Leveraging technology to ensure stock availability, good governance and systems accountability in Pakistan

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Health security lies within youth of Pakistan

**CONTRACEPTIVE PREVALENCE RATE (CPR)**

CPR in Pakistan is 34.2% as compared to 35.4% in PDHS Survey 2012-13.

**POPULATION**

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>100</td>
</tr>
<tr>
<td>2017</td>
<td>150</td>
</tr>
<tr>
<td>2040</td>
<td>250</td>
</tr>
</tbody>
</table>

An expected increase of 174% by 2040.

64% < 30 years

**INFANT MORTALITY**

Infant mortality in Pakistan is 62 deaths per 1,000 live births.

**UNDER-5 MORTALITY**

Under-5 mortality is 74 deaths per LBs; which went down from 89 in 2012-13 DHS.

**NEONATAL MORTALITY**

45.6 deaths per 1,000 live births.

**MATERNAL MORTALITY**

178 deaths per 100,000 live births.

**CONTRACEPTIVE AVAILABILITY**

Product availability increased from 60% in 2010 to 84%.

**IMMUNIZATION**

66% Immunization coverage (an increase from 54% in 2012-13 DHS)

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1. Census 2017
2. [HDR UNDP](http://hdr.undp.org/en/content/unleashing-potential-young-pakistan)
4. [UNICEF](https://data.unicef.org/wp-content/uploads/country_profiles/Pakistan/country%20profile_PAK.pdf)
HIS is highly fragmented: technology is not optimized leading to poor planning, financing and decision making.
We carved the future of visibility in a very complex information environment.
Meeting the needs of 35m MWRA, repairing FP supply chain functions was not easy

Connecting people with essential medicines and FP commodities by linking public policy, technology, service delivery infrastructures and systems
Last mile automation is a journey in large country settings

### DATA VISIBILITY
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018

### DATA QUALITY
- Pilot
- 57
- 438
- 453
- 453
- 9965
- 12484
- 12701
- 14186

### DATA USE
- 0
- 0
- 19 Districts
- 151 Districts
- Reporting Points (Static Facilities & Community workers)

- **Zero Data Visibility, Lack of Quality Data and No Data Use,** preliminary supply chain Intervention
- **Greater data visibility through gradual integration of transaction points of FP supply chain through USAID assistance**

**FASP**
- Distribution Planning
- SDP Stock out Monitoring
- Pipeline Monitoring
- Storage Management
- Distribution Planning
- SDP Stock out Monitoring
- Pipeline Monitoring
- Storage Management

- **Distribution Planning**
- **SDP Stock out Monitoring**
- **Pipeline Monitoring**
- **Storage Management**
- **Executive Dashboard**
- **Commodity Security**
- **Stock Optimization**
- **Automated FASP**
Health systems workforce task shifting to supply chain systems as well: 11,000 employees

Gavi, E2E as well as aggregation ready - Gates E2Open, Track20, UNICEF(MNCH)
USAID total market support led to self reliance in Pakistan: cLMIS guides strategic supply chain decision-making

2009: MWRA & population rates, the estimated demand for contraceptives was $28 million in 2009, indicating a gap of 83%

2018: MWRA & population rates, the estimated demand for contraceptives was $33.6 million in 2018, indicating a gap of 4%

USAID Financing: $108 m

GoP Financing: $123.5m

$21.6m

$5m

$25m

2001-2009

2010-2014

2015-2020

Pakistan and India are doing good job on self reliance

Source: 2017 CS Indicators Report
Pakistan’s national storage and distribution systems

2009: Space: 10K Sq Ft

2019: Space: 55K Sq Ft
Walking, talking and shouldering with public sector:
100 supply chain policies, manuals, guidelines, and SoPs of decentralized ecology

Khyber Pakhtunkhwa
Khyber Pakhtunkhwa Public Health Forecasting and Supply Chain Strategy:

Essential Medicine List:

MNCH Very Essential Medicine List:

Punjab
Punjab Public Health Supply Chain Strategy:
https://pwd.punjab.gov.pk/lmis
https://pwd.punjab.gov.pk/informative_material

Sindh
Essential Medicine List & MNCH VEML:
www.sindhhealth.gov.pk/Downloads>Law/Regulation of Health department

DRAP / MoNHSR&C
National Essential Medicines List – 2018:
We ensured policy speaks the same language in a decentralized setting: Supply Chain Strategies & Structures

Khyber Pakhtunkhwa Forecasting and Supply Chain Strategy (2017-22) ~$29.75 million

Punjab Public Health Supply Chain Strategy (2017-22) ~$15.22 million

~$45 Million committed by two provinces for public health supply chain systems strengthening (2017-22)
Pakistan LMIS http://lmis.gov.pk

1. LMIS for Health Commodities
2. FP data goldmine (decade data 2009-19)
3. Sustainability – Government ownership
4. Digitized supply chain processes and functions
5. Consolidated analytics – interfaced with vertical systems
6. LMIS Helpdesk to support end users
7. 2,000 trained users reporting across from Pakistan
8. Enterprise Dashboards (use of data for supply chain policy functions)

LMIS Modules

<table>
<thead>
<tr>
<th>Master Data Mgmt.</th>
<th>Inventory Mgmt.</th>
<th>Warehouse Mgmt.</th>
<th>Supply Planning</th>
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<tbody>
<tr>
<td>Forecasting</td>
<td>Quantification</td>
<td>Analytics</td>
<td>Dashboards</td>
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<td>Alerts</td>
<td>Notifications</td>
<td>User Management</td>
<td>Batch Management</td>
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<td>District Network</td>
<td>Pivot Business</td>
<td>Transactional I Reporting</td>
<td>Shipment details</td>
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<td>Tower</td>
<td>Intelligence</td>
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LMIS Interfacing

| DHIS | LHW MIS | MNCH MIS | TB MIS | Nutrition MIS | EPI MIS | AIDS MIS | LMIS | PPHI ERP | eVaccs | DHIS2 |

LMIS Important Links
### Public Health Supply Chain Maturity by Country

- **Pakistan** is holding a good standing.

### Journey: Adhoc to Integrated

- **Step 1**: Data Entry digitization
- **Step 2**: Processes digitization
- **Step 3**: Ensured Data Quality
- **Step 4**: Enabled Data Visibility and decision support
- **Step 5**: Seamless interfacing with vertical systems
- **Step 5**: Introduced advance features

### Ad Hoc | Organized | Integrated

<table>
<thead>
<tr>
<th>Country</th>
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**Source**: HR Systems Maturity Survey Results by USAID

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**KATHMANDU**

19th General Membership Meeting of the Reproductive Health Supplies Coalition

**25-28 March 2019 / KATHMANDU, NEPAL**
Today Pakistan stands >80% on contraceptive availability compared with only 40% partial availability in 2009.

2017-18 FP commodity procurement & transport support
- $25.43m, 17%
- $123.85m, 83%

2018-19 FP commodity procurement & transport support
- $123m
- $554m
- $367m

Total = >$1.05 billion
- 09 million women
- 35 million children

Technical Assistance
2009
- Aug 2009 – June 2016 (USAID/DELIVER $33m)

USAID Support
2018
- $123m: Allocation & procurement of contraceptives by four provinces during 2015-2020
- $554m: GoP’s projection for indigenous production of contraceptives till 2030
- $367m: Cost of Punjab and KP Public Health Supply Chain Strategies (2017-22)

Internal financing & new business
2017-2022 .... 2030
We are part of Prime Minister’s 100 Days Agenda

Under this agenda, the Federal Health Minister, MoNHSR&C, based on LMIS* experience, requested the GHSC-PSM project for automation of medicines and devices supply chain systems in four tertiary care hospitals of Islamabad Capital Territory.

* Source: http://lmis.gov.pk

Source: http://pm100days.pmo.gov.pk/downloads/100%20Days%20Progress%20Report.pdf
17 million Unintended Pregnancies

14.5 million Unintended births

~428,931 Infant Deaths averted

~17,500 Maternal Deaths averted

Source: WDI, 2008 (http://data.worldbank.org/indicator/SH.STA.MMRT/countries?display=default) and Data source for estimated CYP data is cLMIS


The Costs and Benefits of Investing in Family Planning and Maternal and Newborn Health, Estimation Methodology” Jacqueline E. Darroch and Susheela Singh, Guttmacher Institute, October 2011
The USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project is funded under USAID Contract No. AID-OAA-I-15-0004. GHSC-PSM connects technical solutions and proven commercial processes to promote efficient and cost-effective health supply chains worldwide. Our goal is to ensure uninterrupted supplies of health commodities to save lives and create a healthier future for all. The project purchases and delivers health commodities, offers comprehensive technical assistance to strengthen national supply chain systems, and provides global supply chain leadership. For more information, visit ghsupplychain.org.

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