

## Family planning: Smartest investment for achieving the Sustainable Developments Goals for Pakistan

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### Abstract

Investing in voluntary family planning services and commodities is a cost-effective intervention for socio-economic development. Every dollar spent on family planning results in reductions in child and maternal deaths, returns in savings in other development areas, and environmental benefits. Investments in family planning yield demonstrated social and economic returns in all sectors - food, water, health, and economic development. Our analysis suggests that achieving universal access to contraception could contribute in the long term to achieving some of the Sustainable Development Goals (SDGs). We applied the Family Planning-Sustainable Development Goals (FP-SDGs) Model that quantifies the benefits voluntary contraceptive use offers for realizing 13 of the SDG indicators which are related to 7 out of the 17 SDGs Goals. The model unravelling the multi-sectoral benefits of contraceptive use and shows that family planning can accelerate progress across the 7 SDG. Further, it shows that family planning does not only empower women to choose the number, timing, and spacing of their pregnancies but also touches on many multisectoral determinants vital to sustainable development. We show that in the case of Pakistan, without universal access to family planning and reproductive health, the impact and effectiveness of other interventions will be less, will cost more, and will take longer to achieve. In the end, we put some key recommendations to prioritize family planning as one of the strategic national development investments.

**Keywords:** Family Planning, Pakistan, SDGs, population, Universal Health Coverage.

### Introduction

Ensuring universal access to reproductive health, including voluntary and human-rights based family planning along with women's education and empowerment can make significant contributions to national socio-economic development.<sup>1-4</sup> Despite its multi-sectoral benefits, the potential impact of rights-

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based family planning programmes is often viewed narrowly for their direct benefits in the health of the mother and child, and family planning is viewed only as a means to reduce population growth. The objective of this paper is to unpack and discuss the unlimited potential of family planning for the national socio-economic development.

Pakistan's population grew from 132.4 million to 207.7 million between 1998 and 2017, with 2.4 percent inter-census growth rate.<sup>5</sup> The total population of Pakistan would be approximately 300 million in 2042 if current efforts are maintained at the same pace.<sup>6</sup> This significant population growth rate has immediate implications and long-term consequences for the socio-economic development that could result in not only pressure on requirement for housing, sanitation, education and drinking water at family level but is also an important influencing factor in maternal and child health. Moreover, with increasing poverty and being a major trigger of falling economic growth, rapid population growth remains one of the foremost factors behind lower per-capita income, higher unemployment, and further worsening the high dependency ratio for the working adults.

The evidence for family planning as a solution for sustainable socio-economic development is very promising: it improves health and empowers women. Voluntary family planning programmes are cost-effective and have evident impacts on poverty reduction strategy and help women achieve the autonomy to make decisions about family size, health, and employment.

The SDGs 2030 agenda<sup>7</sup> will not be achieved without universal access to the critical elements which are often neglected — gender equality, sexual and reproductive health and rights, and family planning. The critical role of family planning in sustainable development is often underestimated and overlooked, leading to a lack of prioritization of family planning in national development initiatives. Beyond playing a major role in reducing maternal and child morbidity and mortality, improving access to family planning would help in achieving several other SDGs. The 2030 agenda related to the elimination of poverty and hunger, access to quality education for all,

sustained economic growth, and environmental sustainability, directly benefits from immediate and long-term impacts of family planning.

The Copenhagen Consensus Center evaluated the costs and benefits of the SDG targets. A panel of experts has reviewed extensive research and estimated that the 19 targets among the overall SDGs targets represents the best value-for-money in social, economic, and environmental development over the period from 2016 to 2030 at the global level. The targets have been clustered into three distinct themes: people, planet, and prosperity reiterating the UN's focus on key pillars of sustainable development. One of the key finding the panel found that reaching these selected targets by 2030 at the global level would returns more than \$15 of good for every dollar spent.<sup>8</sup>

Among the 19 targets identified by the Copenhagen Consensus, universal access to family planning is identified as the second most crucial target, with large social, economic, and environmental benefits, with free trade being the first. The findings show if a country spends a dollar for ensuring universal access to contraception, it would get 120 US\$ worth of social, economic, and environmental goods related to the SDGs.<sup>8</sup> Several other studies have equally identified family planning programmes as extremely cost-effective intervention.<sup>9-11</sup>

**SDGs — Pakistan's commitments and progress:** Pakistan has made some encouraging progress on some

of its SDG targets in recent years.<sup>12</sup> Pakistan is well on track to achieve the Climate Action goal (SDG 13). Further, there have been moderate improvement in terms of No Poverty (SDG 1), Good Health and Well-being (SDG 3), Clean Water and Sanitation (SDG 6) Decent Work and Economic Growth (SDG 8), Responsible Consumption and Production (SDG 12), Peace, Justice and Strong Institutions (SDG 16) and Partnerships for the Goals (SDG 17) (Figure-1). However, substantial challenges persist in achieving the remaining SDGs. These include Zero Hunger (SDG 2), Quality Education (SDG 4), Gender Equality (SDG 5), Affordable and Clean Energy (SDG 7), Industry, Innovation, and Infrastructure (SDG 9), Reduced Inequalities (SDG 10), Sustainable Cities and Communities (SDG 11).<sup>12</sup>

An innovative SDG Index<sup>12</sup> is also developed recently which reflects the assessment of each country's overall performance on the 17 SDGs, score ranges from 0 to 100 and higher scores signify a country best performance. In 2021, the estimated SDGs index score for Pakistan is 58 (rank 129 out of 165 countries), suggests on average, about 58 percent chances that country is on the way to best possible outcome across the 17 Goals. Therefore, despite being on track on some indicators, based on its current trajectory — and particularly considering the COVID-19 pandemic — Pakistan is unlikely to achieve all 17 goals by 2030.

**Role of family planning in accelerating progress towards SDGs:** In 2019, UNFPA Country Office (CO) Pakistan conducted a localized analysis which revealed



Source: The Decade of Action for the Sustainable Development Goals: Sustainable Development Report 2021: Cambridge University Press.2021 (<https://dashboards.sdgindex.org/>)<sup>12</sup>

Figure-1: Assessment of the progress of each sustainable development goals in Pakistan.

that for each US\$ invested in family planning programmes in Pakistan, around 5 US\$ could be saved in net healthcare costs.<sup>9</sup> The analysis estimated the financial resources that would enable the Government of Pakistan to fund family planning efforts required to reach the target CPR of 50% by 2025 as committed in the CCI recommendations.<sup>6</sup>

Investing in family planning is a necessary step for achieving many of the SDGs. Voluntary family planning programmes can play an essential role in empowering couples to better plan and realize their reproductive intentions to achieve their desire fertility and optimize resource usage. Family planning reduces life-threatening complications for mothers and their children by lowering maternal morbidity and mortality. The maternal complications exacerbate when the pregnancies in which the mother is young (less than 18 years) or old (older than 40 years), pregnancies that are too closely spaced (less than 2 years birth interval), and unwanted pregnancies that end in unsafe abortions. Family planning also enables population shifts — delayed childbearing, leading to lower population growth, and lower child and old age dependency ratios — all these aspects are favourable for educational, social, and economic growth at the individual/household level and for national prosperity.

Inequity among contraceptive users, as reflected in a significantly higher proportion of unmet needs (A woman with unmet need defined when she wants to space or limit births but is not currently using any contraceptive) in poor, rural, and uneducated segments of married women as shows in recent survey conducted in 2017-18, points to weaknesses in the service delivery system.<sup>13</sup> Unless a reliable public health system ensures equitable access that fulfills their unmet needs, these women will continue to be deprived of their reproductive rights.

In developing countries, the use of voluntary family planning gives women the options to choose, both the timing and the method to use to limit childbearing, thus potentially increasing female labour force participation. Evidence suggests that female employment is negatively associated with total fertility rates and unmet need for family planning and positively correlated with modern contraceptive prevalence in every major world region.<sup>14</sup> In another study in rural Senegal, the authors concluded that female employment is a robust predictor of lowering fertility rates and accelerating the demographic transition and decreases the number of children per woman by 25%.<sup>15</sup>

Extensive global evidence also shows that family planning is among the key determinants of poverty reduction. A study conducted by the World Bank in Mozambique found

that a one-child difference in fertility rates by 2050 will result in 31 percent increase in real GDP per capita and of 5 percent points reduction in poverty headcount rates.<sup>16</sup> Women with an appropriate birth interval between the last children are more likely to pursue employment and, consequently, can increase their household income, helping to reduce extreme poverty.<sup>17</sup> The use of family planning enhances the per capita share of income of household members and helps reduce poverty in a country at the macro level, strengthening the economy leading to political stability.<sup>18</sup>

Family planning also helps in managing nutritional resource scarcity. For example, in 2018, Pakistan faced a high prevalence of stunting, as 38% of children under five years of age are stunted.<sup>13</sup> Early initiation of breastfeeding and exclusive breastfeeding improves infant immunity and prevents any gastrointestinal infections, including those infections which could lead to stunting. The timing and number of pregnancies/births are also among the key cause of high stunting. Stunting outcomes are also most common among young mother's and women with high parities.<sup>19,20</sup>

In Pakistan, numerous independent interventions for reducing child and maternal mortality have been undertaken, a major gap has been recognition of the neglected role that FP can play in improving these indicators.

In developing countries, the increased use of modern contraceptive methods prevented approximately 40 percent of the maternal deaths during 1990-2010. It is further estimated that addressing the unmet need for modern contraception would results in further 30 percent decline in maternal mortality ratio.<sup>21</sup> Specifically, for Pakistan, Ahmed et al. concluded that the increase in contraceptive use since 1990 has resulted the decline of about 42 percent in maternal mortality ratio.<sup>22</sup> Birth spacing is considered as one of the effective interventions to improve child survival rates. Additionally, intervals of 36-47 months between a birth and the next conception would reduce the under-5 mortality and neonatal mortality rate significantly.<sup>19,23</sup> In Pakistan, neonatal, infant, and child mortality decreased by more than half when birth intervals are 4 years or more, compared to when they are less than 2 years.<sup>13</sup>

High-risk fertility behaviour such as childbearing at young age, and/or short birth intervals significantly increase the risk of infant and under-five mortality.<sup>24</sup> Children born to young mothers have an incremental risk of low birth weight and dying in the first year of life (ibid.).

**Current Levels and trend of family planning in Pakistan:**

Pakistan standing at a CPR of 34%, needs to accelerate universal access to family planning to achieve the SDGs and other international commitments. The recent census revealed that Pakistan's population of around 207.8 million conducted in 2017, growing at 2.4 percent per annum and with net annual addition of 4.3 million, is projected to touch 256 million by 2030. The total population is projected to be 325 million by 2050 if current efforts are not enhanced.<sup>6</sup> CPR, as approved by the Federal Population Task Force, needs to reach 50 percent in 2025 and 60 percent in 2030. Achieving these targets would mean the total fertility rate in Pakistan would fall from 3.6 children in 2017 to 2.8 in 2025 and 2.2 in 2030. The total population would be 309 million by 2062 if the CPR annual increases of 1.5 percentage points are maintained, and 274 million if accelerated efforts are pursued (2 percentage points yearly as per the CCI recommendations).<sup>6</sup>

The demand for more children has seen some reduction due to socio-economic changes and increasing survival rates of children. However, interestingly the demand for FP has remained static. For example, in 1990, the contraceptive prevalence rate (CPR) was only 11.4 percent in Pakistan. The decade of the 1990s experienced a rapid increase in CPR, with the rate of change remaining at about 2 percent per year (CPR for all methods) from 1990 to 2001. However, the first decades of the 21st century saw a slower increase in contraceptive use, less than one percent per year (0.4) from 2001 to 2017 (Figure-2).

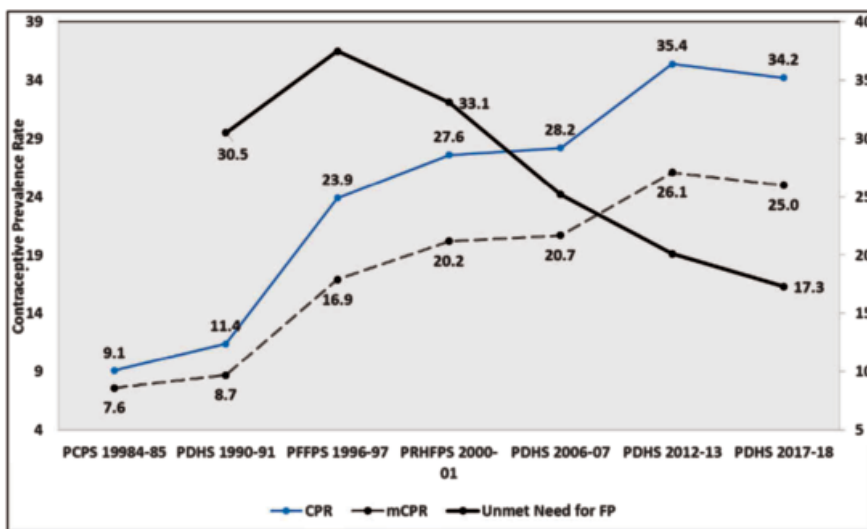
During the decade of 1990s, the use of modern

contraceptive methods in Pakistan has improved over time, rose from 8.7 percent in 1990 to 20.2 percent in 2000 (about a 1.1 percentage point increase per year) and further slightly increased to 20.7 percent in 2006-07. From 2006 through 2012, the uptake of modern methods was about 1 percentage points (from 20.7 to 26.1).<sup>25,26</sup> Since 2012, there was a downward trend in the use of modern contraceptive methods, from 26.1 percent to 25 percent.<sup>13</sup> It is worth noting here that though there was a rapid increase in CPR during the 1990s, the trend has stalled since the onset of the 21st century, Understanding the reasons why and addressing those becomes imperative. Reviewing unmet need shows that the unmet need for family remains high i.e., millions of women/couples would like to use contraceptives but remains unable to do so.

**Family Planning:** A missing link in the Universal Health Coverage: According to the most recent estimates, Pakistan's maternal mortality ratio (MMR) has declined from about 431 per 100,000 live births in 1990 to 186 in 2019.<sup>27</sup> This represents a 90-point decline, almost 33% fall, compared to PDHS 2006-07, and indicates substantial progress. However, the ratio is still considerably high in the region and requires a scale-up in actions if Pakistan is to achieve the SDG of lowering this ratio to 70 by 2030.

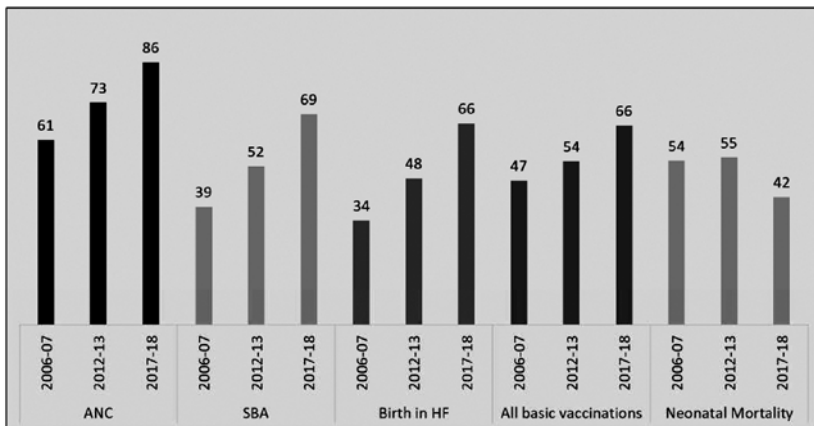
Despite the decline in the maternal mortality ratio, much more is needed for poor women in remote areas with limited access to skilled health workers and facilities. The maternal mortality ratio is slightly higher in rural areas (199) than in urban areas (158) and is the highest in Balochistan, followed by Sindh, KP, and Punjab (298, 224, 165, and 157 respectively). It is critical to note that older women (age 30 and above) have a much higher MMR than the national average, suggesting that they are at a much higher risk of maternal mortality during pregnancy, delivery, and post-delivery period.<sup>27</sup>

Pakistan has shown remarkable improvement in antenatal care (ANC) and institutional deliveries over the years, and these remain the key causes of improving maternal health indicators. For instance, ANC from skilled providers increased from 61% to 86% and percentage deliveries in health facilities increased from 34% to 66% during the period from 2006-2017. Moreover, the percentage of births attended by skilled providers has increased from 39% to 69%. In 2006,



Source: various surveys in Pakistan during 1984-2017. <sup>24,34,35</sup>

**Figure-2:** Contraceptive prevalence rate and Unmet-need of FP in Pakistan: 1990-2017.



Source: Three rounds Pakistan Demographic & Health Surveys 2006-2017.<sup>24, 34, 35</sup>  
 Note: ANC= Antenatal care, SBA = skilled birth attendant, HF = Health facility.

Figure-3: Trend in selected reproductive health indicators in Pakistan.

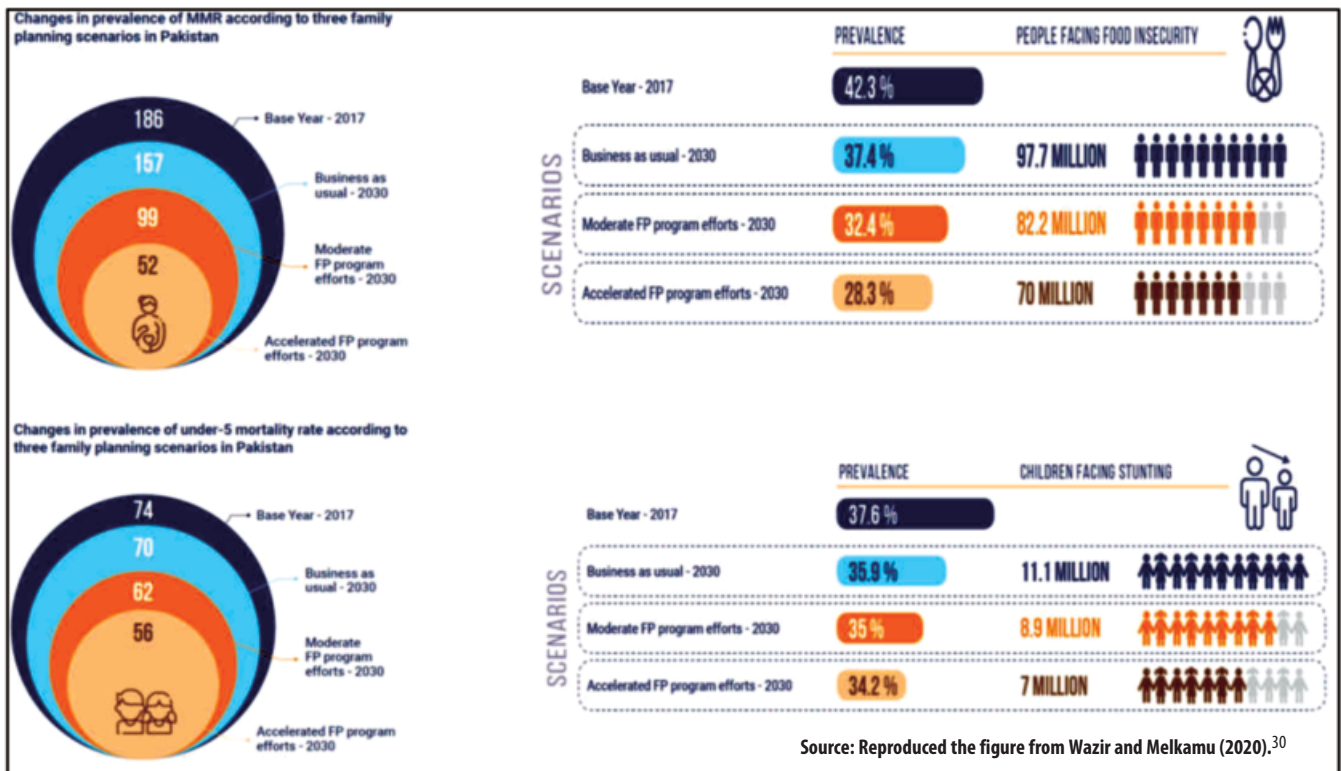
also the percentage of children under-5 who had received all basic vaccinations was 47%, a figure that rose to 66% by 2017 (see Figure-3). However, the neonatal mortality rate (death within 28 days of birth) in Pakistan remains high. It has increased from 2006 to 2012 — from 54 to 55 neonatal deaths per 1000 live births — and slightly declined afterward to 42 neonatal deaths in 2017.<sup>13,25,27</sup>

Since the onset of 21st century in Pakistan, Ministry of

Health did not prioritize the family planning as one of the key interventions under the ambit of Maternal and Newborn Child Health (MNCH) strategy. The MNCH strategy primarily focused mainly on increasing women's access to reproductive health services and treatment of diarrhoea, and pneumonia, improving nutrition and immunization. The induction of community midwives in 2007-08 to increase access to safe delivery was a critical initiative, though the numbers trained and deployed so far are too few to make a great deal of difference.

Wider access to family planning could have contributed to and consolidated these gains but, unfortunately, FP has remained a weak link. Research across the globe has shown that the use of modern contraception and improved access to quality FP services and information are essential for improving maternal health and reducing maternal mortality and morbidity.

**Modelling the impact of family planning on selected SDGs:** The model for linking family planning with SDGs indicators is not new. Based on the success and efficiency



Source: Reproduced the figure from Wazir and Melkamu (2020).<sup>30</sup>

Figure-4: Pakistan's progress on selected SDGs indicators by 2030 according to three different family planning scenarios.

of Millennium Development Goals (MDGs) analyses developed by the USAID-funded Health Policy Project, results showed that voluntary family planning programmes had a strong complimentary impact in achieving the health, gender equality and poverty reduction efforts rooted in the MDGs. The Family Planning-SDGs Model is an analytical tool that estimates the potential impact of family planning on 13 selected SDG indicators by 2030 in Pakistan.<sup>28,29</sup> Using three different hypothetical CPRs for Pakistan and setting various targets for contraceptive prevalence rate, education, governance, economic growth, and agricultural production. Estimated results of each scenario on various SDG indicators for poverty, food security, child stunting, education, water and sanitation services, income, child labour, and others. One can find the detailed analytical strategy and other ingredients of the model elsewhere.<sup>29</sup>

**Scenario 1-Business as usual:** Pakistan's family planning progress remains slow and follows the trend of contraceptive use over the past two decades — 40 percent by 2030.

**Scenario 2-Moderate FP programme efforts:** Pakistan family planning programme attains a moderate level of CPR — 50 percent of women using any method by 2030.

**Scenario 3-Accelerated FP Programme efforts:** Pakistan reaches its national family planning goal of 60 percent of women using any method by 2030.

According to the three different contraceptive use trajectories, SDG targets are most likely to be accelerated under scenario 3, in which family planning is adopted by more people and the average family size decreases (Figure-4). Pakistan has much to gain by continuing to invest in family planning. The current rate of uptake in family planning is not sufficient for achieving progress toward SDG targets and goals. If Pakistan achieves its family planning goal (scenario 3), the number of people living below the poverty line could shrink by 7 million, food insecurity decreased by 14 percent, and GDP per capita income growth rate increase by 40 percent.<sup>30</sup>

## Conclusion

The priority challenge for Pakistan is to address the rapidly growing population with all its emerging needs through creating concrete links between voluntary family planning, population development, and the attainment of SDGs.

Investing in voluntary family planning services and commodities is a cost-effective intervention for socio-

economic development. Every dollar spent on family planning results in reductions in child and maternal deaths, returns in savings in other development areas, and environmental benefits.<sup>30</sup> Investments in family planning yield demonstrated social and economic returns in all sectors—food, water, health, and economic development. Our analysis suggests that achieving universal access to contraception could contribute in the long term to achieving some of the SDGs.

By making access to family planning widespread and implementing the right policies for educating and employing workers, countries can harness the potential of the demographic dividend and accelerate economic development, as seen with the Asian Tiger countries (Hong Kong, Singapore, South Korea, and Taiwan).<sup>31</sup>

Pakistan has good demographic dividend opportunities for development in the world as a growing youth population enters adulthood. The demographic dividend can only be achieved by investing in the education and skills of the youth and harvesting the fruits of long-term human capital development. To open the window of opportunity for the demographic dividend, Pakistan needs to reduce fertility and invest in the growing youth "bulge" entering the labour force. If births begin to decline each year, the young dependent population will also decline. This frees up resources to invest in the health, education, and economic infrastructure of the country.

Prioritize family planning as one of the strategic investments for improving wellbeing, sustainable population growth, and economic development. Demonstrate leadership and ownership by openly talking about the benefits of family planning. Family planning is a pro-poor investment.

## Recommendations

We specifically put forward the following key recommendations drawn from the recently published Population Situation Analysis of Pakistan led by the Ministry of Planning, Development, and Special Initiatives in collaboration with UNFPA.<sup>32</sup>

1. Population policy in Pakistan must adopt an integrated multi-sectoral approach in addressing the high population growth issue. It should be fully integrated within comprehensive socio-economic development plans, and should focus on:

- i. Efficient investments in education, especially secondary level, health, and skills development for girls/women
- ii. Equitable distribution of socioeconomic opportunities,
- iii. Realigning public sector services to: i) meet Family

Planning and Reproductive Health needs of the population, ii) implement strong public-private partnerships and collaboration to encourage the private sector to reach remote areas with MNCH-RH services in a cost-effective manner, and iii) monitor quality of health services providers to have a basic minimum quality standard and ability to monitor results. This would pave the ground for the Council of Common Interests (CCIs) major recommendations to be met, particularly the one aiming to ensure Universal Access to RH and FP.

2. For integrated primary health care services, the government must consider merging DoH and PWD at the provincial and regional levels to provide FP/RH services through all health outlets as stated in the CCIs recommendations. Global evidence strongly suggests that this would be cost-effective at the micro-level. Including streamlining sustainable contraceptive availability according to the needs of each region, through tackling already observed key challenges: sufficient resource allocation and utilization; procurement; logistical system, including storage and distribution; monitoring and evaluation; and human resources.<sup>33</sup>

3. Develop costed implementation plans to cope with critical issues affecting the coverage and quality of FP services, such as the gap between the supply side of services and demand creation, narrow method-mix, late use of contraception, unmet need, and high rate of discontinuation. Resources and efforts should also be dedicated to increasing contraceptive use across all regions and population subgroups with special focus on areas trailing behind in indicators, including Balochistan and Khyber Pakhtunkhwa (KPK), rural areas, and among the poor and less educated subgroups. In addition to the optimal use of available human resources, expanding task-sharing and self-care interventions to reach the marginalized subgroups and those living in remote areas is also necessary.

4. Developing a unified and systematic data collection system and analysis and reporting strategy for both public and private health services outlets is important in monitoring progress and evidence-based policymaking.

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