favour of GoP
	8.2.4. Installation of biogas plant and gas distribution system by Lahore Waste Management Company (LWMC)
	8.2.5. Operations of plants by VSC
8.3. Increased access to sanitation	8.3.1. Identification of schemes
	8.3.2. Approval of schemes
	8.3.3. Contract award of schemes
	8.3.4. Implementation of schemes
	8.3.5. Handing over of schemes to concerned authorities
8.4 Increased access to improved water supply	8.4.1. Identification of schemes
	8.4.2. Approval of schemes
	8.4.3. Contract award of schemes
	8.4.4. Implementation of schemes
	8.4.5. Handing over of schemes to concerned authorities
8.5 Increased coverage under ODF	8.5.1. Identification/selection of villages

	8.5.2. Execution of work
	8.5.3. Certification of village as ODF village
8.6. Provision of clean water	8.6.1. Identification of location for filtration plant
	8.6.2. Installation of filtration plant

The performance monitoring matrix is based on IMF and provides targets for 2018 against each performance indicator. The collection method and collection frequency of relevant data is also given.

Table 2: Performance Monitoring Matrix – LGCDD & PHED

Result Statements	Performance Indicators	Targets	Collection Methods	Collection Frequency
Outcome Results				
4. Access to improved water sources and sanitation	Proportion of Population with Access to Improved Water Sources (%)	93	MICS	4 years
	Proportion of Population with Access to Sanitation (%)	90	MICS	4 years
Outputs				
8.1 Village water ponds causing contamination eliminated	Number of villages where ponds are eliminated	500	Department M&E Cell	Quarterly
8.2 Solid waste management in villages	Number of villages with solid waste management system	6	Department M&E Cell	Quarterly
8.3. Implementation of sanitation schemes	Number of sanitation schemes implemented	95	Department M&E Cell	Quarterly
8.4 Implementation of water supply schemes	Number of water supply schemes implemented	78	Department M&E Cell	Quarterly
8.5 Implementation of ODF in villages	Number of villages ODF certified		Department M&E Cell	Quarterly
8.6. Provision of clean water	Number of filtration plants installed and operational	1,479	Department M&E Cell	Quarterly