

# **Project Completion Report**

## **Project for Strengthening Routine Immunization in Islamic Republic of Pakistan**

**June 2018**

**Japan International Cooperation Agency (JICA)**

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# Project Completion Report

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## List of Acronyms

CCE	Cold Chain Equipment
CSO(s)	Civil Society Organization(s)
DHO(s)	District Health Office(s)
DoH	Department of Health
DSV	District Supervisor, Vaccination
EOC	Emergency Operation Center (for Polio response)
EPI	Expanded Program on Immunization
EVM	Effective Vaccine Management
FSV(s)	Field Supervisor(s), Vaccination
GAVI	GAVI Vaccine Alliance
IDSRS	Integrated Disease Surveillance and Response Systems
IEC	Information, Education, Communication
JCC	Joint Coordinating Committee
JICA	Japan International Cooperation Agency
KAPB	Knowledge, Attitude, Practice, Behavior (survey)
KP	Khyber Pakhtunkhwa (province)
KP-ISP	Khyber Pakhtunkhwa Immunization Support Program
LHS	Lady Health Supervisor(s)
LHW(s)	Lady Health Worker(s)
MO(s)	Medical Officer(s)
PDM	Project Design Matrix
PO	Plan of Operation
R/D	Record of Discussions
SRI	Strengthening Routine Immunization (Project)
TSV(s)	Tehsil Supervisor(s), Vaccination
UC(s)	Union Council(s)
UCMO(s)	Union Council Medical Officer(s)
VMC	Vaccine Management Committee
VPD(s)	Vaccine Preventable Disease(s)

## I. Basic Information of the Project

### 1. Country

Pakistan

### 2. Title of the Project

The Project for Strengthening Routine Immunization (SRI Project or the Project)

### 3. Duration of the Project (Planned and Actual)

12 November 2014 to 11 November 2017 (Planned)

12 November 2014 to 8 June 2018 (Actual)

### 4. Background

JICA had implemented a technical cooperation project, EPI (Expanded Program on Immunization)/Polio Control Project, to strengthening routine immunization in Pakistan from 2006 to 2011. Given the continuous outbreak of Polio, necessity of further strengthening routine immunization, and in response to the request of the Government of Pakistan, JICA has thus decided to have a series of discussions with the relevant authorities for the purpose of formulating a detailed plan of the Project. The basic contents of the Project were mutually agreed by signing the Minutes of Meeting on July 2, 2012. Later on Record of Discussion (R/D) was signed on June 10, 2014.

### 5. Overall Goal and Project Purpose

	Original (per Project Design Matrix (PDM) Ver.2, May 2015) <sup>1</sup>
Overall Goal	The mobility of vaccine preventable diseases (VPDs) are reduced in Khyber Pakhtunkhwa Province.
Project Purpose	The routine immunization service provided in the Khyber Pakhtunkhwa Province is strengthened.

The original Overall Goal and Project Purpose remained the same throughout the Project period.

### 6. Implementing Agency

Department of Health (DoH), Government of Khyber Pakhtunkhwa, Pakistan  
District Health Office, District of Mansehra, Nowshera and Lakki Marwat

<sup>1</sup> This report refers to the Project Design Matrix (PDM) version 2 as the original version, which was agreed at the first Joint Coordinating Committee (JCC) of the Project in May 2015 with extensive changes from the PDM attached to the R/D.

## II. Results of the Project

### 1. Results of the Project

#### 1-1 Input by the Japanese side (Planned and Actual)

	Planned (per PDM Ver.2)	Actual
Long-term Experts	<ul style="list-style-type: none"> <li>- Chief Advisor</li> <li>- Project Coordinator / Training Manager</li> <li>- Social Mobilization Specialist, etc.</li> </ul>	<ul style="list-style-type: none"> <li>- Chief Advisor</li> <li>- Project Coordinator</li> <li>- Social Mobilization Specialist</li> </ul>
Short-term Experts	<ul style="list-style-type: none"> <li>- EPI Planning</li> <li>- EPI data management</li> <li>- Surveillance</li> <li>- EPI logistics</li> <li>- Social mobilization, etc.</li> </ul>	<ul style="list-style-type: none"> <li>- Surveillance</li> <li>- Effective Vaccine Management (EVM)</li> <li>- EVM &amp; supervision</li> <li>- Cold Chain equipment management</li> <li>- Social Mobilization Specialist</li> </ul>
Equipment	Cold-chain equipment, etc.	5 sets of tools and workshops for provincial and divisional warehouses, for the maintenance and repair of cold chain equipment
Overseas Activities Cost including Equipment Cost	JPY 87 million	JPY 122.4 million

Across the duration of the Project, six Japanese experts filled three long-term experts' positions, and seven short-term experts on five subject areas joined the SRI Project on 15 assignments. The detail list of Japanese experts dispatched is attached as Annex 1-1. In addition to the Japanese experts, the SRI Project employed a number of local professionals, including Project Manager (1), Surveillance Officer (1), Training Officer (1), and four administrative staff to manage three project offices in Peshawar, Islamabad, and Abbottabad.

#### 1-2 Input by the Pakistan side (Planned and Actual)

	Planned (per R/D)	Actual
Personnel (Provincial)	<ul style="list-style-type: none"> <li>- Director Health Services (Project Director)</li> <li>- Deputy Director EPI (Project Manager)</li> <li>- Assistant Director EPI</li> <li>- Training Coordinator</li> <li>- Cold-chain Coordinator</li> <li>- Communication Coordinator</li> </ul>	<ul style="list-style-type: none"> <li>- Director EPI (Project Director)</li> <li>- Deputy Directors, EPI</li> <li>- National Program Lady Health Workers (LHW) Manager</li> <li>- Communication officer</li> </ul>

	<ul style="list-style-type: none"> <li>- EPI Data Coordinator</li> <li>- National Program Manager</li> <li>- National Program Coordinator, etc.</li> </ul>	
Personnel (Districts)	<ul style="list-style-type: none"> <li>- Executive District Officer for Health (EDO (H))</li> <li>- EPI coordinator</li> <li>- District Supervisor, Vaccination (DSV)</li> <li>- EPI supervisor including Tehsil Supervisors, Vaccination (TSVs) &amp; Field Supervisors, Vaccination (FSVs)</li> <li>- EPI technicians / vaccinators</li> <li>- Cold-chain officer (mechanic, operator, technician)</li> <li>- Communication officer (Social Mobilization)</li> <li>- COMNet Personnel</li> <li>- National Program Coordinator</li> <li>- Assistant National Program Coordinator</li> <li>- Account Supervisors</li> <li>- Lady Health Supervisors (LHSs)</li> <li>- Lady Health Visitors (LHVs) and LHWs</li> </ul>	<ul style="list-style-type: none"> <li>- District Health Officers</li> <li>- District EPI Coordinators</li> <li>- EPI supervisors (DSVs, TSVs &amp; FSVs)</li> <li>- EPI technicians / vaccinators</li> <li>- Cold-chain officers</li> <li>- LHW National Program Coordinator</li> <li>- LHS</li> <li>- LHVs and LHWs</li> </ul>
Others	<ul style="list-style-type: none"> <li>- Security Officer, etc.</li> <li>- Administrative cost</li> <li>- Operating cost</li> <li>- Vaccines</li> <li>- Facility</li> <li>- Project offices in Peshawar and Abbottabad</li> <li>- Training facilities, etc.</li> </ul>	<ul style="list-style-type: none"> <li>- Administrative and operating costs for routine immunization services</li> <li>- Vaccines</li> <li>- Project office in Peshawar</li> <li>- Training facilities at district level</li> <li>- Office space in Mansehra DHO</li> </ul>

Detailed list of counterpart is included as Annex 1-2.

### 1-3 Activities (Planned and Actual)

The SRI Project organized a number of activities over the course of three years and six months, per outlined in the PDM, Plan of Operation (PO) and in line with the KP Immunization Support Program (KP-ISP). As agreed by both parties at the first Joint Coordinating Committee (JCC) in May 2015, the SRI Project started undertaking of baseline studies, followed by implementation of some activities only in District Mansehra to start with, then expanded to remaining two districts, namely Nowshera and Lakki Marwat in

2016. There was a delay in implementation of activities in the first year of the Project (2015) due to the technical difficulties with the Provincial EPI (see “III. Results of Joint Review, 2.

Key Factors Affecting Implementation and Outcomes” for more detail). However, the Project picked up the speed in implementation with the enhancement of coordination with the Provincial EPI Program by the end of 2015. The detail list of training is shown in the Annex 1-3, and key activities undertaken are shown in the Annex 1-4.

During the course of implementation, a significant change to the funding environment for immunization programs in Pakistan had occurred, with the inauguration of the national and provincial Immunization Support Program (including KP-ISP) in November 2016. It was a long-awaited arrival of the large-scale funding, made available to the country to match the domestic investment on immunization, after four years of preparation.<sup>2</sup> With this financial support from the multi-donor fund (participated by multiple international partners such as GAVI, the World Bank, Gates Foundation and USAID), provincial EPI program had to accelerate scaling-up of immunization services at every level since. The influence of such a large-scale funding into the provincial immunization program had also changed the technical assistance (TA) gaps and priorities, thus required other programs including this Project to reorganize activities to avoid duplication and to maximize the impact through complementary support. In order to adjust SRI Project-supported activities to the changing TA needs, the revision of the PDM and re-organization of key activities were made at the JCC in May 2017. The list below indicates key activities planned and undertaken by this Project, all in close partnership with the district and provincial stakeholders.

Output	Key Activities (Planned)	Key Activities (Actual)
1. Vaccine Management	<ol style="list-style-type: none"> <li>1. Assessment on EPI logistics and vaccines management</li> <li>2. Supporting Vaccine Management Committee (VMC) at provincial and district level</li> <li>3. Assessment of the cold chain inventory and management status</li> <li>4. Cold chain mechanics’ training</li> <li>5. ToT and cascade training for EPI workers on EVM, EPI logistics and management of cold chain</li> </ol>	<ol style="list-style-type: none"> <li>1. Assessment on EPI logistics and vaccines management</li> <li>2. Supporting regular discussion on vaccine management at provincial and district level</li> <li>3. Assessment of the cold chain inventory and management status</li> <li>4. Training of Teachers (ToT) and cascade training for EPI workers on EVM, EPI logistics and management of cold chain equipment (combined with 2-4)</li> <li>5. Cold chain equipment maintenance</li> </ol>

<sup>2</sup> KP-ISP (2016-2020) approved cost is PKR 6,493.55 million, of which 1,260 million is supported by the multi-donor fund, with the local funding of 5,233 million expected from the provincial budget. NB: JICA’s total contribution to immunization program in KP is approximately 40 million rupees per year.

	<p>equipment (combined with 2-4)</p> <ol style="list-style-type: none"> <li>6. Cold chain equipment (CCE) maintenance training for CCE technicians</li> <li>7. Monitoring and supervision for EVM and cold chain equipment management</li> </ol>	<p>training for CCE technicians (including staff at divisional stores)</p> <ol style="list-style-type: none"> <li>6. Equipping the divisional stores with workshops and tools to support district warehouses in preventive maintenance</li> <li>7. Monitoring and supervision for EVM and cold chain equipment management</li> </ol>
2. Immunization service delivery	<ol style="list-style-type: none"> <li>1. Baseline Knowledge, Attitude, Practice and Belief (KAPB) survey among LHWs and EPI technicians for capacity gap analysis</li> <li>2. Support for quarterly meeting for EPI review at provincial level</li> <li>3. Support for regular meeting among stake holders at district level</li> <li>4. ToT and cascade training for EPI workers (EPI technicians and LHWs)</li> <li>5. Modification of EPI workers' training materials based on KAPB results</li> <li>6. EPI micro-planning training</li> <li>7. Post-training monitoring and supervision for service delivery</li> <li>8. Development of a need-based training plan with district management</li> </ol>	<ol style="list-style-type: none"> <li>1. Baseline KAPB survey among LHWs and EPI technicians for capacity gap analysis</li> <li>2. Support for quarterly meeting for EPI review at provincial level</li> <li>3. ToT and cascade training for EPI technicians (including new EPI technicians hired under KP-ISP)</li> <li>4. Revision of training materials for EPI workers based on KAPB survey</li> <li>5. EPI training for LHWs and LHSs in Mansehra</li> <li>6. Post-training monitoring and supervision for service delivery</li> <li>7. Development of EPI human resources development plan at provincial level</li> <li>8. Disseminate lessons learned from EPI human resource development at district level</li> <li>9. Piloting mobile outreach services in hard-to-reach areas</li> </ol>
3. Surveillance	<ol style="list-style-type: none"> <li>1. Situational analysis of surveillance systems</li> <li>2. Survey on surveillance systems at district level</li> <li>3. VPD surveillance training for EPI coordinators and Union Council Medical Officers (UCMOs)</li> <li>4. Development of effective district monitoring systems</li> <li>5. Post-training monitoring and</li> </ol>	<ol style="list-style-type: none"> <li>1. Situational analysis of surveillance systems</li> <li>2. Survey on surveillance systems at district level</li> <li>3. VPD surveillance training for EPI coordinators and UCMOs</li> <li>4. Development of routine supervision for VPD surveillance at district level</li> <li>5. Establishing and operationalizing outbreak response teams</li> </ol>



	supervision 6. Reporting to district stakeholders on surveillance and monitoring findings	6. VPD surveillance feedback systems 7. Integration of VPD surveillance into integrated disease surveillance systems (IDSRs)
4. Social mobilization	1. Data assessment meeting with DHOs and EPI officers 2. Baseline KAPB survey in target districts 3. Community action planning to integrate into micro-plans 4. Social mobilization training for EPI workers 5. Community events on immunization	1. Data assessment meeting with DHO and EPI officers 2. Baseline KAPB survey in target districts 3. Community action planning to integrate into micro-plans 4. Social mobilization training for EPI workers 5. Community events on immunization 6. Developing IEC materials 7. End-line KAPB survey to assess impact of social mobilization 8. Dissemination of social mobilization results and lessons learned 9. Social mobilization pilot in selected hard-to-reach areas

(See Annex 1-4 for further details of activities implemented)

The SRI Project, by design, was focusing on training for the most part of implementation, to strengthen capacities of various cadres of EPI workers in KP province (i.e., District EPI coordinators, medical officers, EPI Technicians / vaccinators, Cold Chain technicians, Lady Health Workers, civil society partners, COMNet workers<sup>3</sup>, etc.). In total, 91 training and workshops have been conducted over the period of three and a half years, which strengthened capacities of nearly 2,000 people providing various services related to EPI. A post-training monitoring and supervision mechanism were established, and the Project also supported supervision in three target districts. These activities were not only ensuring quality of services provided by EPI workers, but also enhancing the capacities of district EPI programs in undertaking quality monitoring and supervision. Yet it should be noted that organizing trainings for EPI workers at district level was not an easy task, as district EPI cells and frontline EPI workers were often busy with the frequent Polio campaigns (national, sub-national and mop-up campaigns) and a number of outbreak responses. Many trainings had to be postponed or rescheduled, which resulted in limited time available for many EPI workers to actually utilize knowledge and skills they learned during the training to deliver quality routine immunization services.

<sup>3</sup> COMNet (Communication Network) workers are community based social mobilizers for polio campaigns. Deployed only in Tier 1 high-risk area.

Even though planned capacity building activities were all completed, the challenge of achieving the Project Purpose, by increasing immunization coverage and reducing drop-out rates, remained. The original design of this Project was heavily concentrated on building/strengthening capacities of EPI workers via training, and only a handful of activities were included for enhancing service delivery. It was therefore decided in 2017 that some small but critical support for piloting service delivery, i.e., social mobilization and intensive mobile outreach in hard-to-reach area, to be included in the second half of the Project.

It is noteworthy that the SRI Project deliberately chose some activities to produce evidences for effective service delivery, in view of supporting the provincial EPI to accelerate the implementation of the KP-ISP with proven-effective activities (see **2-2 Project Purpose and indicators**).

## 2. Achievements of the Project

### 2-1 Outputs and indicators

(Target values and actual values achieved at completion)

The SRI Project achieved most of its targets set for 4 outputs, though some external challenges made it difficult to achieve a few targets. In response to changing external context, activities undertaken under each output were regularly reviewed in order to reach intended targets. Objectively verifiable results listed below were gathered mostly from the provincial and target district data presented during the Annual Review of KP Routine Immunization Services, held in January 2018. Some surveillance-related data was gathered from the Provincial Surveillance Review meeting held in October 2017.

<b>Output 1. Capacity for effective vaccine management including cold chain management and vaccine logistics in the routine immunization services of DoH is strengthened</b>		
Target values	Actual values	Result
1. Regular discussion at the provincial level on vaccine management is held	Provincial EOC (Emergency Operating Center, for Polio responses) meetings were held every week at provincial level, where vaccine management was discussed regularly.	Achieved
2. 80% of the fixed EPI centers, store houses and transport utilize the Vaccine Management Monitoring Form and report to responsible persons in a timely manner in target districts	Since 2017, health facility vaccination reports, vaccine consumption and vaccine requisition reports are being entered through MIS (Management Information Systems). All three target districts were reporting at high rate in 2017; Mansehra at 92%, Nowshera at 94%, and Lakki Marwat at 94%.	Achieved

3. More than 90% of EPI workers receive training on every EVM component and score over 80% on post-test	100% of EPI technicians (existing and newly recruited in 2017) received training on EPI including EVM in 3 target districts. However, Post-test results for all 3 districts were less than 80% marks on average, which were followed-up by on-the-job training during the monitoring and supervision. (See also Project Purpose and Indicators)	Partially achieved
4. More than 80% of fixed EPI centers, store houses and transport receive at least one supervision visit per two months in target districts	Supervision visits to fixed EPI centers, store houses and transport by the supervisors at district level were found very limited before 2016, due to the lack of supervisory human resources and transportation/fuels in all three districts. Yet average 66% of all fixed EPI centers received supervision every month in Mansehra, 87% in Lakki Marwat and 96% in Nowshera, by the end of 2017. Supervision skills of Tehsil Supervisors, Vaccination (TSVs) were intensively strengthened via on-the-job training by the SRI Project to achieve this target in the future.	Achieved

**Output 2. Capacity of staffs for service delivery in routine immunization (including newly introduced antigens) is strengthened.**

Target values	Actual values	Result
1. More than 90% of service delivery staffs receive training in the target districts	100% of EPI technicians (existing and newly recruited in 2017) in three target districts were trained on routine immunization, both on theory and practice. Additionally, 100% of Medical Technicians, Lady Health Visitors and Lady Health Workers in Mansehra, 100% of Lady Health Supervisors in Nowshera, 100% of Medical Technicians, Female Medical Technicians, and Lady Health Visitors in Lakki Marwat were trained on routine immunization, specifically tailored to their job category.	Achieved
2. All the trainees obtain a minimum mark of 80% of the post-training test	While almost all the trainees show significant improvement in post-training test compared to the pre-training test, not all were able to obtain minimum marks of 80%. It was specifically the case for “old” or existing EPI technicians who could not exceed 80% mark on post-training test (45% of them in Mansehra, 20% in Lakki Marwat, and 21% in Nowshera) due to the lack of refresher training opportunities in the past.	Not achieved

	<p>In comparison, newly recruited EPI technicians did better, as 90% in Mansehra, 86% in Nowshera, 77% in Lakki Marwat got over 80% mark.</p> <p>For LHWs in Mansehra, 662 out of 828 LHWs trained (80%) were able to score more than 80% in the post-test.</p> <p>Those who scored low in post-test were followed-up by district supervisors on the job, during the monitoring and supervision visits.</p>	
3. All health facilities in the target district gain a minimum mark of 75% in the check list for quality of service provision during the supervision	<p>Every health facility supervised were found with a number of issues to be addressed, especially in Lakki Marwat. As many newly recruited vaccinators are still being oriented to the day-to-day operations, not all facilities were able to gain 75% mark of the checklist. Record keeping and microplanning are found to be the areas that need improvement most.</p>	Not achieved
4. More than 80% of fixed EPI centers receive at least one visit per two months by DHO, EPI Coordinator, DSV, or TSV in a target district	<p>(See Annex 1.4 for details)</p> <p>The frequency of supervision increased dramatically in 2017-2018, while the quality of monitoring and supervision using the new standard checklist (finalized in mid-2017) need to be improved. The Project contributed to building supervisors' capacities through on-the-job training, in three target districts. Also extensive support for monitoring and supervision of mobile outreach activities in hard-to-reach areas in District Mansehra was made, enabling effective outreach planning and implementation.</p>	Achieved
5. 100% of UCs submit the immunization reports (especially on fully immunized children) to DHO in the target districts	<p>All UCs in target districts are currently submitting routine immunization related reports to the DHO. UCs are now categorized in four groups depending on access and utilization for improved management, based on data entered through these reports. By the end of 2017, Health facility reports, vaccine consumption and vaccine requisition reports were entered in provincial MIS, and three districts achieved 92-94% compliance on provincial level reporting as well.</p>	Achieved
<b>Output 3. Capacity for surveillance systems in the routine immunization services by the DoH is strengthened</b>		

Target values	Actual values	Result
1. 100% of health facilities in charge receive training for VPD surveillance in the target districts	Nowshera and Lakki Marwat were selected as part of pilot districts for Integrated Disease Surveillance and Responses Systems (IDSRS) in 2016, and all health facilities in charge received IDSRS training which included expanded session on VPD surveillance. All UC Medical Officers and health facilities in charge in Mansehra also received training on VPD surveillance and on IDSRS in 2017.	Achieved
2. Training modules on VPD surveillance are fully integrated into the existing and newly established integrated surveillance systems at the provincial level	In response to the launch of IDSRS pilot in 2016, the SRI Project worked closely with the Provincial DoH Public Health directorate to fully integrate VPD surveillance component into the IDSRS training. The training materials for such a VPD session were jointly developed by IDSRS and JICA team.	Achieved
3. More than 90% of outbreak clusters are investigated and responded by the district and the province in a timely manner	Mansehra and Lakki Marwat achieved 100% outbreak (measles) investigation and responses in 2017. Nowshera was not investigating outbreaks of measles and diphtheria timely, yet responded with mop-up vaccination later. The SRI Project trained selected medical officers and technicians in each Tehsil on outbreak investigation and responses, to build local capacities to respond immediately.	Partially achieved

**Output 4. Capacity for social mobilization activities for the communities in the routine immunization services by the DoH is strengthened**

Target values	Actual values	Result
1. More than 80% of UCs make EPI micro plans through community involvement in the target district	100% of UCs in three districts developed EPI micro plans, with participation of communities (mostly represented by local leaders and LHWs).	Achieved
2. More than 80% UCs utilize the communication tools for social mobilization in the target district	100% of UCs in Mansehra have at least one functional fixed EPI center, which is equipped with immunization related communication materials (posters, leaflets, stickers, etc.) All LHWs in three target districts and other health promoters in Lakki Marwat working in communities where LHWs are not in place also received immunization pocket manuals for effective communication.	Achieved
3. 100% target districts develop	3 of target districts developed or localized existing IEC	Achieved

immunization recall tools	(Information, Education, Communication) materials that can be used for reminding families and stakeholders for immunization schedule. Localized LHW pocket manuals, posters, leaflet, and stickers are being used by frontline EPI workers. (see Annex 2: List of Products for details)	
4. In the end-line KAPB survey, the information on immunization, provided by LHWs and EPI technicians increase up to 30% compared to the rate in the base-line survey in the target district	The end-line KAPB survey included exit interview of 222 caregivers who brought children to 8 health facilities for vaccination in Mansehra. Of those caregivers, 66% responded receiving information on immunization from LHWs, compared to 24% in baseline KAPB survey in 2015.	Achieved

Output targets that failed to achieve are related to the post-test results of the training of EPI workers. Although the increased knowledge gained by a series of training for EPI workers across the job categories and target districts were significant in respective scores of pre-test and post-test, not all had scored more than 80% due to a number of reasons. Some low-scored EPI workers appeared to be too old to read these tests properly to start with, or too old to digest new information. Others were often found with no history of in-service training for many years to brush up their knowledge on community health in general and on routine immunization in particular. It was also noted more than a few of those who were old and not scored well decided to retire, as appeared in the post-training follow-up by their supervisors.

Meanwhile, the induction training for newly recruited vaccinators (undertaken in all 3 target districts, in 2017) was closer to achieve the target, with notable progress from the pre-test to the post-test, as the figure below. It is a promising sign, that the new, young and better-educated vaccinators are gaining practical knowledges for routine immunization in three districts.

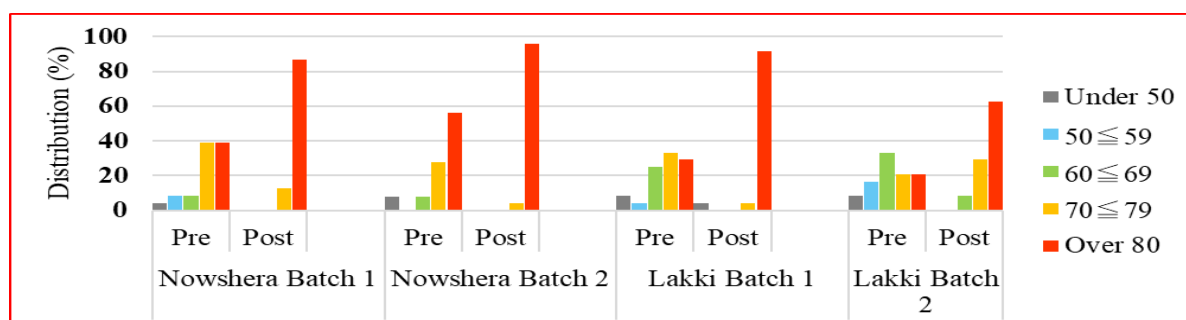


Figure 1. Pre-Post test score distribution, EPI Technicians induction training (2017)

For the LHWs training in Mansehra, the age and educational level of training participants were two factors that correlated to the post-test scores. Same as for the EPI technicians, LHWs who scored not satisfactory were followed-up by Lady Health Supervisors (LHS), in order to ensure the quality of services they offer to the households in their respective catchment area.

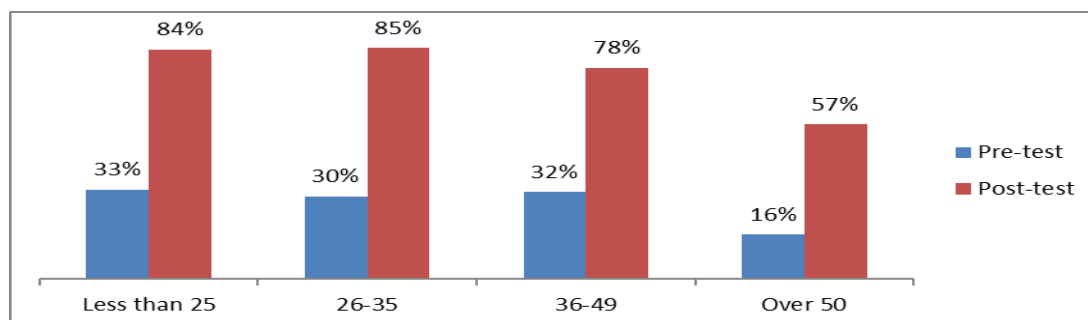


Figure 2. Pre-Post test score distribution, % of LHWs with >80% mark by age (2016-2018)

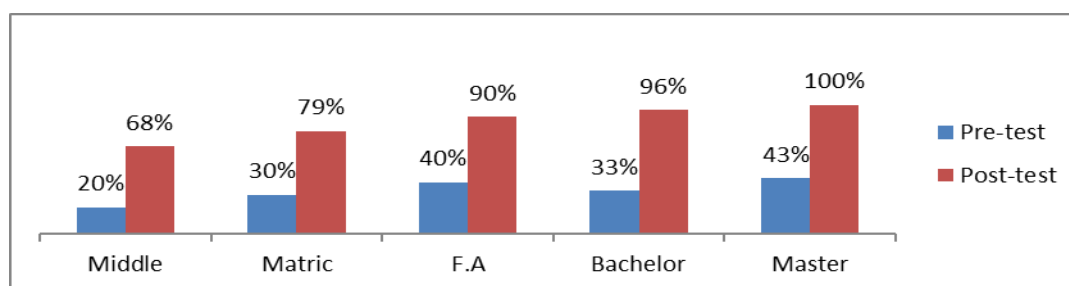


Figure 3. Pre-Post test score distribution, % of LHWs with >80% mark by education (2016-2018)

Aside from the activities that were linked directly to the output targets, several activities were implemented to build local capacities on provision of EPI services to hard-to-reach population. These activities were undertaken in the forms of micro-planning (with focus on under-served population/areas) that followed by extensive monitoring and supervision for mobile outreach activities in Mansehra<sup>4</sup>, in addition to community-based social mobilization activities in hard-to-reach areas of three districts in partnership with local civil society organizations (CSOs). Outcomes of these activities not only contributed to the improvement of immunization coverages in those under-served areas (which directly contributes to the Project Purpose target), but also to creating evidences of effective model for potential replication in and beyond KP province<sup>5</sup>. Knowledge base created from these activities were shared widely with non-target districts in KP and federal level development partners including international donors and CSOs working in the health sector.

<sup>4</sup> Mobile outreach activities were supported in Mansehra, where mountainous area of Naran is home to thousands of seasonal migrants, nomads and Afghan refugees during the summer. A series of mobile outreach was organized in May, August and October 2017.

<sup>5</sup> Factsheet: Social Mobilization for Routine Immunization in Hard-to-Reach Areas of Khyber Pakhtunkhwa Province, Pakistan (2017), CHIP, JICA, KP Provincial Health Directorate.

## 2-2 Project Purpose and indicators

(Target values and actual values achieved at completion)

Project Purpose: The routine immunization service provided in the Khyber Pakhtunkhwa Province is strengthened				
Target values	Actual values			Result
1. All districts develop the District EPI Plan and present the achievements on an annual review meeting	Provincial EPI organized annual review meetings every year since 2015 to date, inviting all districts to present achievement of the past year and target-oriented plans for the coming year. Quarterly review meetings are also regularly held to review district-level progress.			Achieved
2. More than 70% of districts utilize and receive vaccines from divisional warehouses by 2017	Districts started receiving Rota and oral polio vaccines for polio campaigns from divisional warehouses by the end of 2017, yet continue to receive other vaccines for routine immunization on monthly basis from the KP provincial warehouse.			Partially achieved
3. 10% increase in Measles 1 coverage by 2017 in the target districts		Baseline (2014) <sup>6</sup>	2017 <sup>7</sup>	Partially achieved
	Mansehra	57%	89.1%	
	Nowshera	67%	68.3%	
	Lakki Marwat	21%	34.5%	
4. More than 80% Union Councils in the target district achieve 90% coverage of Penta3 by 2017		Baseline (2014)	2017	Not achieved
	Mansehra	46%	51%	
	Nowshera	22%	33%	
	Lakki Marwat	6%	15%	
5. Dropout rate of Penta1-Penta 3 decreases to less than 10% in the target districts by 2017		Baseline (2014)	2017 <sup>8</sup>	Partially achieved
	Mansehra	7%	3.4%	
	Nowshera	14%	7.5%	
	Lakki Marwat	23%	19.0%	
6. More than 70% UCs in target districts submit weekly VPD report in a proper manner (timeliness and completeness)	Timely and complete submission of VPD reporting was showing mixed results. Mansehra improved completeness from 93% in 2014 to 97% in 2017, while timeliness was down from 93%			Partially achieved

<sup>6</sup> Baseline immunization data (based on records) for 3 districts were drawn from Pakistan Social and Living Standard Measurement Survey (PSLM) 2014-2015, Government of Pakistan, Statistics Division, 2015

<sup>7</sup> End-line immunization data (based on records) were drawn from Khyber Pakhtunkhwa Health Survey 2017, Department of Health and Bureau of Statistics, Government of Khyber Pakhtunkhwa

<sup>8</sup> Data from provincial EPI-MIS



to provincial EPI	in 2014 to 71% in 2017. Nowshera went down 93% timeliness and 95% completeness in 2014 to 58% timeliness and 85% completeness in 2017, as the district faced a number of VPD outbreaks (measles and diphtheria) to respond to. In Lakki Marwat, both timeliness and completeness improved significantly from 2014 to 2017, from 68% to 88% in timeliness, and from 80% to 96% in completeness respectively.	
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As outlined above, it is difficult to say that the SRI Project fully achieved its intended project purpose to date, as the Project was designed to improve immunization coverage without directly intervening service delivery to the population at large. Most of activities in the Project were aimed at providing quality of services via strengthening capacities of frontline EPI workers, rather than providing more services to reach the under-served populations in general. It is also true that behavioral changes towards immunization by social mobilization require time and continued efforts, thus not making instant improvement in vaccination uptake in the course of this project period. One factor that negatively affected to achieve the vaccination coverage related targets was the delay of hiring new EPI technicians, which only occurred in the first quarter of 2017 to place at least one vaccinator in each Union Council (UC), against the original plan of doing so in early 2015. Such delays were due to the later-than-expected arrival of external funding from the multi-donor fund and the release of provincial budget for KP-ISP, which only started implementation in November 2016. Delayed recruitment and placement of vaccinators were most serious in Lakki Marwat, where the vaccination coverage outcomes did not reach the target unlike other two districts. These external conditions had obviously influenced the outcomes of the Project, while the Project relied on large-scale funding from other development partners to support operational expenses at district level for service provision.

However, the signs of improvement are more than obvious. With the increased human resources for immunization program, all three District EPI cells are doing more outreach vaccination activities in accordance with micro-plans to reach the underserved communities and children. It is anticipated that the immunization coverage will be further improved in the coming years, provided the domestic and international funding are available as planned to continue quality services.

### 3. History of PDM Modification

The Department of Health, KP Province and the Project mutually agreed to modify the Project Design Matrix (PDM) a number of times during the implementation period. The first

major modification of the PDM was made in May 2015, at the first Joint Coordinating Committee (JCC) of the Project, from the version 0 (agreed at the signing of the project's Record of Discussion (R/D) in 2014) to the version 2. Reflecting the discussion with the provincial counterparts, the outputs were doubled from 2 to 4, and details of activities to be undertaken were agreed.

Since then, a series of minor revisions were made, such as adding/subtracting certain training as requested by the Provincial EPI program (e.g., adding a VPD surveillance training for District EPI coordinators of all 25 districts in KP, in responses to measles outbreak in 2016). The next major modification was made at the third JCC in November 2016 (PDM version 19), when Nowshera and Lakki Marwat were included as target districts for a series of training activities on service delivery and surveillance. The final modification was made at the fourth JCC in May 2017, when the extension of the Project by seven months based on the recommendation by the monitoring survey team from JICA Headquarters in February 2017. The final revision (PDM version 20) further streamlined activities, in response to the provincial and federal activities that were began at scale with other partners' financial and/or technical support. This modification had the biggest impact on Output 1, as Effective Vaccines Management including cold chain equipment (CCE) management was well-covered by GAVI-funded CCE-Optimization Platform which procured and started managing a large quantity of CCE throughout the country.

The PDM version 2 and version 20 are attached for information, as Annex 3-1 (vers.2) and Annex 3-2 (vers.20).

#### **4. Others**

##### **4-1 Results of Environmental and Social Considerations (if applicable)**

N.A.

##### **4-2 Results of Considerations on Gender/Peace Building/Poverty Reduction**

The SRI Project has taken underlying gender issues into serious consideration in planning, implementing, and evaluating the Project activities. The Project included key gender-sensitive and gender-responsive activities throughout the implementation, of which design was informed by sex-disaggregated immunization data, analysis of behaviors of caregivers, and surveillance related data.

It is noteworthy that some of the Project's activities contributed directly to the empowerment of women at grass-root level, for example, by building capacities of LHWs (and female community health volunteers in hard-to-reach area) for immunization-related social

mobilization, equipping them with knowledge and skills to perform their jobs with confidence in their respective communities. Other activities, such as supporting outreach immunization activities in hard-to-reach area, had also enabled better access to health services for often disadvantaged girls. The outreach activities also directly benefited pregnant women and women of reproductive age in the remotest setting, who often have very limited opportunities to seek health services including tetanus vaccinations.

However, the Project regrets that it had not optimized opportunities to address existing gender issues and harmful gender norms through various activities, such as addressing women's lack of decision-making authority for the immunization of their children. Even though the Project was aware of this lack of women's authority to decide from the findings of the base-line KAPB survey, social mobilization activities supported in this Project were directed to change men's behaviors to let children receive immunization, rather than taking gender-transformative approaches by empowering women and local communities to decide on their own without men's permission. The key lesson learned from this Project is that it is essential to build-in specific activities to address underlying gender norms, rather than hoping for self-motivated actions to be taken, if the routine immunization activities were expected to address particular gender issues.

### **III. Results of Joint Review**

#### **1. Results of Review based on DAC Evaluation Criteria**

##### **[Relevance] – Very high**

The SRI Project was implemented in line with the federal and provincial priorities on routine immunization, in aligning to key government policies and programs. Activities were originally designed to strengthen EPI services to implement National EPI Policy and Strategic Guidelines (2014), which operationalize *Pakistan's Vision 2025* to reduce infant mortality rate through immunization targets. Then those activities were well-adjusted during the course of implementation to re-align and to fill technical assistance gaps identified in the KP-ISP, 2015/16 -2019/20. KP-ISP set the programmatic objectives as 1) 90% of the children receive vaccination according to EPI schedule, 2) Polio transmission is reduced to zero, and 3) Measles and Neonatal Tetanus are eliminated, all of which SRI Project's purpose was directly contributing to.

The relevance of Project activities was kept high, if not increasingly higher, as large-scale funding became available for the KP-ISP in late 2016, while technical "evidence" of what works remain unclear. The SRI Project contributed with creating data-driven evidence for potential replication/scale-up in 2017, including those from extensive outreach immunization activities in Mansehra, and the pilot initiative to strengthen public-private partnership engaging CSOs for mobilizing the hard-to-reach population to improve

immunization service uptake. These activities not only provided essential “evidence” to support the replication in other districts of the KP province, but also informed the national EPI policy (being revised as of May 2018) with key lessons learned.

Last but not least, it shall also be noted that the Project’s focus on hard-to-reach population is in sync with the global goal (Sustainable Development Goal 3 / target 3.8) to achieve Universal Health Coverage by 2030 to ensure access to vaccines for all.

### **[Effectiveness] – Moderate**

The effectiveness of the SRI Project was found to be moderate (most of project purpose was partially achieved during the Project duration), while the improvement in outcome indicators to date are promising. The Project by design created an enabling environment to deliver quality immunization services in the target area, yet the actual service delivery with adequate human and financial resources continued to depend on provincial (own resources) and external support. As the external funding and sufficient budget allocation were delayed, the recruitment of new EPI workers was also delayed. The Project had to keep building capacities of EPI service providers even into the first quarter 2018, which left very limited time to let those service providers produce outcomes as intended.

Yet, the outcomes from this Project is supporting the KP Province with key evidence base, that well-planned and tailored service provision can effectively and cost-effectively reduce the number of zero-dose children. It is highly anticipated that sustained efforts to reach these under-served population will eventually lead to the attainment of Project’s purpose and overall goal in the years to come, provided the same level of resources are available to the provincial and district EPI programs.

### **[Efficiency] – Moderate**

The review found efficiency of the Project was moderate, especially with regard to the progress made in the second half of the Project period, i.e., 2016-2018. The first year of implementation, in 2015, was unfortunately inefficient, as almost no activity except baseline surveys was implemented due to the technical difficulties with the Provincial EPI (see p.22 for more detail). It was only in 2016 that activities started to move forward, starting from working with only one target district (Mansehra) to the other 2 districts. In order to catch up such delays in implementation and to ensure capacity building activities in two target districts were completed, the extension of the Project period by 7 months was mutually agreed between KP government and JICA in 2017 to complete all planned activities with sustainable impact.

The total amount the SRI Project spent during the Project period of 3 years and 7 months

was JPY 122.4 million, or PKR 130 million<sup>9</sup> as Overseas Activities Cost (in-country) and for provision of equipment (the planned cost was JPY 87 million). Out of PKR 130 million, about PKR 9 million was spent on procuring cold chain equipment maintenance tool kits and workshops, which were set up in four divisional warehouses and one provincial warehouse, to undertake preventive maintenance and minor repairs of the cold chain equipment. The activity cost of the SRI Project is relatively a small amount of funding, considering the KP provincial EPI budget is around 6.5 million USD (about PKR 750 million) per year. However, the inputs made by the Project with this amount were recognized as reliable, results-oriented, and of quality<sup>10</sup>, which have good potential to be replicated/scaled-up with domestic and external resources in the future.

### **[Impact] – High**

The overarching goal of the SRI Project is to reduce the morbidity of vaccine preventable diseases (VPDs) in Khyber Pakhtunkhwa province, which is highly likely to be achieved in the near future, after the completion of this Project. (Further analysis is in section IV.1) VPD morbidity rate in KP province is believed to be on decline, as immunization coverage is improving slowly but steadily in recent years.<sup>11</sup> It is also considered promising that the provincial EPI program got a significant boost in terms of domestic and external resources since 2016 to support this trend, and it is expected to continue making progress. There also is a strong political commitment to improve vaccination coverages in KP province, as seen in the Provincial Assembly to have amended 1958 law on vaccination in July 2017, to make vaccination against 14 VPDs (including all diseases covered by current routine immunization plus smallpox) compulsory for all children<sup>12</sup>. It should also be noted that at the time of discussion at the Provincial Assembly, the former Provincial EPI Director used some examples of Japanese routine immunization services he learned during the In-country training in Japan, for political advocacy to make this amendment to the law passed.

However, it should be taken into consideration that the data on morbidity may not be showing the declines in VPD morbidity in a straight-forward manner, as more VPD cases are likely to be detected, reported and investigated for lab confirmation as capacities of health workers are strengthened. The VPD surveillance data in KP province in recent years had more number of suspected cases reported, while the number of actual cases – be they reported or not reported – are believed to be declining. Since the KP province uses a proxy data of suspected cases of VPDs to measure morbidity, the data may show the real impact

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<sup>9</sup> Based on JICA exchange rate of each occasion

<sup>10</sup> As mentioned in the remarks by the Director General of KP Provincial Health Services, at the 5<sup>th</sup> JCC meeting in May 2017.

<sup>11</sup> World Health Organization. Global Immunization Factsheet. 2016 Sept: available at <http://www.who.int/mediacentre/factsheets/fs378/en/>. Retrieved 23 May 2018.

<sup>12</sup> Tuberculosis (BCG), Polio, Hepatitis B, Diphtheria, Tetanus, Pertussis, Hemophilic influenza B, measles, mumps, rubella, varicella, hepatitis A, typhoid, and smallpox

in a reverse manner. (e.g., the number of Acute Flaccid Paralysis (AFP) cases for suspected polio had been large, while the confirmed cases of polio in KP province for 2014 was 68, 17 cases in 2015, and only 1 case in 2017.)

<b>VPD Surveillance Data 2013 to 2017, KP DoH</b>			
<b>Diseases</b>	<b>Number of suspected cases</b>		
	<b>2014 (baseline)</b>	<b>2015</b>	<b>2017</b>
Childhood TB	153	67	62
Measles	7048	1379	12072
Diphtheria	61	17	125
Pertussis	75	30	55
Neonatal Tetanus	289	222	128
Polio (AFP)	1043	417	1125

There are other kind of impact that are emerging beyond expectation of the Project. Some of key achievements of the SRI Project were already making ripple effects, for example, CSOs started replicating the models of social mobilization in hard-to-reach area in other provinces including Sindh and Baluchistan. A number of training materials the Project developed were already integrated into the training curriculum of KP provincial EPI. Some of IEC materials on routine immunization the Project produced are replicated by the Federal EPI for campaigns. Key lessons learned from reaching the hard-to-reach population via mobile outreach activities are informing the on-going revision of National EPI Policy and Guidelines in 2018. These outcomes are being seen not only in KP province but also in other parts of Pakistan, well-beyond the Project's geographical reaches.

#### **[Sustainability] – Moderate**

As written above, the KP provincial government is fully committed to move the routine immunization agenda forward in partnership with external partners, to strengthen EPI services and making children fully vaccinated. Outcomes of the SRI Project are fully owned by provincial and target districts' EPI program, and the Provincial EPI program has sufficient human resources and financial resources under the KP-ISP to sustain the gains made from this Project for the coming years. Capacities of the EPI workers built in this Project are also likely to be utilized for long period of time, along with the trainers' capacities to facilitate similar training in the future. However, some of activities undertaken in this Project, such as the series of in-service training for LHWs in Mansehra on routine immunization, lack sustainability as resources were fully dependent upon the Project, without prospects of the national LHW program nor provincial/district EPI program to bear

the cost for continuation and/or periodical follow-up of trained LHWs.

## **2. Key Factors Affecting Implementation and Outcomes**

As mentioned earlier, the SRI Project was not able to undertake much activities for almost one year since the inception of the Project, mostly due to the communication issues with the Provincial EPI at that time. This has caused delays in implementation of the Project, which affected the achievement of outcomes despite the extension of the Project period by 7 months. The Project also faced challenges to timely implementation by the frequent Polio campaigns in target districts. Each Polio campaign – be it national/ sub-national campaigns or mop-up vaccinations following the cases found – occupied district EPI cells and their EPI Technicians as field supervisors for two weeks (one week for micro-planning and training, another week for actual campaigning), leaving only limited time for the district EPI cells to organize training or monitoring and supervision activities. In addition, a frequent changes of provincial and district EPI leaderships had negatively affected the timely implementation of activities. Capacities built among them were not fully utilized to produce outcomes prior to their transfers to other positions, and new leaders needed time to get fully onboard while they often needed to build their own capacities as well. These challenges were not considered as important assumptions in the PDM, yet significantly influenced the Project implementation.

In addition, it should be mentioned that all three districts experienced multiple outbreaks of infectious diseases (Measles, Diphtheria, Crimean-Congo Fever, Pertussis, Polio, etc.) during the Project period. As district EPI teams are primary responsible for outbreak responses and case management, they became too occupied to carry out Project activities. Nowshera was worst hit in 2017 measles outbreaks, and Lakki Marwat and Mansehra had to respond to polio cases in and around their districts, by monthly mop-up campaigns.

Security risks in target areas also had significant implications for the sound implementation of the Project. Japanese Experts were not able to enter two of three target districts for the entire duration of the Project, and visits to Peshawar was only granted maximum once a month, while the visit was prohibited for 25 out of 43 months of operation. Having no access to these areas hindered the Project to have direct engagement with the counterparts, which created additional burden to plan and to undertake activities with quality to ensure intended outcomes, as per the PDM and the PO.

The failed recruitment of Japanese short-term Experts with specific technical expertise on EPI had also challenged undertaking some activities. Some experts were also seen not strong enough technically, by the KP counterparts. A quality pool of Japanese experts in the field of EPI must be created to ensure the timely dispatch of them, as well as in view of the

potential life-or-death consequences that improper technical advice on immunization services could create.

Last but not least, it should be noted that the Project could not have achieved these outcomes without the team of highly skilled local staff members who not only led implementation of the series of activities but also kept the good communication between the provincial and district health offices and the Project. The liaison office of the Project was set within the Provincial EPI program office space, and it had enabled day-to-day communication with the counterpart officials possible. Other members were also keeping close communication with local EPI workers, who often do not have sufficient English communication skills, and these inputs from target audiences made Project activities most appropriate to their needs.

### **3. Evaluation on the results of the Project Risk Management**

The SRI Project assumed some risks for implementation (as Important Assumptions in the PDM), such as the shortage of budget/resources and vaccines at district level, as well as the risk of losing trained trainers due to the job rotation. The Project ensured a sufficient pool of master trainers for various training, both at provincial and district level, so that the transfer of one staff to the other facility/job does not pose a risk to the quality of training. There were a number of outbreaks that were prioritized at district level, which the Project saw as on-the-job opportunities to strengthen surveillance and outbreak responses skills, supporting the district EPI cells with additional supervision from the Project. Overall, it can be said that most risks were well-averted, by close cooperation with the provincial and district counterparts.

### **4. Lessons Learned**

The first and foremost lessons learned for the SRI Project was the importance of coordination with stakeholders, especially with other international partners, in order to achieve project purpose and the overall goal. Being a small but on-the-ground external partner, the outcomes of the Project activities could be catalytic, yet at the same time they can be easily reversed by the actions (and inactions) of other large-scale partners. This Project had adjusted and re-adjusted activities in order to avoid duplications of efforts, which are supported by other partners with nation-wide implementation. More than a few “draft” or “pilot” forms and systems that the Project supported for operationalizing at district level were later replaced by similar but different ones, because of the scales they are introduced to. Meanwhile, it was not easy to coordinate with other partners at provincial level because of the travel restriction to Peshawar; and national level coordination often lacks the details and provincial level buy-in. Innovative means of coordinating with others are strongly recommended for the future project.



The importance of having physical access to the target districts and direct communication with counterparts cannot be stressed more, and it should be taken into serious consideration when a project is formulated in a country like Pakistan. Because the needs for technical cooperation are often the most serious in those security-challenged area, they should not be excluded from becoming target districts, yet if selected, that project should be ready to face extreme difficulties operating and not to achieve intended targets. The SRI Project believes it essential for the future projects that target high security risk area(s) to ensure having a very strong team of local professionals at the provincial liaison office, which enable quality communication between the Project team and the counterpart officials.

Finally, a bitter lesson learned for the SRI Project was the difficulty of achieving service-utilization related targets, while the Project was designed not to directly intervene in service provision nor undertaking social mobilization activities at scale. For the SRI Project, the availability of quality immunization services at district level was found rather fluctuating, often because of the shortage of local and other partners' financial and human resources. In such a context, it is too naïve to believe strengthened capacities of service providers would automatically improve the service uptake, and the limited causality between activities and outcome targets need to be recognized. It is strongly recommended that future projects take such challenges into serious considerations when setting the project goal and targets, to make them realistically achievable within the limited duration.

#### **IV. For the Achievement of Overall Goals after the Project Completion**

##### **1. Prospects to achieve Overall Goal**

The SRI Project, in partnership with the KP Provincial EPI Program, believe that the Overall Goal of the Project, “The morbidity of vaccine preventable diseases (VPDs) is reduced in Khyber Pakhtunkhwa Province” is likely to be achieved in near future, after the completion of the Project. This goal is viewed optimistically achievable largely due to the increasing trend in immunization coverage throughout the KP province, strong commitment by the Federal and KP government on routine immunization, as well as international commitment to support this sector for coming years. With the sustainable financial and human resources maintained at current level, district EPI programs should be able to provide immunization services to majority of children. However, the uncertain nature of predicting outbreaks of those VPDs remain a challenge. In order to attain this Overall Goal, proactive measures to increase immunization coverages need to be further strengthened, and the capacities to respond to outbreaks effectively and timely must be in place throughout the province, beyond the target districts of the SRI Project.

## **2. Plan of Operation and Implementation Structure of the Pakistan (KP province) side to achieve Overall Goal**

The KP government needs to ensure the full and timely implementation of the KP-ISP, to continue strengthening immunization services both in terms of availability and quality to achieve its programmatic objectives. Should the KP government achieved all the KP-ISP objectives of fully vaccinating more than 90% of children, reducing Polio transmission to zero, and to eliminate Measles and Neonatal Tetanus, the Overall Goal of the SRI Project would be automatically achieved.

## **3. Recommendations for the Pakistan (KP province) side**

The SRI Project recommends the KP government to accelerate the implementation of KP-ISP, while making sure the sustainability of the EPI program to be considered well before the current KP-ISP expires in 2020, especially by bearing the cost for continuation and/or periodical follow-up of trained LHWs. It is also recommended to explore innovative measures to vaccinate the hard-to-reach population, including replicating and/or scaling-up of the pilot activities this Project had created evidence of effectiveness. These pilot activities include public-private partnership for routine immunization by engaging CSOs especially in areas where no LHWs are in place, as well as intensive mobile outreach in geographical hard-to-reach periodically, so that children without access to health services would not be left zero-dose.

## **4. Monitoring Plan from the end of the Project to Ex-post Evaluation**

JICA Pakistan should continue to engage in the inter-agency coordination mechanisms on EPI, where joint monitoring of national and provincial ISPs shall be undertaken. Also recommended is to continue participating in the KP annual review of the EPI program, to monitor the progress made against KP-ISP targets, which would impact reduction of VPDs morbidity in the following years.

### **ANNEX 1: Results of the Project**

- 1-1: List of Dispatched Experts
- 1-2: List of Counterparts
- 1-3: List of Trainings
- 1-4: List of Monitoring and Supervision

### **ANNEX 2: List of Products (Report, Manuals, Handbooks, etc.) Produced by the Project**

#### **ANNEX 3: PDM**

- 3-1: PDM Version 2, June 2015
- 3-2: PDM Version 20, May 2017

## Annex 1-1 List of Dispatched Experts

Area of expertise	Dates	Affiliation in Japan
Chief Advisor	2015.02 - 2015.04 2015.06.03 – 2015.07.15 2015.07.25 – 2015.08.26 2016.04.30 – 2016.06.24 2016.07.16 – 2016.07.23 2016.10.15 – 2016.11.11	National Center for Global Medicine (NCGM)
	2016.10.21 – 2018.06.08	N.A.
Project Coordinator / Training	2015.01.07 – 2016.12.23	N.A.
Project Coordinator	2017.01.16 – 2017.11.11	N.A.
	2017.11.01 – 2018.06.08	N.A.
Social Mobilization	2014.12.17 – 2016.12.16	N.A.
Vaccine Logistics / EVM	2015.02.11 – 2015.03.22 2015.05.01 – 2015.06.16 2015.10.10 – 2015.11.21	HANDS (NPO)
	2016.03.30 – 2016.06.02 2016.09 – 2016.11.05	TAC Int'l. Inc.
EPI Equipment Maintenance	2015.08.08 – 2015.09.19	AMHN., Ltd.
	2016.01.11 – 2016.02.21	
	2017.01.11 – 2017.02.23	
EVM & Supervision	2017.08.12 – 2017.09.27	Research Institute on Tuberculosis
Surveillance	2015.09.26 – 2015.10.24	NCGM
	2016.02.08 – 2016.03.05	NCGM
	2017.05.06 – 2017.06.03	NCGM
	2017.12.04 – 2017.12.21	
Social Mobilization	2017.03.27 – 2017.04.24	TAC Int'l. Inc.
	2017.07.17 – 2017.08.31	
	2018.01.15 – 2018.01.28	

## Annex 1-2 List of Counterpart

Director General Health Services, DoH
Director EPI, DoH (Project Director)
Deputy Director, Provincial EPI, DoH
Provincial Coordinator, LHW Program, DoH
Communication officer, DoH
EPI Coordinator Mansehra DHO
EPI Coordinator Lakki Marwat DHO
EPI Coordinator Nowshera DHO

Annex 1-3 List of Trainings

Target District Training Summary										
S.no	Target District	Venue of Training	Year	Month	Date	Batch No.	Duration of Training	Description of Training	Participants / Health Facilities	No of Participants
N1	Mansehra	DHO Office Mansehra	2015	12	7,8,9	Batch 1	3 Day	Training of Trainers (ToT) on Routine Immunization	EPI Coordinator, Medical Officers, Medical Technicians, Lady Health Supervisors & District Supervisor Vaccination	17
N2	Mansehra	DHO Office Mansehra	2016	1	18,19,20,21	Batch 1	4 Day	Training of Trainers (ToT) on Cold Chain Equipment Repair & Maintenance	Mechanics & Operator from 5 Divisional Cold Room from KP Province (Mansehra, Bannu, D.I.Khan, Malakand, Kohat & Provincial Cold Room Peshawar)	7
N3	Divisional Cold Room of KP	Divisional Cold Room District D.I.Khan	2016	2	8,9,10,11	Batch 1	4 Day	Cascade training on CCE Repair & Maintenance	CC Mechanics, Technicians & Operators from D.I.Khan & Bannu	5
N4	Mansehra	DHO Office Mansehra	2016	2	16,17,18	Batch 1	3 Day	Routine Immunization Training	EPI Technicians	25
N5	Mansehra	DHO Office Mansehra	2016	3	1,2,3	Batch 2	3 Day	Routine Immunization Training	EPI Technicians	25
N6	Mansehra	DHO Office Mansehra	2016	3	7,8,9	Batch 3	3 Day	Routine Immunization Training	EPI Technicians	26
N7	Mansehra	DHO Office Mansehra	2016	3	4	Batch 1	1 Day	Routine Immunization Training	Lady Health Supervisors	25
N8	Peshawar		2016	3				Social Mobilization Workshop	Provincial EPI Team & JIA SRI Team	13
N9	Mansehra	DHO Office Mansehra	2016	4	21	Batch 1	1 Day	Routine Immunization Training	Medical Technicians	27
N10	Mansehra	DHO Office Mansehra	2016	4	25	Batch 2	1 Day	Routine Immunization Training	Medical Technicians	32
N11	Mansehra	DHO Office Mansehra	2016	4	26	Batch 3	1 Day	Routine Immunization Training	Medical Technicians	17
N12	Mansehra	DHO Office Mansehra	2016	4	27	Batch 4	1 Day	Routine Immunization Training	Medical Technicians	28
N13	Mansehra	DHO Office Mansehra	2016	4	28	Batch 5	1 Day	Routine Immunization Training	Lady Health Visitor	27
N14	Mansehra	DHO Office Mansehra	2016	5	2	Batch 6	1 Day	Routine Immunization Training	Lady Health Visitor	24
N15	Mansehra	DHO Office Mansehra	2016	5	3,4	Batch 1	2 Day	Two days training on Cold Chain Equipment Maintenance and Management	District Supervisor Vaccination from 25 Districts of KPK	24
N16	Mansehra	DHO Hospital Mansehra	2016	5	23,24,25	Batch 1 & Batch 2	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) DHQ Hospital Batch 1 2) BHU Behali & Datta Batch 2	52
N17	25 District, KP	Hill View Hotel Islamabad	2016	7	18,19	Batch 1	2 Day	Training of Trainers (ToT) on Vaccine Preventable Disease's Surveillance	EPI coordinators, DSV, VPD focal person from 8 Districts of KP, Provincial Assistant Directors & IDSRs Officers	27
N18	25 District, KP	Hill View Hotel Islamabad	2016	7	20,21	Batch 2	2 Day	Training of Trainers (ToT) on Vaccine Preventable Disease's Surveillance	EPI coordinators, DSV, VPD focal person from 8 Districts of KP, Provincial Assistant Directors & IDSRs Officers	27
N19	Mansehra	RHC Kewai	2016	7	19,20,21	Batch 3	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) RHC Kewai 2) BHU Jared	28
N20	25 District, KP	Hill View Hotel Islamabad	2016	7	22,23	Batch 3	2 Day	Training of Trainers (ToT) on Vaccine Preventable Disease's Surveillance	EPI coordinators, DSV, VPD focal person from 8 Districts of KP, Provincial Assistant Directors & IDSRs Officers	25
N21	Mansehra	CH Kaghan	2016	7	26,27,28	Batch 4	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) BHU Khanian 2) BHU Rajwal 3) CH Kaghan	21
N22	Mansehra	BHU Talhatta	2016	8	2,3,4	Batch 5	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers 1) BHU Talhatta 2) BHU Jabri Kaleesh	21
N23	Lakki Marwat	DHO Office Lakki Marwat	2016	8	8,9		2 Day	Social Mobilization Workshop	District Stake Holder, District Health Office Team, Selected Union Council Health Staff, Local Welfare Organization & JICA SRI	30
N24	Mansehra	BHU Shohal Najaf Khan	2016	8	9,10,11	Batch 6	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) BHU Shohal Najaf Khan 2) BHU Sangar	28

S.no	Target District	Venue of Training	Year	Month	Date	Batch No.	Duration of Training	Description of Training	Participants / Health Facilities	No of Participants
N25	Nowshera	DHO Office Nowshera	2016	8	15,16		2 Day	Social Mobilization Workshop	District Stake Holder, District Health Office Team, Selected Union Council Health Staff, Local Welfare Organization & JICA/SRI	30
N23	Mansehra	RHC Sachan Kalan	2016	8	16,17,18	Batch 7	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers 1) RHC Sachan Kalan 2) CH Nawazabad	37
N24	Divisional Cold Room of KP	Divisional Cold Room District Malakand	2016	8	16,17,18,19	Batch 2	4 Day	Cascade training on CCE Repair & Maintenance	CC Mechanics, Technicians & Operators from Malakand	7
N25	Mansehra	CH Gari Habibullah	2016	8	22,23,24	Batch 8	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from CH Gari Habibullah	25
N26	Mansehra	CH Gari Habibullah	2016	8	25	Batch 8	1 Day	RED/REC Microplanning Workshop UC Level	LHWs, Health facility Incharge, Local EPI Technician, UC Level Chairman & Secretary from CH Gari Habibullah	4
N27	Mansehra	DHO Office Mansehra	2016	8	30	Batch 1	1 Day	Cascade Training on VPD Surveillance	Health Facility Incharge	13
N28	Mansehra	DHO Office Mansehra	2016	8	31	Batch 2	1 Day	Cascade Training on VPD Surveillance	Health Facility Incharge	32
N29	Nowshera		2016	8,9				Social Mobilization Micro-census		
N30	Lakki Marwat		2016	10,11				Social Mobilization Micro-census		
N31	Mansehra	DHO Office Mansehra	2016	9	1	Batch 3	1 Day	Cascade Training on VPD Surveillance	Health Facility Incharge	29
N32	Mansehra	CH Battal	2016	10	4,5,6	Batch 9	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) CH Battal 2) RHC Chatter Plain	34
N33	Mansehra	DHO Office Mansehra	2016	10	17,18	Batch 1	2 Day	District Level Social Mobilization Workshop	District Stake Holder, District Health Office Team, Selected Union Council Health Staff, Local Welfare Organization & JICA/SRI	30
N34	Mansehra	BHU Shohal Najaf Khan	2016	10	19,20,21	Batch 10	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from Tehsil Headquarter Hospital Balakot	30
N35	Mansehra	BHU Shohal Najaf Khan	2016	10	25,26,27	Batch 11	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from Tehsil Headquarter Hospital Balakot	26
N36	Mansehra	CH Darband	2016	11	1,2,3	Batch 12	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) CH Darband 2) BHU Chakal	24
N37	Mansehra	BHU Behali	2016	11	7	Batch 2	1 Day	RED/REC Microplanning Workshop UC Level	LHWs, Health facility Incharge, Local EPI Technician, UC Level Chairman & Secretary from BHU Behali	4
N38	Mansehra	BHU Datta	2016	11	8	Batch 2	1 Day	RED/REC Microplanning Workshop UC Level	LHWs, Health facility Incharge, Local EPI Technician, UC Level Chairman & Secretary from BHU Datta	4
N39	Mansehra	RHC Shinkari	2016	11	15,16,18	Batch 13	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) RHC Shinkari 2) Dhodial	38
N40	Mansehra	BHU Talhatta	2016	11	29	Batch 5	1 Day	RED/REC Microplanning Workshop UC Level	LHWs, Health facility Incharge, Local EPI Technician, UC Level Chairman & Secretary from BHU Talhatta	4
N41	Mansehra	CH Kaghlan	2016	11	30	Batch 4	1 Day	RED/REC Microplanning Workshop UC Level	LHWs, Health facility Incharge, Local EPI Technician, UC Level Chairman & Secretary from CH Kaghlan	4
N42	Mansehra	RHC Kewai	2016	12	1	Batch 3	1 Day	RED/REC Microplanning Workshop UC Level	LHWs, Health facility Incharge, Local EPI Technician, UC Level Chairman & Secretary from RHC Kewai	4
N43	Divisional Cold Room of KP	Provincial Cold Room District Peshawar	2016	12	6,7,8,9	Batch 3	4 Day	Cascade training on CCE Repair & Maintenance	CC Mechanics, Technicians & Operators from Kohat & Peshawar	9
N44	Mansehra	BHU Shergarh	2016	12	27,28,29	Batch 14	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) BHU Bandi Shungli 2) BHU Bandi Parow 3) BHU Gali Badnal 4) BHU Shergarh 5) BHU Karori	33
N45	Nowshera	DHO Office Nowshera	2016 / 2017	12, 1				VPD Surveillance Training	Medical Officers & Paramedics	112
N46	Lakki Marwat	DHO Office Lakki Marwat	2017	1,2				VPD Surveillance Training	Medical Officers & Paramedics	106
N47	Mansehra	RHC Ogai	2017	1	2,3,4	Batch 15	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) BHU Dilborri 2) BHU Belian 3) RHC Ogai	22
N48	Mansehra	BHU Arbora	2017	1	10,11,12	Batch 16	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) BHU Arbora 2) BHU Kathai	22
N49	Lakki Marwat	DHO Office Lakki Marwat	2017	1	12,13,14	Batch 1	3 Day	Training of Trainers (ToT) on Routine Immunization	Master Trainers from District	10
N50	Mansehra	RHC Lissan Nawab	2017	1	24,25,26	Batch 17	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) RHC Lissan Nawab 2) BHU Chandoor	19
N51	Nowshera	Tehsil Headquarter Hospital Pabbi Nowshera	2017	1	25,26,27	Batch 1	3 Day	Routine Immunization Training	EPI Technicians	30

S.No	Target District	Venue of Training	Year	Month	Date	Batch No.	Duration of Training	Description of Training	Participants / Health Facilities	No of Participants
N52	Nowshera	DHO Office Nowshera	2017	1 & 2	31.1.2	Batch 2	3 Day	Routine Immunization Training	EPI Technicians	29
N53	Mansehra	BHU Gandhian	2017	2	1,2,3	Batch 18	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from BHU Gandhian	26
N54	Nowshera	DHO Office Nowshera	2017	2	5,6,7	Batch 1	3 Day	Training of Trainers (ToT) on Routine Immunization	Master Trainers from District	11
N55	Mansehra	BHU Bao Bandi	2017	2	6,7,8	Batch 19	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from BHU Bao Bandi	20
N56	Mansehra	DHO Office Mansehra	2017	2	13,14,15	Batch 20	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from DHQ Mansehra	24
N57	Nowshera	DHO Office Nowshera	2017	2	15,16,17	Batch 3	3 Day	Routine Immunization Training	EPI Technicians	29
N58	Mansehra	DHO Office Mansehra	2017	2	16	Batch 1	1 Day	RED/REC Microplanning Workshop UC Level	LHWs, Health facility Incharge, Local EPI Technician, UC Level Chairman & Secretary from District Headquarter Hospital DHQ	4
N59	Lakki Marwat	DHO Office Lakki Marwat	2017	2	23,24,25	Batch 1	3 Day	Routine Immunization Training	EPI Technicians	17
N60	Lakki Marwat	DHO Office Lakki Marwat	2017	2	23,24,25	Batch 2	3 Day	Routine Immunization Training	EPI Technicians	18
N61	Mansehra	BHU Pano Dheri	2017	3	6,7,8	Batch 21	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from BHU Pano Dheri	24
N62	Mansehra	RHC Sachan Kalan	2017	3	8	Batch 7	1 Day	RED/REC Microplanning Workshop UC Level	LHWs, Health facility Incharge, Local EPI Technician, UC Level Chairman & Secretary from RHC Sachan Kalan	4
N63	Mansehra	BHU Pano Dheri	2017	3	13,14,15	Batch 22	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from BHU Pano Dheri	18
N64	Mansehra	DHO Office Mansehra	2017	4	24,25,26,27	Batch 1	4 Day	Induction Training on Routine Immunization	Newly Recruited EPI Technicians	21
N65	Mansehra	DHO Office Mansehra	2017	5	2,3,4,5	Batch 2	4 Day	Induction Training on Routine Immunization	Newly Recruited EPI Technicians	23
N65	Peshawar	DG Health Office	2017	5	29		1 Day	Training on EPI-MIS IDSRs Reporting System on Intergrated Disease Surveillance & Response System	EPI Coordinators / DMS	4
N66	Mansehra	DHO Office Mansehra	2017	7	4,5	Batch 1	2 Day	Communicable Disease Surveillance IDSRs/Rota Introduction Training	Medical Officers & Medical Technician	25
N67	Mansehra	DHO Office Mansehra	2017	7	6,7	Batch 2	2 Day	Communicable Disease Surveillance IDSRs/Rota Introduction Training	Medical Officers & Medical Technician	24
N68	Mansehra	DHO Office Mansehra	2017	7	18,19	Batch 3	2 Day	Communicable Disease Surveillance IDSRs/Rota Introduction Training	Medical Officers & Medical Technician	28
N69	Mansehra	DHO Office Mansehra	2017	7	20,21	Batch 4	2 Day	Communicable Disease Surveillance IDSRs/Rota Introduction Training	Medical Officers & Medical Technician	25
N70	Mansehra	DHO Office Mansehra	2017	8	1,2	Batch 5	2 Day	Communicable Disease Surveillance IDSRs/Rota Introduction Training	Medical Officers & Medical Technician	25
N71	Mansehra	CH Baffa	2017	8	15,16,17	Batch 23	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) BHU Gandhian 2) CH Baffa	19
N72	Nowshera	DHO Office Nowshera	2017	8	15,16,17	Batch 1	4 Day	Induction Training on Routine Immunization	EPI Technicians	25
N73	Mansehra	RHC Trangri Sabir Shah	2017	8	22,23,24	Batch 24	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from RHC Trangri Sabir Shah	23
N74	Nowshera	DHO Office Nowshera	2017	8	22,23,24,25	Batch 2	4 Day	Induction Training on Routine Immunization	EPI Technicians	23
N75	Lakki Marwat	City Hospital	2017	9	12,13,14,15	Batch 1	4 Day	Induction Training on Routine Immunization	EPI Technicians	24

S.No	Target District	Venue of Training	Year	Month	Date	Batch No.	Duration of Training	Description of Training	Participants / Health Facilities	No of Participants
		Lakki Marwat								
N76	Mansehra	BHU Atershisha	2017	9	13,14,15	Batch 25	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) CH Kaghan 2) BHU Rajwal 3) BHU Jabba	22
N77	Mansehra	BHU Sande Sar	2017	9	25,26,27	Batch 26	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from BHU Sande Sar	17
N78	Lakki Marwat	City Hospital Lakki Marwat	2017	10	17,18,19,20	Batch 2	4 Day	Induction Training on Routine Immunization	EPI Technicians	24
N79	Mansehra	Civil Dispensary Khaki	2017	11	25,26,27	Batch 27	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) BHU Bherkund 2) BHU Perhama	38
N80	Mansehra	Civil Hospital Phurla	2017	12	12,13,14	Batch 28	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from CH Phurla	18
N81	Mansehra	DHO Office Mansehra	2017	12	12,13,14	Batch 1	2 Day	Outbreak Response Team Training	Medical Officers & Medical Technician	18
N82	Mansehra	RHC Shinkari	2017	12	20,21,22	Batch 29	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from BHU Dharyal	29
N83	Lakki Marwat	City Hospital Lakki Marwat	2017	12	27,28	Batch 1	2 Day	Routine Immunization Training	Paramedics (LHV, M.T & F.M.T)	27
N84	Nowshera	DHO Office Nowshera	2018	1	2,3	Batch 1	2 Day	Routine Immunization Training	Lady Health Supervisors	23
N85	Nowshera	DHO Office Nowshera	2018	1	4,5	Batch 2	2 Day	Routine Immunization Training	Lady Health Supervisors	19
N86	Mansehra	RHC Shinkari	2018	1	24,25,26	Batch 30	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) CH Nawazabad 2) BHU Kotli Bala 3) RHC Shinkari	24
N87	Lakki Marwat	City Hospital Lakki Marwat	2018	1	29,30	Batch 1	2 Day	Routine Immunization Training	Lady Health Visitors Female Medical Technician Lady Health Supervisor	15
N88	Mansehra	RHC Chowki	2018	2	20,21,22	Batch 31	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from RHC Chowki	29
N89	Mansehra	BHU Sande Sar	2018	2	26,27,28	Batch 32	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) BHU Parran Khairabad 2) BHU Sandesar 3) BHU Doga	20
N90	Mansehra	RHC Khawari	2018	3	6,7,8	Batch 33	3 Day	Lady Health Workers Training on Routine Immunization Services	Lady Health Workers from 1) BHU Lissan Thakral 2) RHC Khawari	19
N91	Lakki Marwat	City Hospital Lakki Marwat	2018	3	19		1 Day	Social Mobilization Workshop	Union Council Medical Officers	27
N92	Lakki Marwat	City Hospital Lakki Marwat	2018	3	20		1 Day	Social Mobilization Workshop	ComNet Staff	42
N93	Lakki Marwat	City Hospital Lakki Marwat	2018	3	21,22	Batch 1	2 Day	Routine Immunization Training	Lady Health Supervisors	21
N94	Mansehra	DHO Office Mansehra	2018	5	10,11,12	Batch	3 Day	Cold Chain Equipment Maintenance & Management Training for 25 Districts of KP	Store Keepers from 25 Districts & Provincial EPI	27



## Annex 1-4 List of Monitoring and Supervision

Monitoring & Supervision Vists Summary in Target Districts								
S.no	Target District	Venue of Training	Year	Month	Date	Duration of Training	Description of Training	Participants / Health Facilities
N1	Mansehra	11 Health Facilities in District Mansehra	2017	2	6,7,8,9	4 Day	Monitoring & Supervision of Different Health Facilities	EPI Centers
N2	Nowshera	5 Health Facilities in District Nowshera	2017	3	27,28,29	3 Day	Monitoring & Supervision of Different Health Facilities	EPI Centers
N3	Lakki Marwat	3 Health Facilities in District Lakki Marwat	2017	4	4,5	2 Day	Monitoring & Supervision of Different Health Facilities	EPI Centers
N4	Mansehra	Naran-Kaghan	2017	8	7,8,9,10,11	5 Day	Mobile Outreach Routine Immunization Activity 1st Round	District Mansehra EPI Team and JICA SRI Staff
N5	Mansehra	Naran-Kaghan	2017	10	24,25,26	3 Day	Mobile Outreach Routine Immunization Activity 2nd Round	District Mansehra EPI Team and JICA SRI Staff
N6	Lakki Marwat	5 Health Facilities in Lakki Marwat	2018	2	21-22	2 Day	Monitoring & Supervision of Different Health Facilities	EPI Centers 1) BHU Land Ahmed Khel 2) BHU Gandhi Khan Khel 3) City Hospital Lakki 4) THQ Serai Nourang 5) BHU Mama Khel
N7	Nowshera	5 Health Facilities in District Nowshera	2018	3	20,21	2 Day	Monitoring & Supervision of Different Health Facilities	EPI Centers 1) Type D Hospital Manki Sharif 2) BHU Pahari Kati Khel 3) RHC Khairabad 4) BHU Mughalki 5) BHU Shelkhi
N8	Mansehra	5 Health Facilities in Mansehra	2018	4	23,24	2 Day	Monitoring & Supervision of Different Health Facilities	EPI Centers 1) PTP Point 2) BHU Jared 3) RHC Kewai 4) CH Kaghan 5) BHU Naran 6) THQ Hospital Balakot
N9	Nowshera	4 Health Facilities in Nowshera	2018	5	7,8	2 Day	Monitoring & Supervision of Different Health Facilities	EPI Centers 1) Spin Khaak 2) Akbar Pura 3) Chokki Mumraiz 4) Daag Ismail Khel

## Annex 2 List of Products

Product	Target audiences
<b>Output 1: Effective Vaccines Management</b>	
1. Vaccines Management monitoring form	EPI Technicians Cold room operators
2. CCE&M Training needs assessment	Provincial EPI
3. EPI logistics and vaccine management assessment	Provincial EPI
4. CCE&M Training curriculum and materials	Cold chain technicians (2016)
	Storekeepers (2018)
<b>Output 2: Service Delivery</b>	
1. Supervision checklist (pilot version, until federal one is confirmed)	EPI supervisors (TSV, FSV, DSV) at district level
2. Routine Immunization training materials for EPI workers	EPI Technicians
	LHWs
	UCMOs, MTs
	Newly recruited EPI technicians
3. Baseline survey on LHWs and EPI technicians (gap analysis)	Provincial EPI
4. LHWs pocket manuals for routine immunization	LHWs in 3 districts
5. Micro-plan charts and immunization progress charts	EPI Technicians
<b>Output 3: Surveillance</b>	
1. VPD surveillance training materials	District EPI coordinators (2016)
	UCMOs
2. Outbreak responses training materials	MTs, MOs
3. IDSRs List of notifiable diseases panel	All health centers in Mansehra / MOs
4. Quick reference for outbreak investigators (on responses)	Outbreak responses team members, Mansehra
<b>Output 4: Social Mobilization</b>	
1. Microplanning training materials	LHWs, UCMOs, EPI technicians, local influentials
2. IEC materials/poster for LHWs (immunization recall tools)	LHWs, mothers
3. Base-line KAPB survey	Provincial EPI
4. End-line KAPB survey	Provincial EPI

5. Social mobilization training materials	EPI technicians, UCMOs, LHWs, paramedics, etc.
6. Fact sheet on social mobilization in hard-to-reach areas	Districts in KP, CSOs, development partners

# Annex 3-1 PDM Version 2, June 2015

(Ver.2) 10 June 2015

## 【Project Design Matrix (PDM)】

Project for Strengthening Routine Immunization in Khyber Pakhtunkhwa Province

Project Area : Khyber Pakhtunkhwa Province

Target Districts : Mansehra, Nowshera and Lakki Marwat

Target Groups : Health officials related to routine immunization activities

Beneficiaries : Children under the age of two in Khyber Pakhtunkhwa Province

Duration : 3 years from 12/11/2014 to 11/11/2017

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<b>Overall Goal</b>			
The morbidity of vaccine preventable diseases (VPDs) is reduced in Khyber Pakhtunkhwa Province	1. VPD morbidity rate is decreased.	1. Khyber Pakhtunkhwa Province DOH annual EPI review reports 2. VPD surveillance reports	
<b>Project Purpose</b>			
The routine immunization service provided in the Khyber Pakhtunkhwa Province is strengthened.	1. More than 70% of districts develop the District EPI plan and present the achievements on an annual review meeting 2. More than 70% of districts develop costed plan of Cold Chain Equipment Maintenance and Management and managed to conduct a maintenance / replacement / repairment according to their plan 3. 10% increase in Measles 1 coverage by 2017 in the target district. 4. More than 80% Union Councils (UCs) in the target district achieve 90% coverage of Penta 3 by 2017. 5. Dropout rate of Penta 1-Penta 3 decreases to less than 10% in the target district by 2017 6. More than 70% districts submit weekly VPD report in a proper manner (timeliness and completeness) to provincial EPI from all sentinel sites.	1. District EPI plan, Annual review meeting report 2. Costed plan of Cold Chain Equipment Maintenance and Management, the records of the post-training follow-up supervision 3-5. The minutes of monthly meeting on EPI at district level Khyber Pakhtunkhwa Province DOH annual EPI review report. 6. weekly VPD surveillance reports made by district(s)	1. The budget required for routine immunization services is secured by the DOH and DHOs. 2. The supply of vaccines is secured by the Federal level. 3. Outbreak of infectious diseases and natural disasters do not cause negative impact on the implementation of the project.
<b>Outputs</b>			
1. <b>Capacity for vaccine management</b> including cold chain management, repair/maintenance of cold chain equipment and vaccine logistics in the routine immunization services of DOH is strengthened.	1. Regular Vaccine Management Committee conducted (Biannually at Provincial level and quarterly at District Level) 2. 80% of the EPI service delivery points, store houses and transport utilize the Vaccine Management Monitoring Form and report to responsible persons in a timely manner in target district(s) 3. More than 90% of EPI workers receive training on every EPI component and score over 80% on post-test. 4. More than 80% of EPI service delivery points, store houses and transport receive supervision in target district(s)	1. Minutes of Vaccine Management Committee at provincial and district level 2. Data monitoring form 3. The records of the training 4. Visitor book at the health facilities/ EPI service delivery points and monitoring reports for supervision, field interview	1. The master trainers and health officials who have the training continue their assignments for routine immunization services in Khyber Pakhtunkhwa province.
2. <b>Capacity of staffs for service delivery</b> in routine immunization (including newly introduced antigens) is strengthened.	1. More than 90 % of service delivery staffs receive training in the target district(s) 2. All the trainees obtain a minimum mark of 80 % of the post-training test. 3. All health facilities in the target district gain a minimum mark of 75% in the check list for quality of service provision during the supervision 4. More than 80% of EPI service delivery points receive at least one visit per month by DHO, EPI Coordinator, DSV, or TSV in a target district 5. 90% UCs in the target district achieve at least 10% increase of	1. Staff training records and Provincial annual review 2. Results of the post-training test. 3. Results of the check list 4. Visitor book at the health facilities/ EPI service delivery points and monitoring form for supervision 5. Annual provincial EPI review PPHI report 6. Immunization reports at district level	1. The master trainers and health officials who have the training continue their assignments for routine immunization services in Khyber Pakhtunkhwa province.

	<p>fully immunized children</p> <p>6. 100% of UCs submit the immunization reports (especially on fully immunized children) to DHO in the target district</p>		
<p>3. <i>Capacity for surveillance systems</i> in the routine immunization services by the DOH is strengthened.</p>	<p>1. 100% of health facilities in charge receive training for VPD surveillance in the target district</p> <p>2. More than 90% of the UCs submit weekly zero reports from zero reporting sites in the target districts</p> <p>3. More than 90% of outbreak clusters are investigated and responded by the district and the province in a timely manner</p> <p>4. Target districts obtain satisfactory WHO Data Quality Self-assessment (DQS) score/marks</p>	<p>1. Training report(s)</p> <p>2. Weekly district VPD reports. The situation analysis and surveys reports</p> <p>3. Outbreak investigation reports</p> <p>4. WHO Data Quality Self-assessment (DQS) report</p>	
<p>4. <i>Capacity for social mobilization</i> activities for the communities in the routine immunization services by the DOH is strengthened.</p>	<p>1. More than 80% of UCs make EPI micro plans through community involvement in the target district</p> <p>2. More than 80% UCs implement the communication tools for social mobilization in the target district</p> <p>3. 100% target districts develop immunization recall tools</p> <p>4. In the End-line KAPB survey, the information on immunization, provided by LHWs and EPI technicians increases up to 30% compared to the rate in the Base-line survey in the target district</p>	<p>1. Minutes of monthly meetings with LHWs and EPI micro plans</p> <p>2. Communication materials for social mobilization</p> <p>3. Immunization schedule recall tools</p> <p>4. Base-line KAPB survey and End-line KAPB survey reports</p>	

Activities	Inputs	Pre-conditions	
<p><b>[Vaccine Management]</b></p> <p>1-1. Conduct an assessment on EPI logistics and Vaccine Management</p> <p>1-2. Support the Vaccine Management Committee (VMC) to be conducted on regular bases at both Provincial and District Level</p> <p>1-3. Assess a current cold chain inventory and management status and develop a training plan for cold chain mechanics</p> <p>1-4. Conduct a training needs assessment, reflecting on EVM assessment especially on vaccine quality and quantity management for EPI workers at the target district</p> <p>1-5. Conduct ToT for designated EPI workers, which includes vaccine management, EPI logistics and maintenance / management of cold chain equipment (combine with 2.4)</p> <p>1-6. Conduct training of Vaccine Management and Logistics for responsible persons for EPI at district level</p> <p>1-7. Conduct training of Vaccine Management and Logistics for EPI workers at UC / health facility level in the target districts (combine with 2.6)</p> <p>1-8. Conduct training on maintenance of cold chain equipment for cold chain technicians / Cold Room operators</p> <p>1-9. Strengthening the EVM monitoring system at district level especially in the target district(s)</p> <p>1-10. Support development of a post-training monitoring and supervision mechanism for Vaccine Management in the target district</p> <p><b>[Immunization Service Delivery]</b></p> <p>2-1. To conduct Baseline KAPB survey on LHWs and EPI technicians in the target districts (Gap analysis)</p> <p>2-2. To strengthen the regular quarterly meeting for the review of EPI activities at provincial level</p> <p>2-3. To organize the regular meeting with DHOs, DSM, EPI Coordinators, DSVs, and LHSs to share the information, findings and gaps in relation to the delivery of immunization services in the target district</p> <p>2-4. To conduct ToT for Master Trainers for EPI workers' training</p> <p>2-5. To update/ modify the training materials for EPI workers based on the KAPB survey</p> <p>2-6. To conduct training for LHWs and LHSs in the target district</p> <p>2-7. To conduct training for EPI workers</p> <p>2-8. To conduct training on EPI micro-planning for EPI technicians and health facility in-charge</p> <p>2-9. To conduct follow-up supervision of the training</p> <p>2-10. To develop a post-training monitoring mechanism for immunization service delivery including social</p>	<p><b>[Japan]</b></p> <p>&lt;Dispatch of experts&gt;</p> <p>-Long-term-</p> <p>Social Mobilization Expert</p> <p>Project Coordinator/Training Expert</p> <p>-Shuttle type-</p> <p>Chief Advisor</p> <p>-Short-term-</p> <p>Vaccine logistics</p> <p>Cold chain management</p> <p>Surveillance</p> <p>&lt;Training in Japan&gt;</p> <p>Counterpart training</p> <p>&lt;Equipment&gt;</p> <p>Cold-chain equipment, etc.</p>	<p><b>[Pakistan]</b></p> <p>&lt;Personnel&gt;</p> <p>-DOH-</p> <p>Director General Health Services * Project Director</p> <p>Deputy Director EPI * Project Manager</p> <p>Assistant Director EPI</p> <p>Training Coordinator</p> <p>Cold-chain Coordinator</p> <p>Communication Coordinator (Social Mobilization)</p> <p>EPI Data Coordinator (statistician)</p> <p>Provincial Coordinator for Lady Health Workers Program</p> <p>-DHO s in the all Districts</p> <p>DHO/DDHO</p> <p>EPI coordinator</p> <p>District Monitoring Coordinator</p> <p>District Surveillance Coordinator</p> <p>DSV</p> <p>EPI supervisor including TSVs &amp; FSVs</p> <p>EPI technicians / Vaccinators</p> <p>Cold-chain officer (Mechanic, Operator, Technician)</p> <p>Communication officer (Social Mobilization)</p> <p>COMNet Personnel</p> <p>National Program Coordinator</p> <p>Assistant National Program Coordinator</p> <p>Account Supervisors</p>	<p>1. The implementation system of routine immunization services in collaboration between routine immunization program and LHW program continue in Khyber Pakhtunkhwa Province.</p> <p>2. The health officials are assigned in the DOH and DHOs according to the requirement of the posts to deliver routine immunization services.</p> <p>3. The security situation in Khyber Pakhtunkhwa Province does not cause negative impact on the implementation of the project.</p>

<p>mobilization</p> <p>2-11. To discuss and prepare a need-based training plan with district management</p> <p><b><i>【Surveillance】</i></b></p> <p>3-1. To conduct situation analysis of surveillance systems</p> <p>3-2. To conduct surveys on surveillance systems in the target district(s)</p> <p>3-3. To conduct training of VPD surveillance for EPI coordinators</p> <p>3-4. To conduct training of VPD surveillance for UC MO in the target district</p> <p>3-5. To develop the plans of effective district monitoring systems in the target district(s)</p> <p>3-6. To develop a post-training monitoring mechanism for surveillance in the target district(s)</p> <p>3-7. To support feedback on the information about VPD surveillance and outbreak investigation from province to districts</p> <p>3-8. To report VPD surveillance and monitoring findings in the monthly coordination meeting between EPI Coordinators, DSMs, Epidemiologists, DSVs and partners in the target district(s)</p> <p><b><i>【Social mobilization】</i></b></p> <p>4-1. To conduct data assessment meeting with DHOs and EPI officers in the target districts</p> <p>4-2. To conduct the base-line KAPB survey in the target districts</p> <p>4-3. To conduct community action planning to integrate it into micro-plan in the target district</p> <p>4-4. To conduct training of social mobilization for EPI-related staffs including MOs, LHVs, LHSs, LHWs, and EPI technicians in the target district</p> <p>4-5. To conduct community events in the target districts</p> <p>4-6. To develop culturally appropriate messages in the target districts</p> <p>4-7. To develop Immunization recall and motivation tools in the target districts</p> <p>4-8. To conduct the end-line KAPB survey in the target districts</p> <p>4-9. To hold workshops on social mobilization to share the results for expanding activities in other districts of Khyber Pakhtunkhwa</p>		<p>LHS</p> <p>LHV and LHW</p> <p>·Others·</p> <p>Security Officer, etc.</p> <p>&lt;Administrative cost&gt;</p> <p>&lt;Operating cost&gt;</p> <p>&lt;Vaccines&gt;</p> <p>&lt;Facility&gt;</p> <p>Project offices in Peshawar and Abbottabad</p> <p>Training facilities, etc.</p>	
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DHO: District Health Office, DOH: Department of Health, DSV: District Superintendent Vaccination, EPI: Expanded Program on Immunization, EVM: Effective Vaccine Management, KAPB: Knowledge, Attitude and Practice and Behavior, LHS: Lady Health Supervisor, LHV: Lady Health Visitor, LHW: Lady Health Worker, MO: Medical Officer, TSV: Tehsil Superintendent Vaccination, UC: Union Council

Target district:

**【Output 1】** 1-1. Mansehra, 1-2. Provincial office & Mansehra, Nowshera and Lakki Marwat 1-3. Assessment in Mansehra, Nowshera and Lakki Marwat 1-4. Manshera 1-5. Mansehra 1-6. All 25 Districts 1-7. Mansehra 1-8. All 25 Districts 1-9. Mansehra (possibly Nowshera and Lakki Marwat) 1-10. Mansehra

**【Output 2】** Mansehra (except 2-1: Mansehra, Nowshera and Lakki Marwat)

**【Output 3】** 3-1, 3-2, 3-5, 3-6 and 3-8: Mansehra (Nowshera and Lakki Marwat), 3-3, 3-7: All 25 districts, 3-4: Mansehra

**【Output 4】** Mansehra, Nowshera and Lakki Marwat (except 4-3 and 4-4: Mansehra)

# Annex 3-2 PDM Version 20, May 2017

(Ver.20) 27 May 2017

## 【Project Design Matrix (PDM)】

**Project for Strengthening Routine Immunization in Khyber Pakhtunkhwa Province**

**Project Area** : Khyber Pakhtunkhwa Province

**Target Districts** : Mansehra, Nowshera and Lakki Marwat

**Target Groups** : Health officials related to routine immunization activities

**Beneficiaries** : Children under the age of two in Khyber Pakhtunkhwa Province

**Duration** : 3 years and 7 months from 12/11/2014 to 11/06/2018

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions	Achievement	Remarks
<b>Overall Goal</b>					
The morbidity of vaccine preventable diseases (VPDs) is reduced in Khyber Pakhtunkhwa Province	1. VPD morbidity rate is decreased.	1. Khyber Pakhtunkhwa Province DOH annual EPI review reports 2. VPD surveillance reports		Mixed results	Annual review report 2016 indicates decreased trends in uptaking of vaccinations but that is a result of good governance with real data.
<b>Project Purpose</b>					
The routine immunization service provided in the Khyber Pakhtunkhwa Province is strengthened.	1. All districts develop the District EPI plan and present the achievements on an annual review meeting 2. More than 70% of districts utilize and receive vaccines from divisional warehouses by 2017 3. 10% increase in Measles 1 coverage by 2017 in the target	1. District EPI plans, Annual review meeting report 2. Costed plan of Cold Chain Equipment Maintenance and Management, the records of the post-training	1. The budget required for routine immunization services is secured by the DOH and DHOs. 2. The supply of vaccines is	1. On-track 2. To be implemented from 2017 3. TBC 4. TBC 5. TBC 6. Expected	Target 2 was added in this version of the PDM, to better reflect the changing supply management schemes, utilizing district warehouses.



	<p>districts.</p> <ol style="list-style-type: none"> <li>4. More than 80% Union Councils (UCs) in the target district achieve 90% coverage of Penta 3 by 2017.</li> <li>5. Dropout rate of Penta 1-Penta 3 decreases to less than 10% in the target district by 2017</li> <li>6. More than 70% UCs in target districts submit weekly VPD report in a proper manner (timeliness and completeness) to provincial EPI</li> </ol>	<p>follow-up supervision</p> <ol style="list-style-type: none"> <li>3-5. The minutes of monthly meeting on EPI at district level Khyber Pakhtunkhwa Province DOH annual EPI review report. (Baseline: PSLM 2014-15)</li> <li>6. weekly VPD surveillance reports made by district(s)</li> </ol>	<p>secured by the Federal level.</p> <ol style="list-style-type: none"> <li>3. Outbreak of infectious diseases and natural disasters do not cause negative impact on the implementation of the project.</li> </ol>		
Outputs					
<ol style="list-style-type: none"> <li>1. <b>Capacity for effective vaccine management</b> including cold chain management and vaccine logistics in the routine immunization services of DOH is strengthened.</li> </ol>	<ol style="list-style-type: none"> <li>1. Regular discussion at the provincial level on vaccine management is held</li> <li>2. 80% of the fixed EPI centers store houses and transport utilize the Vaccine Management Monitoring Form and report to responsible persons in a timely manner in target districts</li> <li>3. More than 90% of EPI workers receive training on every EPI component and score over 80% on post-test.</li> <li>4. More than 80% of fixed EPI centers, store houses and transport receive at least one supervision visit per two months in target district(s)</li> </ol>	<ol style="list-style-type: none"> <li>1. Minutes of Vaccine Management Committee or equivalent at provincial level</li> <li>2. Data monitoring form</li> <li>3. The records of the training</li> <li>4. Monitoring and supervision reports, field interview</li> </ol>	<ol style="list-style-type: none"> <li>1. The master trainers and health officials who have the training continue their assignments for routine immunization services in Khyber Pakhtunkhwa a province.</li> </ol>	<ol style="list-style-type: none"> <li>1. On track: weekly provincial EOC meeting held.</li> <li>2. TBC</li> <li>3. 100% of EPI technicians (old) in Nowshera&amp; Lakki and new EPI technicians in Mansehra received training and about 80% of them scored more than 80% on post-test.</li> <li>4. Supervision conducted monthly, yet not reaching all fixed facilities</li> </ol>	



<p>2. <b>Capacity of staffs for service delivery</b> in routine immunization (including newly introduced antigens) is strengthened.</p>	<ol style="list-style-type: none"> <li>1. More than 90 % of service delivery staffs receive training in the target districts.</li> <li>2. All the trainees obtain a minimum mark of 80 % of the post-training test.</li> <li>3. All health facilities in the target district gain a minimum mark of 75% in the check list for quality of service provision during the supervision</li> <li>4. More than 80% of fixed EPI centers receive at least one visit per two months by DHO, EPI Coordinator, DSV, or TSV in a target district</li> <li>5. 100% of UCs submit the immunization reports (especially on fully immunized children) to DHO in the target district</li> </ol>	<ol style="list-style-type: none"> <li>1. Staff training records and Provincial annual review</li> <li>2. Results of the post-training test.</li> <li>3. Results of the check list</li> <li>4. Visitor book at the health facilities/ EPI service delivery points and monitoring form for supervision</li> <li>5. Immunization reports at district level</li> </ol>	<ol style="list-style-type: none"> <li>1. The master trainers and health officials who have the training continue their assignments for routine immunization services in Khyber Pakhtunkhwa province.</li> </ol>	<p>1./2. On track (see Output 1.)  3./4. To be accelerated in the remaining project period  5. On track</p>	<p>Target 5. Has been changed</p> <p>Removed one target: “90% UCs in the target district achieve at least 10% increase of fully immunized children” as this is an indicator for the Project Purpose level.</p>
<p>3. <b>Capacity for surveillance systems</b> in the routine immunization services by the DOH is strengthened.</p>	<ol style="list-style-type: none"> <li>1. 100% of health facilities in charge receive training for VPD surveillance in the target districts</li> <li>2. Training modules on VPD surveillance are fully integrated into the existing and newly established integrated surveillance systems at the provincial level</li> <li>3. More than 90% of outbreak clusters are investigated and responded by the district and the province in a timely manner</li> </ol>	<ol style="list-style-type: none"> <li>1. Training report(s)</li> <li>2. Training curriculum(s) for IDSRS</li> <li>3. Outbreak investigation reports</li> </ol>		<ol style="list-style-type: none"> <li>1. All health facilities in charge and UCMOs in Lakki and Nowshera were trained on VPD in IDSRS training. Plan for Mansehra in the next quarter.</li> <li>2. Completed</li> <li>3. To be addressed in the remaining project period.</li> </ol>	<p>Original targets: “ More than 90% UCs submit weekly zero reports” and “Target districts obtain satisfactory WHO-DQS score” were removed, as they are already covered in the project purpose.</p> <p>Target 2 was</p>

					added in responding to the introduction of IDSRS.
4. <b>Capacity for social mobilization</b> activities for the communities in the routine immunization services by the DOH is strengthened.	<ol style="list-style-type: none"> <li>1. More than 80% of UCs make EPI micro plans through community involvement in the target district</li> <li>2. More than 80% UCs utilize the communication tools for social mobilization in the target district</li> <li>3. 100% target districts develop immunization recall tools</li> <li>4. In the End-line KAPB survey, the information on immunization, provided by LHWs and EPI technicians increases up to 30% compared to the rate in the Base-line survey in the target district</li> </ol>	<ol style="list-style-type: none"> <li>1. Minutes of monthly meetings with LHWs and EPI micro plans</li> <li>2. Communication materials for social mobilization</li> <li>3. Immunization schedule recall tools</li> <li>4. Base-line KAPB survey and End-line KAPB survey reports</li> </ol>		<ol style="list-style-type: none"> <li>1. On-track</li> <li>2. On-track</li> <li>3. Mansehra and Lakki completed; Nowshera to be followed up.</li> <li>4. TBC (End-line KAP to be conducted in Aug. 2017)</li> </ol>	Promising outcomes are seen in selected UCs/villages that are hard-to-reach and supported by CHIP activities.

Activities	Inputs		Pre-conditions
<b>【Vaccine Management】</b> 1-1. Conduct an assessment on EPI logistics and Vaccine Management 1-2. Support the regular discussion on vaccine management to be conducted on regular bases at Provincial and District Level 1-3. Periodically assess a current cold chain inventory and management status and develop a training plan for cold chain mechanics 1-4. Conduct a training needs assessment, reflecting on EVM assessment especially on vaccine quality and quantity management for EPI workers at the target district 1-5. Conduct ToT for designated EPI workers, which includes vaccine	<b>【Japan】</b> <Dispatch of experts> -Long-term- Chief Advisor Project Coordinator -Shuttle type- Social Mobilization Expert	<b>【Pakistan】</b> <Personnel> -DOH- Director General Health Services * Project Director Deputy Director EPI * Project Manager Assistant Director EPI Training Coordinator Cold-chain Coordinator	1. The implementation system of routine immunization services in collaboration between routine immunization program and LHW program continue in

<p>management, EPI logistics and maintenance / management of cold chain equipment (combine with 2.4)</p> <p>1-6. Conduct training of Vaccine Management and Logistics for responsible persons for EPI at district level and at divisional stores</p> <p>1-7. Conduct training of Vaccine Management and Logistics for EPI workers at UC / health facility level in the target districts (combine with 2.7)</p> <p>1-8. Conduct training on maintenance of cold chain equipment for cold chain technicians / Cold Room operators (including staff in newly established divisional stores)</p> <p>1-9. Equip the divisional stores with workshops and tools to support district warehouses in preventive maintenance of cold chain equipment</p> <p>1-9. Strengthening the EVM monitoring system at district level especially in the target district(s)</p> <p>1-10. Support development of post-training monitoring and supervision mechanisms for vaccine management in the target districts and at divisional stores</p>	<p>-Short-term- Vaccine logistics Cold chain management Surveillance Monitoring and supervision</p> <p>&lt;Training in Japan&gt; Counterpart training</p> <p>&lt;Equipment&gt; Cold-chain equipment, etc.</p>	<p>Communication Coordinator (Social Mobilization) EPI Data Coordinator (statistician) Provincial Coordinator for Lady Health Workers Program -DHO s in the all Districts DHO/DDHO EPI coordinator District Monitoring Coordinator District Surveillance Coordinator DSV EPI supervisor including TSVs &amp; FSVs EPI technicians / Vaccinators Cold-chain officer (Mechanic, Operator, Technician) Communication officer (Social Mobilization) COMNet Personnel National Program Coordinator Assistant National</p>	<p>Khyber Pakhtunkhwa Province. 2. The health officials are assigned in the DOH and DHOs according to the requirement of the posts to deliver routine immunization services. 3. The security situation in Khyber Pakhtunkhwa Province does not cause negative impact on the implementation of the project.</p>
<p><b>[Immunization Service Delivery]</b></p> <p>2-1. Conduct Baseline KAPB survey on LHWs and EPI technicians in the target districts (Gap analysis)</p> <p>2-2 Strengthen the regular quarterly meeting for the review of EPI activities at provincial level</p> <p>2-3. Conduct ToT for Master Trainers for EPI technicians' training</p> <p>2-4. Update/ modify the training materials for EPI workers based on the KAPB survey</p> <p>2-5. Conduct training for LHWs and LHSs in the target district (Manshra)</p> <p>2-6. Conduct training for EPI technicians, including those who were newly</p>			<p>&lt;Issues and countermeasures&gt; External assistance (financial and technical) is changing the landscape of the EPI program in KP province. This version of the PDM was aligned</p>

<p>recruited under KP-ISP</p> <p>2-7. Conduct training on EPI micro-planning for EPI technicians and health facility in-charge</p> <p>2-8. Conduct follow-up supervision of the training, in accordance with the supervision plans for health facilities (with fixed EPI centers) of the target districts</p> <p>2-9. Develop and initiate EPI human resources development plan at provincial level</p> <p>2-10. Organize a dissemination workshop on lessons learned from activities related to EPI human resources development in the target districts</p> <p><b><i>[Surveillance]</i></b></p> <p>3-1. Conduct situation analysis of surveillance systems</p> <p>3-2. Conduct surveys on surveillance systems in the target districts</p> <p>3-3. Conduct training of VPD surveillance for EPI coordinators</p> <p>3-4. Conduct training of VPD surveillance for UC MO in the target districts</p> <p>3-5. Establish the systems of routine supervision for VPD surveillance in the target districts</p> <p>3-6. Support establishment and operationalizing of the outbreak response teams in target districts</p> <p>3-7. Support feedback on the information about VPD surveillance and outbreak investigation from province to districts</p> <p>3-8. Facilitate integration of VPD surveillance component into the new and /or upgraded disease surveillance systems at provincial level (i.e., IDSRS)</p> <p><b><i>[Social mobilization]</i></b></p> <p>4-1. Conduct data assessment meeting with DHOs and EPI officers in the</p>		<p>Program Coordinator</p> <p>Account Supervisors</p> <p>LHS</p> <p>LHV and LHW</p> <p>-Others-</p> <p>Security Officer, etc.</p> <p>&lt;Administrative cost&gt;</p> <p>&lt;Operating cost&gt;</p> <p>&lt;Vaccines&gt;</p> <p>&lt;Facility&gt;</p> <p>Project offices in Peshawar and Abbottabad</p> <p>Training facilities, etc.</p>	<p>to those changing context, e.g., adjusting surveillance-related activities and target to be in line with the newly introduced IDSRS; to re-focus on divisional warehouses as the vaccines logistics systems to be changed. Also adjusted was the target number of vaccinators and other cadres of people trained, as the KP province is hiring new (e.g., doubling the number of vaccinators) EPI workers under KP-ISP.</p>
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<p>target districts</p> <p>4-2. Conduct the base-line KAPB survey in the target districts</p> <p>4-3. Conduct community action planning to integrate it into micro-plan in the target districts</p> <p>4-4. Conduct training of social mobilization for EPI-related staffs including MOs, LHVs, LHSs, LHWs, and EPI technicians in the target districts</p> <p>4-5. Conduct community events in the target districts</p> <p>4-6. Develop culturally appropriate messages in the target districts</p> <p>4-7. Develop information materials and/or tools that remind schedule and motivate immunization uptake in the target districts</p> <p>4-8. Conduct the end-line KAPB survey in the target districts to assess the impact of social mobilization activities</p> <p>4-9. Hold workshops on social mobilization to share the results and lessons learned to inform similar activities in other districts of Khyber Pakhtunkhwa</p>			
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DHO: District Health Office, DOH: Department of Health, DSV: District Superintendent Vaccination, EPI: Expanded Program on Immunization, EVM: Effective Vaccine Management, KAPB: Knowledge, Attitude and Practice and Behavior, LHS: Lady Health Supervisor, LHV: Lady Health Visitor, LHW: Lady Health Worker, MO: Medical Officer, TSV: Tehsil Superintendent Vaccination, UC: Union Council

Target district:

**[Output 1]** 1-1. Mansehra, 1-2. Provincial office and Mansehra, Nowshera and Lakki Marwat 1-3. Assessment in Mansehra, Nowshera and Lakki Marwat 1-4. Manshera 1-5. Mansehra 1-6. All 25 Districts 1-7. Mansehra, Nowshera and Lakki Marwat 1-8. All 25 Districts 1-9. Mansehra (possibly Nowshera and Lakki Marwat) 1-10. Mansehra

**[Output 2]** 2-1, 3. 4. 5. 7, 9, 10, 11: Mansehra, Nowshera and Lakki Marwat. 2-2: Provincial Office, 2-6 and 8: Mansehra

**[Output 3]** 3-1, 2: Mansehra, 3-3 and 7: 25 districts, 3-4, 5, 6 and 8: Mansehra, Nowshera and Lakki Marwat

**[Output 4]** Mansehra, Nowshera and Lakki Marwat (except 4-3)