

Joint Appraisal Update report 2019

The text in italics contained in this document can be deleted when preparing the Joint Appraisal (JA) Update Report.

Country	
Full JA or JA update¹	<input type="checkbox"/> full JA <input checked="" type="checkbox"/> JA update
Date and location of Joint Appraisal meeting	10 – 12 June 2019, Dushanbe, Tajikistan
Participants / affiliation²	MoHSSP RT, SI RCIP, Gavi, WHO, UNICEF, UNDP, One23, World Bank
Reporting period	2018
Fiscal period³	1 January – 31 December
Comprehensive Multi Year Plan (cMYP) duration	2016 - 2020
Gavi transition / co-financing group	<i>Preparatory transition</i>

1. RENEWAL AND EXTENSION REQUESTS

Renewal requests were submitted on the country portal

Vaccine (NVS) renewal request (by 15 May)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Does the vaccine renewal request include a switch request?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
HSS renewal request	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
CCEOP renewal request	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

2. GAVI GRANT PORTFOLIO

Existing vaccine support

Introduced / Campaign	Date	2017 Coverage (WUENIC) by dose	2018 Target		Approx. Value \$	Comment
			%	Children		
Penta	2008	96% (3 rd dose)	98	258,360	820,500	The Demography and Health Survey shows a lower coverage rate and the dropout rate of 6%
Rota	2015	97%	99	258,360	972,500	The Demography and Health Survey shows a lower coverage rate and the dropout rate of 6%
IPV	2018	na	100	258,360	581,000	The IPV vaccine was approved in 2015, however, it was introduced in June 2018. It was due to global vaccine availability related problems

¹ Information on the differentiation between full JA and JA update can be found in the Guidelines on reporting and renewal of Gavi support, <https://www.gavi.org/support/process/apply/report-renew/>

² If taking too much space, the list of participants may also be provided as an annex.

³ If the country reporting period deviates from the fiscal period, please provide a short explanation.

Existing financial support

Grant	Channel	Period	First disbursement	Cumulative financing status @ June 2018				Compliance	
				Comm.	Appr.	Disb.	Util.	Fin.	Audit
HSS2	TOTAL	2016-20	July 2017	9,7k	5,9 k	4,5 k :80%	1,4k: 60%	2018	N/A
	UNICEF	2016-20	July 2017	3,5 k	2,4 k	1,8 :68%	1,0k: 70%	2018	N/A
	WHO	2016-20	July 2017	2,6 k	1,7 k	860 k :65%	668k: 78%*	2018**	N/A
	UNDP	2016-20	October 2017	3,6 k	1,8 k	1,8 k :100%	0,1k: 35%	2018	N/A
HSS - PBF	UNDP	2019		460 k	460 k			N/A	N/A
CCEOP	TOTAL	2019-21		920 k	669 k			N/A	N/A
NVG - IPV	UNICEF	2018	July 2018	127 k	127 k	127 k : 100%	117 k: 92%***	2018	N/A
Comments									
* As specified in the WHO report provided during the JA									
** Interim Financial Report									
*** Financial Report as of the end of 2018									

Indicative interest to introduce new vaccines or request Health System Strengthening support from Gavi in the future⁴

Indicative interest to introduce new vaccines or request HSS support from Gavi	Programme	Expected application year	Expected introduction year
	Pneumococcal vaccine	2020	2021

Grant Performance Framework – latest reporting, for period 2018

Intermediate results indicator	Target	Actual
Number of PHC facilities functional in selected areas	5	0
Number of staff trained on MLM, VPD, AEFI, EVM, WM and Safe Injection training	220	307
Number of mobile teams established and equipped for the selected hard to reach areas/populations	6	0
Percentage of health workers in the selected districts, who acquired communication skills on immunization as a result of capacity building	0	0
Proportion of PHC workers in the selected districts trained on the defined home visiting service package	0	0
Comments		
As noted in the HSS sections below, some of the delayed activities negatively affecting the GPF indicators have significantly progressed in the first half of 2019. Some of the PHC facilities have been constructed and are now functional (3 by June 2019) and the mobile teams assessment should be finalized in September and equipped in Q3-Q4 2019.		

⁴ Providing this information does not constitute any obligation for either the country or Gavi, it merely serves for information purposes.

Countries are encouraged to highlight in subsequent sections, and particular in the Action Plan in Section 7, key activities and potentially required technical assistance for the preparation of investment cases, applications and vaccine introductions, as applicable.

PEF Targeted Country Assistance: Core and Expanded Partners at June 2019

	Year	Funding (US\$m)			Staff in-post	Milestones met	Comments
		Appr.	Disb.	Util.			
<u>Total: Core Partners</u>	2017	329,365	329,365	152,203	0,5	22 of 30	
	2018	782,568	782,568	158,070	1	40 of 40	
	2019	782,568	782,568	--	--	--	Reports on intermediate goals and the use of financial resources are not yet applicable for 2019.
UNICEF	2017	65,440	65,440	65,440	--	4 of 4	
	2018	98,928	98,928	98,928	--	8 of 8	
	2019	98,928	98,928	--	--	--	Reports on intermediate goals and the use of financial resources are not yet applicable for 2019.
WHO	2017	263,925	263,925	86,763	0,5 of 0,5	18 of 26	Additionally used at the regional level
	2018	483,640	483,640	59,142	1 of 1	32 of 32	Additionally used at the regional level
	2019	483,640	483,640	--	--	--	Reports on intermediate goals and the use of financial resources are not yet applicable for 2019.
WB	2018	200,000	200,000	200,000	--	2 of 2	Work plan is being developed
	2019	200,000	200,000	200,000			
<u>Total: Additional Partners</u>	2017	21,813	17,040	17,040	--	0 of 1	Reports on intermediate goals and the use of financial resources are not yet applicable for 2019.
	2018	454,857	222,486	222,486	--	10 of 12	
	2019	185,806	85,137	85,137	--	--	
One23	2017	21,813	17,040	17,040	--	0 of 1	
	2018	173,107	68,492	68,492	--	2 of 2	
Dalberg	2018	281,750	153,994	153,994	--	8 of 10	
	2019	185,807	85,137	85,137	--	--	

3. RECENT CHANGES IN COUNTRY CONTEXT AND POTENTIAL RISKS FOR NEXT YEAR

The JA update does not include this section.

4. PERFORMANCE OF THE IMMUNISATION PROGRAMME

The JA update does not include this section.

5. PERFORMANCE OF GAVI SUPPORT

5.1. Performance of Gavi HSS support (if country is receiving Gavi HSS support)

Tajikistan was awarded the GAVI Health System Strengthening (HSS) grant in 2017 of a total amount of US\$ 9.660.000 to be implemented over a period of five years. This funding support of the GAVI to the Ministry of Health and Social Protection of the Population (MoHSPP) is currently channeled through WHO, UNICEF and UNDP while the country is strengthening its financial and programme management systems. The project is designed to help maintain a high level of immunization coverage, including in areas with low population, as well as focusing on eliminating existing potential problems, such as poor access to PHC services, shortages in providing a cold chain, supply and routine data management, inadequate injection safety and waste management practices.

The GAVI HSS support aims to address these bottlenecks by achieving the following objectives:

1. Strengthening PHC capacity, with focus on the quality and safety of immunization services;
2. Improving equity in vaccination by increasing immunization coverage in low performing and hard-to-reach areas;
3. Improving the implementation of the National Health Strategy "Population Health of Tajikistan 2010-2020", with focus on immunization;
4. Improving the population's commitment to immunization and other MCH services.

According to the Partnership Framework Agreement, the first level of coordination mechanism - the Technical Working Group (TWG) has been established and regular meeting conducting with the purpose of coordination of the day to day management of HSS Programme. The TWG consists of technical and programmatic staff of the implementing partners – MoHSPP, RCIP, UNICEF, WHO, UNDP, and is open to the Gavi Secretariat. The TWG is chaired by the Deputy Minister of Health and Social Protection of Population and secretariat is running by the WHO Country Office. The TWG carries out periodic review and progress assessment of the Project activity and contributes to establishing mechanisms for the project sustainability in Tajikistan.

The Ministry of Health and Social Protection of Population of the Republic of Tajikistan, with the support of the executive agencies - UNICEF, WHO and UNDP, implemented the following activities under the GAVI HSS grant during the reporting period:

Objective 1: Strengthened capacity of PHC with focus on immunization service quality and safety.

Strengthened Cold Chain System: As part of Objective 1, UNICEF made significant progress in the implementation of one of the main components of the project – upgrading and strengthening cold chain through procurement of Cold Chain Equipment (CCE). In June 2018, upon receiving the report of the Cold Chain Equipment Inventory conducted by the WHO in 2017, UNICEF in close consultation with the WHO and RCIP colleagues developed a list and specifications of a priority cold chain equipment and initiated the procurement process. The following cold chain equipment were procured and delivered to the country and distributed to the districts and regions:

- 341 pcs of Ice-lined refrigerator for storage of vaccines (Model: Vestfrost) with capacity from 60 to 127L;
- 66 pcs freezers with water-pack storage capacity from 160 x 0.6 L to 256 x 0.6 L;
- 1040 cold boxes
- 1170 vaccine carriers 1.7L with the sufficient amount of the ice-packs.

In addition, 5 generators and 2 voltage stabilizers were procured and delivered to the Immunoprophylactic centers of Bokhtar, Rasht, Rudaki, and Dushanbe. A detailed distribution list is available and will be shared upon request.

To facilitate the installation process, development of a repair/maintenance plan and capacity building of health managers on the use and maintenance of the procured cold chain equipment, UNICEF contracted a local company. The company has been closely working with MOHSP and WHO experts in the development of a cold chain operational deployment plan for national, regional and levels. So far, 49 health managers at the national level, 74 in Sogd oblast, 70 in Bokhtar, 29 in Kulob, 40 in GBAO and 48 in RRS were trained by the company's expert on the use and maintenance of the equipment. In addition, the company identified potential refrigerator repair technicians across the country and trained 42 technicians on repair and maintenance of newly procured cold chain equipment. Now, the trained technicians are able to provide equipment repair services to the health centers in case of need for a repair of cold chain equipment. SOPs on the use and maintenance/repair of the equipment at the national and subnational level has been developed, printed and distributed during the training workshops.

Based on a request received from RCIP in May 2019, UNICEF has initiated the process of procurement of additional equipment, including 7 cold rooms for the national and regional levels.

Training of staff of immunization services in EVM. To support capacity strengthening of PHC with focus on immunization service quality and safety, the training courses on “Middle-level management”, “Immunization in practice” and “Training of trainers” were conducted in Tajikistan in August 2018 by a team of the WHO Collaborating Center for Immunization Training. The national trainings were followed in September 2018 by sub-national trainings for immunization service providers, including VPD, AEFI and Safe injection practices. Total 307 health professionals (GPF target 220 staff trained in 2018) representing PHC/RC/SES and Medical Academia were trained during these sessions to retain and strengthen the capacity of the immunization program of Tajikistan. To address the needs of health professionals, two national manuals on Immunization in Practice and Middle-level Management were developed based on the WHO Modules by the team of national experts. The manuals have been approved by the MoHSPP and recommended for use by the EPI and PHC staff, medical students of higher and secondary education institutions. The National Immunization Program is one of the main preventive health care services in Tajikistan. It is performed by about 2868 PHC facilities across the country (polyclinics and rural health centers) in both urban and rural areas as well as in maternity houses for newborns. According to the official data provided by the MoHSPP at the beginning of 2018, there are 2517 family doctors and 7324 family nurses working at the PHC level, including 3114 vaccinators who provide comprehensive immunization services.

In order to cover PHC staff at the service delivery level, the cascade training courses on MLM/IIP have been launched in April 2019 at the district level to cover 1630 PHC staff (mainly family doctors and mid-level medical personnel in some rural health centers) from Sogd and Kulob regions, GBAO and Rayons of Republican Subordination. During the reporting period, the share of doctors and mid-level medical personnel covered by trainings to ensure the provision of safe immunization services is about 30% of the total number of medical workers at the level of service provision. According to the project implementation plan, this year the trainings covered representatives of all district and rural health centers in four regions of the country. In the future, it is planned to continue training cycles with the aim of reaching at least one medical worker from each PHC facility in other regions, as well as additional training for all vaccinators on the practice of safe injections. Within promotion of supported supervision services, it is also planned to monitor the effectiveness of the provided training courses and their impact on the quality of immunization services provision to all categories of the population, including those living in hard-to-reach and remote regions of the country.

To ensure further sustainability, the WHO Modules on MLM and IIP have been institutionalized into curriculum of the State Institution “Republican Teaching and Clinical Center for Family Medicine (RTCFCM)” which has a mandate to implement and coordinate the development of family medicine in the Republic of Tajikistan, train family medicine professionals to improve quality of family medicine services and to ensure equitable access to health services at the PHC level. In the framework of the RTCFCM educational program, there are a 6-month primary specialization course in family medicine and 1-2-month advanced training courses in family medicine for family doctors and family nurses. For example, in 2018, the RTCFCM and its branches trained a total of 1,031 family doctors and nurses as part of the existing educational programs. Introduction of the WHO immunization modules in the existing educational programs will ensure the continuous coverage of medical workers with training courses in Mid-Level Management (MLM) and Immunization in Practice (IIP). Within the framework of the HSS project, training courses on MLM and IIP for 85 academic staff members of the RTCFCM are planned for June-July 2019 to support a comprehensive integration of safe immunization principles into the training program of RTCFCM both at the national and regional / district levels.

Introduce modern practices of waste management at the PHC level. As part of the implementation of modern medical waste management and injection safety practices at the PHC level in 2017, WHO supported an analysis of existing policies and environmental requirements with a set of recommendations for the revision and update the regulatory framework for the health care waste management of PHC facilities in relation to immunization. Also, criteria are being developed to identify PHC facilities for potential installation of HCWM equipment (including the technical specifications of the equipment to be procured). Local and international expertise are in place to ensure the implementation of all activities in line with WHO guidance.

Objective 2: Improving equity in vaccination by increasing immunization coverage in low performing and hard-to-reach areas

Assessment of mobile teams and patronage nurses: Towards increasing immunization coverage especially in the low performance and hard to reach areas, UNICEF hired an international consultant to support MOHSP in assessing the needs for patronage/home visiting services and mobile clinics in the targeted districts and based on the assessment results provide recommendations for strengthening of the mobile clinic and home visiting services. The consultant conducted a literature review and made his first inception visits to the country from August 25 to September 1, 2018 and submitted a draft report on the findings of the country visits. However, the consultant had thereafter indicated his unavailability to continue the work and thus his contract

with UNICEF was terminated. UNICEF through a new selection process hired a national consultant to complete the remaining tasks of this activity. The consultant conducted field visits and currently working on data analysis and preparing the final report. It is expected that the final report with the recommendations for further improvement of the existing regulatory framework including clear roles and responsibilities of home visiting nurses and mobiles teams will be ready by the end of September.

Procurement of vehicles for the immunization program: After approval of MoHSPP for specifications of vehicles procurement – refrigerators, trucks, off-road vehicles and spare parts – developed by UNDP CO to improve equity in vaccination by increasing immunization coverage in low performing and hard-to-reach areas, the tendering procedures completed, and the vehicles have been purchased. Following the results of the announced international tender, the resources were saved and based on agreement with RCIP 4 more off-road vehicles additionally were purchased and in total 20 off-road vehicles have been delivered to RCIP/MoHSPP instead of 16 planned. The tendering process for the remaining 5 vehicles is in process. RCIP/TWG recommended to cancel the large truck and purchase 3 small trucks instead of 2. RCIP/TWG recommended purchasing 6 medium-sized refrigerators instead of 3 large, in order to provide six regional branches of RCIP with required equipment's.

Construction of new and rehabilitation of existing health centers in selected areas: In accordance with the findings of the rapid assessment results, within the frame of which 9 PHC's were selected in 9 districts respectively, it was revealed that physical conditions of the PHC's were very poor. Resources which were initially allocated for rehabilitation of facilities (\$9 200 per PHC) were considered as insufficient to ensure appropriate quality of rehabilitation works. As a result of the consultations held among members of the technical working group it was decided to increase the budget for the rehabilitation activities from the \$9,200 to \$20,000. Consequently, the number of facilities which were planned to be rehabilitated were decreased from 116 to 52.

By the end of June 2019, UNDP completed the construction of 3 (three) new PHC's which were equipped and handed over to MoHSPP. Remaining 7 (seven) PHC's which are being constructed and 5 (five) PHC's undergoing rehabilitation are planned to be completed by the end of 2019.

In total, it is planned to construct 19 and rehabilitate 52 health facilities during the period of 2019-2021.

Objective 3: Improving implementation of the National Health Strategy “Population Health of Tajikistan 2010-2020” with focus on immunization and Objective 4: Improving readiness of population to immunization and MCH services.

Improve quality/reliability of routine data collection and reporting: To address the GPF intermediate results/output tailored indicators, and in line with the activities outlined in the Data Quality Improvement Plan, the technical mission of WHO EURO was organized to address recommendations of recent assessments of National Immunization Program in Tajikistan, as follows: improve the system for timely reporting of data, development and distribution of an electronic coverage monitoring tool, improving data management, and exploring with the MoHSPP the use the DHIS2 to manage immunization data. Demo version of the proposed scope is planned to be developed and presented by August 2019 for further implementation.

Regular measurement of the immunization system performance: WHO CO in collaboration with MoHSPP supported conduction of Vaccination Coverage Survey in 12 selected HSS project targeted districts to assess the vaccination coverage for routine immunization among children 12-35 months of age for all recommended vaccines/doses, including key qualitative indicators and coverage by equity dimensions. A total of 15680 pre-selected households were visited in 312 clusters in 12 districts during the survey. From the selected households, 5899 children were enrolled and completed the questionnaire. Most of children's vaccination status (93.5%) was documented and recorded either by immunization passport or by health facility-based records. Overall, crude estimated coverage was considered high for all vaccines in the most of selected districts. Despite the general high vaccination coverages, differences in timeliness in districts were found with high proportion of children vaccinated later than the eligible age. Efforts to maintain high coverage and improve timeliness of administration need to be ensured by provision of resources, timely procurement of supplies and training to health care workers, and communication strategies and activities to increase awareness have been recommended.

According to the initial project workplan, there are 3 standard immunization coverage evaluation surveys planned for the 5-year project. However, based on the findings of the above-mentioned survey conducted in 2018, it is proposed to reprogram the allocated funds for the implementation of measures aimed at addressing policy issues and systemic barriers that affect lack of immunization equity in order to ensure fair and efficient access to health services for all categories of the population.

Knowledge Attitude Practice and Behavior (KAPB) survey on immunization and development of an Immunization communication strategy.

To fulfill this task, UNICEF hired an international institution, namely Drexel University of Philadelphia, Pennsylvania, United States. The institution worked closely with the MOHSP, the Republican Healthy Life-Style Center (HLSC) and the Republican Immunoprophylactic Centre (RCIP) in conducting a quantitative and qualitative study on immunization and vaccine hesitancy in 12 districts (10 GAVI HSS focused districts plus Rudaki and Dushanbe were added in response to evidence of recent under-immunization and potential for disease outbreaks) of Tajikistan. The goal of the research was to identify key audiences and messages for addressing vaccine hesitancy, and improving knowledge, attitudes, and behaviors related to vaccine adherence.

The experts from the Drexel University made an inception visit on October 15-19 and based on the discussion and field observations finalized the inception report, survey design, and a study methodology. The report along with the survey tools was translated and shared with the national partners. During the second visit on November 26-29, the experts of the company conducted a training workshop for 30 field interviewers from different field offices of the HLSC on key aspects of the qualitative survey including field testing and finalization of the surveys plan. The field data collection took place between December 2018 and January 2019.

The study used a mixed-methods design, collecting both quantitative data through abstraction of immunization records and structured surveys with parents and caregivers, and qualitative data through focus groups with mothers, fathers, and mothers-in-law, and semi-structured one-on-one interviews with health care professionals and community leaders. The qualitative data were translated and transcribed, and thematically analyzed.

The findings of the study were shared with across sector of stakeholders on May 14th and the final report is ready to be shared with all relevant stakeholders.

Some conclusions of KAP study: The study has shown that most often it is due to insufficient awareness of families, fears and lack of understanding the importance of vaccination for child health, children do not get all the required vaccinations. Parents of fully vaccinated children have also noted a lack of knowledge. But, the most vulnerable in this connection have turned to be mothers under 24 years old and a group of parents who do not feel like receiving knowledge. Particularly vulnerable group of families has also included those residing in separate populated areas, whose access to vaccination is impeded by financial costs related to transportation. On the other hand, among families residing in the urban area, particularly in Dushanbe City and Rudaki District, there has been reported a high vaccine hesitancy score. Many mothers have trust in the public healthcare system in Tajikistan regarding vaccination issues. Nevertheless, although trust in vaccination is high in general, almost one-third of parents are convinced that the current immunization rate and schedule are somewhat burdensome, especially for sick children.

The development of Immunisation Communication Strategy and Social Mobilisation Strategy informed by the KAP for the 12 districts in close consultation and collaboration with a Technical Working Group established for this purpose has been finalized. The final draft of the strategy is ready to be shared with MoHSP for endorsement.

To address one of the key findings of the KAP, which indicated that inadequate communication between the health workers and caregivers is one of the factors for vaccine hesitancy towards immunization by mothers/parents, the adaptation of an interpersonal communication module developed for the region for training and capacity development of health workers on effective immunization communication is in progress. Interpersonal communication training for health workers based on the contextualized module is planned for September 2019.

Improve the practice of evidence-based decision making: To increase visibility of MCH/PHC issues including immunization among decision makers and improve the practice of evidence-based decision making, the HPAU expert has been attracted to analyze the empirical evidence and produce policy analysis products with alternative views on the achievements, system problems and future prospects of the MCH/Immunization services.

Organization of a two-day Roundtable for the national and sub-national EPI managers, PHC, SES and HMIS staff, and representatives of international agencies engaged in the implementation of the National Immunization Program with the main objectives: (i) present achievements or challenges in the area of

immunization within a broader framework of MCH services and PHC performance; (ii) review the main bottlenecks of achieving immunization outcomes and propose interventions to address them within current support and expected additional Gavi HSS funding opportunities; (iii) review implementation of HSS and TCA plans and share lessons learnt in 2018 with a wider national audience.

The Government of Tajikistan has recently initiated the process of developing a new National Health Strategy for 2020-2030 (NHS-2030). The donor community is supporting this endeavor, with the WHO being the lead agency to provide technical assistance to the MOHSP of the Republic of Tajikistan. The NHS-2030 is envisioned as a forward-looking strategy that will provide directions to challenges identified in achieving health and well-being of the population. It should be outcome-oriented, and indicator-based and supported by an evaluation framework to monitor progress. This new NHS-2030 strategy will concentrate on:

- Addressing of the four identified main components of Health Governance, Health Financing, Health Service Delivery, and Resources for Health to strengthen the national health system of the country for attaining Universal Health Coverage (UHC);
- Strengthening governance of national health and well-being programmes with special emphasis on human rights, equity, gender, and social determinants of health;
- Strengthening public health system with focus on integrated Primary Health Care services;
- Promoting intersectoral collaboration for health-related issues as part of health governance for achieving policy coherence and advocating for health-in-all-policies in connection with the related Sustainable Development Goals.

The NHS should be a document that brings together the policies and strategies from specific areas of work, oriented at addressing health system strengthening, equity, and efficiency of access to health services for all categories of population. To ensure that proper alignment of provision of services to infant and children, as well as prevention and mitigation of communicable diseases are among the key areas of health protection highlighting in the NHS-2030, it is proposed to reprogram a portion of the project budget to support the process of developing a new health strategy. It is imperative to ensure that the needs of the immunization program are reflected in the context of the overall national health strategy, as well as the fragmented and vertical aspects of immunization, in order to better align with the integrated PHC approaches as part of the development of the new policy.

Objective 1	
Objective of the HSS grant (as per the HSS proposal or PSR)	Strengthening capacity of PHC with focus on immunization service quality and safety
Priority geographies / population groups or constraints to C&E addressed by the objective	Nationwide, and in 10 selected districts (Vanj, Lakhsh, Sangvor, Tojikobod, Dusti, S. Shokhin, Khovaling, Baljuvon, Panjakent, K. Mastchoh) for some activities
% activities conducted / budget utilisation	WHO 95%, UNICEF 100%
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	<p>WHO:</p> <ul style="list-style-type: none"> 307 immunization service providers were trained on MLM/IIP at the national and subnational levels in 2018 (GPF target: 220 staff trained in 2018). As of June 2019, 1194 PHC staff were trained on MLM/IIP at the district level (GPF target: 1500 staff trained in 2019). Two national guidelines on Immunization in practice and Mid-Level Management have been developed and approved by MoHSP based on WHO modules. To ensure further sustainability, the WHO Modules on MLM and IIP have been institutionalized into curriculum of the RTCFM. Revision of the Sanitary norms and rules for the HCWM. Development of criteria to identify PHC facilities for potential installation of HCWM equipment, including the technical specifications of the equipment to be procured. <p>UNICEF:</p> <p>The following cold chain equipment was procured and delivered to the country and distributed to the districts and regions:</p> <ul style="list-style-type: none"> 341 pcs of Ice-lined refrigerator for storage of vaccines (Model: Vestfrost) with capacity from 60 to 127L; 66 pcs freezers with water-pack storage capacity from 160 x 0.6 L to 256 x 0.6 L;

	<ul style="list-style-type: none"> - 1040 cold boxes - 1170 vaccine carriers 1.7L with the sufficient amount of the ice-packs' - 5 generators and 2 voltage stabilizers were procured and delivered to the Immunoprophylactic centers of Bokhtar, Rasht, Rudaki, and Dushanbe. <p>In addition to the procurement of cold chain equipment, more than 310 health managers at the national, oblast and district level were trained on the use of the cold chain equipment. Identified potential technicians and refrigerator repair shops across the country and trained 42 technicians on the repair of the new cold chain equipment</p>
Major activities planned for upcoming period (mention significant changes / budget reallocations and associated changes in technical assistance ⁵	<p>WHO:</p> <ul style="list-style-type: none"> - Continuation of cascade trainings on MLM and IIP to cover all PHC facilities. - Training for the RTCFM academic staff to ensure high-quality implementation of WHO modules in the curriculum. - Work with other higher and secondary educational institutions to revise existing curricula and introduction WHO immunization modules. - Approval of new SanPin on HCWM by order of the MoHSPP. - Procurement and installation of equipment for HCWM in accordance with the MoHSPP order. - Training of PHC staff on HCWM, including use of equipment for the disposal of medical waste. <p>UNICEF:</p> <ul style="list-style-type: none"> - Procurement of additional cold chain equipment. - Training of staff on use and maintenance of newly procured equipment. - Monitoring and supportive supervision of use of cold chain equipment.
Objective 2	
Objective of the HSS grant (as per the HSS proposal or PSR)	Improving equity in vaccination by increasing immunization coverage in low performing and hard-to-reach areas
Priority geographies / population groups or constraints to C&E addressed by the objective	Nationwide, and in 10 selected districts (Vanj, Lakhsh, Sangvor, Tojikobod, Dusti, S. Shokhin, Khovaling, Baljuvon, Panjakent, K. Mastchoh) for some activities
% activities conducted / budget utilisation	UNICEF 48%
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	Towards increasing immunization coverage especially in the low performance and hard to reach areas, UNICEF hired an international consultant to support MOHSP in assessing the needs for patronage/home visiting services and mobile clinics in the targeted districts and based on the assessment results provide recommendations for strengthening of the mobile clinic and home visiting services. The consultant conducted a literature review and made his first inception visits to the country from August 25 to September 1, 2018, and submitted a draft report on the findings of the country visits. However, the consultant had communicated thereafter indicated his unavailability to continue the work and thus his contract with UNICEF was terminated. UNICEF through a new selection process hired a national consultant to complete the remaining tasks of this activity. The consultant conducted field visits and currently working on data analysis and preparing the final report. It is expected that the final report with the recommendations for further improvement of the existing regulatory framework including clear roles and responsibilities of home visiting nurses and mobiles teams will be ready by the end of September. The implementation of this component was delayed due to problems with finding a suitable consultant.

Major activities planned for upcoming period (mention significant changes / budget reallocations and associated changes in technical assistance ⁵)	<p>UNICEF:</p> <ul style="list-style-type: none"> Conduct needs assessment, identify the bottlenecks and conduct a round table meeting with relevant stakeholders to recommend revision of the existing regular framework; Develop a service package and TORs for both mobile team and patronage nurses.
Objective 3	
Objective of the HSS grant (as per the HSS proposal or PSR)	Improving implementation of the National Health Strategy "Population Health of Tajikistan 2010-2020" with focus on immunization
Priority geographies / population groups or constraints to C&E addressed by the objective	Nationwide, and in 10 selected districts (Vanj, Lakhsh, Sangvor, Tojikobod, Dusti, S. Shokhin, Khovaling, Baljuvon, Panjakent, K. Mastchoh), as well as the city of Dushanbe and the Rudaki district for implementation of some activities
% activities conducted / budget utilisation	WHO 75%, UNICEF 70%
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	<p>WHO:</p> <ul style="list-style-type: none"> Implementation of Immunization Data Quality Improvement Plan Conduction of Vaccination Coverage Study in 12 selected districts Contribution to improving the level of consideration of MCH/ PHC issues through engaging an HPAU expert to analyze empirical data and develop policy analysis products for decision makers. Organization of forum with national and international partners to discuss the implementation of the National Immunization Program, identify existing problems and propose interventions to address them. <p>UNICEF:</p> <ul style="list-style-type: none"> Initiated the Knowledge Attitude Practice (KAP) survey / formative research on immunization, which will inform the development of a long and medium-term communication and social mobilization strategy. Data collection started in December 2018 and finished by January 2019. The survey aimed in each district to complete 50 surveys – 25 with caregivers of children who are up to date on vaccines, and 25 with caregivers of children who are not up-to-date. In additional semi-structured interviews with health workers and activists of these districts have been conducted along with focus groups among mothers, fathers and grandmothers of vaccinated and unvaccinated children. The findings of the study presented to relevant stakeholders and the final report submitted.
Major activities planned for upcoming period (mention significant changes / budget reallocations and associated changes in technical assistance ⁵)	<p>WHO:</p> <ul style="list-style-type: none"> Further implementation of the Data Quality Improvement Plan Promotion of the supportive supervision services for EPI Support for the development of the National Health Strategy of the Republic of Tajikistan for 2020-2030. <p>UNICEF:</p> <ul style="list-style-type: none"> Finalise and approve the Communication Strategy and implement in the selected districts
Objective 4:	
Objective of the HSS grant (as per the HSS proposals or PSR)	Improve readiness of population to immunization and other preventive MCH services
Priority geographies / population groups or	Nationwide and focused in the 10 selected districts (Vanj, Lakhsh, Sangvor, Tojikobod, Dusti, Sh. Shohin, Khovaling, Baljuvon, Panjakent, K. Mastchoh) as well as Dushanbe and Rudaki for some activities

⁵ When specifying Technical Assistance (TA) needs, do not include elements of resource requirements. These will be discussed in the context of the Targeted Country Assistance (TCA) planning. The TCA planning will be informed by the needs indicated in the JA. TA needs should however describe - to the extent known to date - the type of TA required (staff, consultants, training, etc.), the provider of TA (core/expanded partner) the quantity/duration required, modality (embedded; sub-national; coaching; etc.), and any timeframes/deadlines. JA teams are reminded to both look back (TA which was not completed/successful in the past) and forward (planned vaccine introductions, campaigns, major upcoming HSS activities, etc.) when specifying TA priorities for the coming year. The TA menu of support is available as reference guide.

constraints to C&E addressed by the objective	
% activities conducted / budget utilisation	30% UNICEF
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	The first draft of the Communication on Immunization and social mobilization strategy has been developed and soon will be shared with the Ministry of health for endorsement
Major activities planned for upcoming period (mention significant changes / budget reallocations and associated needs for technical assistance ⁶)	Implementation of the Strategy in the pilot districts.

5.2. Performance of vaccine support

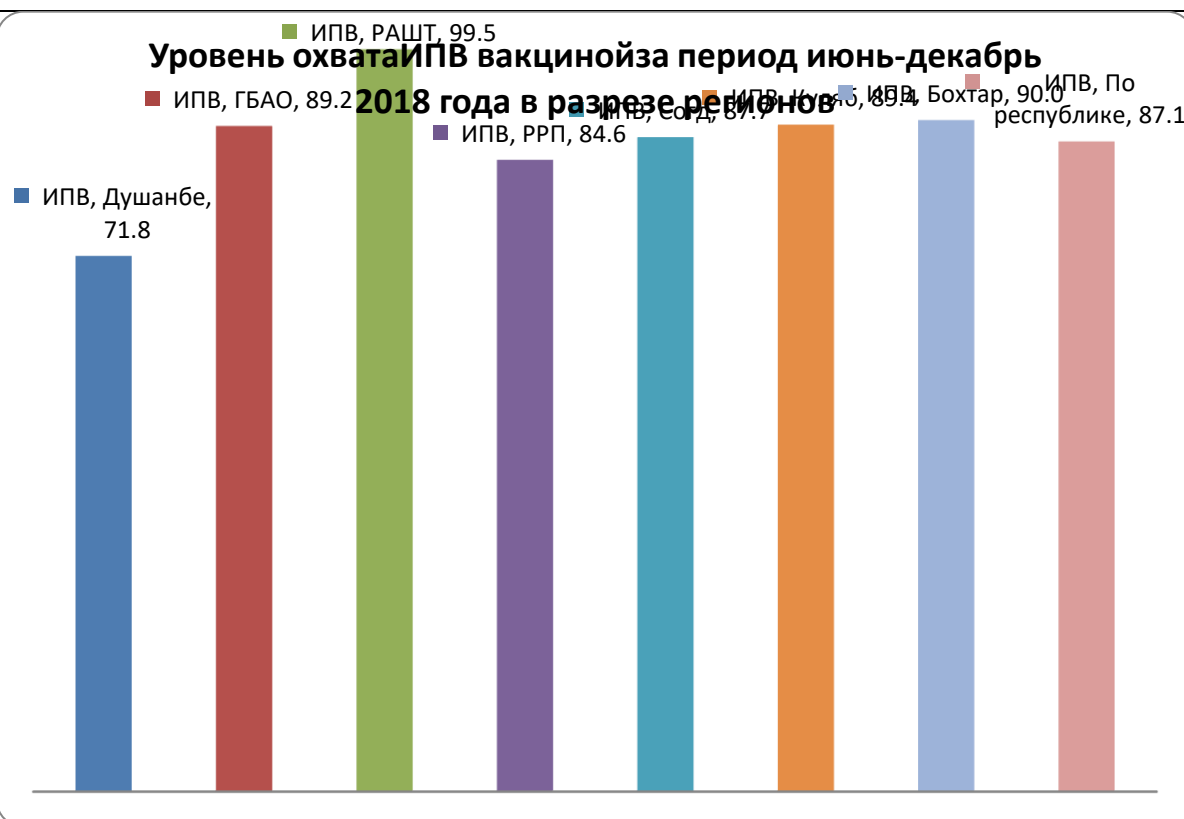
New vaccine support and/or changes in vaccine presentation or vaccine types used

Introduction of IPV vaccine

Since June 2018, the country began immunizing children with a single dose of inactivated polio vaccine (IPV) for each child aged 4 months. Delayed delivery of IPV vaccine to the country due to the global shortage of IPV vaccine has left a group of children (about 500,000 children) without protection from the second type of poliovirus because since the country switched from using trivalent OPV vaccine to bivalent OPV vaccine (April 2016) more than two years have passed. There is a need to plan and conduct a catch-up immunization campaign among children who have not received IPV vaccine (children born from February 2016 to January 2018) after switching from using tOPV to bOPV. As shown in Figure 1, the IPV vaccine coverage for the 7 months of 2018 (June - December) was about 90%, indicating a successful introduction of the vaccine. However, during the analysis of the coverage rate in the regions, it was revealed that in some areas, particularly in the City of Dushanbe, the level of coverage is below 90%. In this regard, it was decided to monitor the level of IPV immunization for 7 months of 2019 in order to identify the causes that contributed to the decrease in coverage. With the support of the UNICEF Country Office in Tajikistan, employees of the State Institution "Republican Center for Immunoprophylaxis" and its branches developed a special questionnaire for monitoring the level of IPV immunization. For monitoring, 20 cities and districts were selected where coverage was observed to decrease, or where a high coverage rate was in doubt. The final results of the monitoring will be available by the end of July 2019.

Figure 1. Rate of immunization coverage with IPV for June - December 2018 by region

⁶ Note: When specifying Technical Assistance (TA) needs, do not include elements of resource requirements. These will be discussed in the context of the Targeted Country Assistance (TCA) planning. The TCA planning will be informed by the needs indicated in the JA. TA needs should however describe - to the extent known to date - the type of TA required (staff, consultants, training, etc.), the provider of TA (core/expanded partner) the quantity/duration required, modality (embedded; sub-national; coaching; etc.), and any timeframes/deadlines. JA teams are reminded to both look back (TA which was not completed/successful in the past) and forward (planned vaccine introductions, campaigns, major upcoming HSS activities, etc.) when specifying TA priorities for the coming year. The TA menu of support is available as reference guide.



Introduction of pneumococcal vaccine (PCV)

As part of the implementation of the National Immunoprophylaxis Program in the Republic of Tajikistan for 2016-2020, the introduction of pneumococcal vaccine into the National Immunization Calendar was scheduled for 2018. However, due to the deteriorating economic situation in the country and the devaluation of the national currency against the US dollar, the introduction of the PCV vaccine was postponed until 2021. At present, with the technical support of the World Health Organization, work has been initiated on the preparation of a rationale based on scientifically-proven data for the Ministry of Health and Social Protection of the Population of the Republic of Tajikistan (RT MoHSPP). To accomplish this task, a group of experts from among experienced specialists (pediatric infectious disease specialists, pediatricians, clinicians, family doctors, statisticians, specialists of the SI Republican Healthy Life Style Centre and SI Republican Centre for Immunoprophylaxis) was established under the National Immunization Technical Advisory Group (NITAG). This study will help identify the burden of morbidity (morbidity and mortality), the burden on the health care system and other relevant effects of pneumococcal infection. After receiving the results of the study, drawing up and submitting a scientifically-based report to the RT MoHSPP, an application is expected to be prepared for submission to Gavi in 2020.

Introduction of the mumps component in the existing measles-mumps-rubella vaccine (MMR)

Introduction of the mumps component into the National Immunization Schedule by replacing the existing measles-rubella vaccine (MR) with the measles-mumps-rubella vaccine (MMR). It should be noted that the MMR vaccine is twice as expensive as the MR vaccine, so the implementation of this initiative is postponed for an indefinite period. Tajikistan is the only country in the post-Soviet space that does not have the mumps component in its immunization schedule. This phenomenon is explained by the lack of public funds for the purchase of vaccines. In addition, after the completion of the support of the Government of Japan in 2019, the gap will create additional difficulties for the introduction of new vaccines in the country. The only solution to this problem is to advocate at the highest level for the mobilization of resources for immunization, in order to achieve increased funding for immunization from the Government of the Republic of Tajikistan.

Presentation switch from the 10-dose measles-rubella vaccine to the 5-dose vaccine

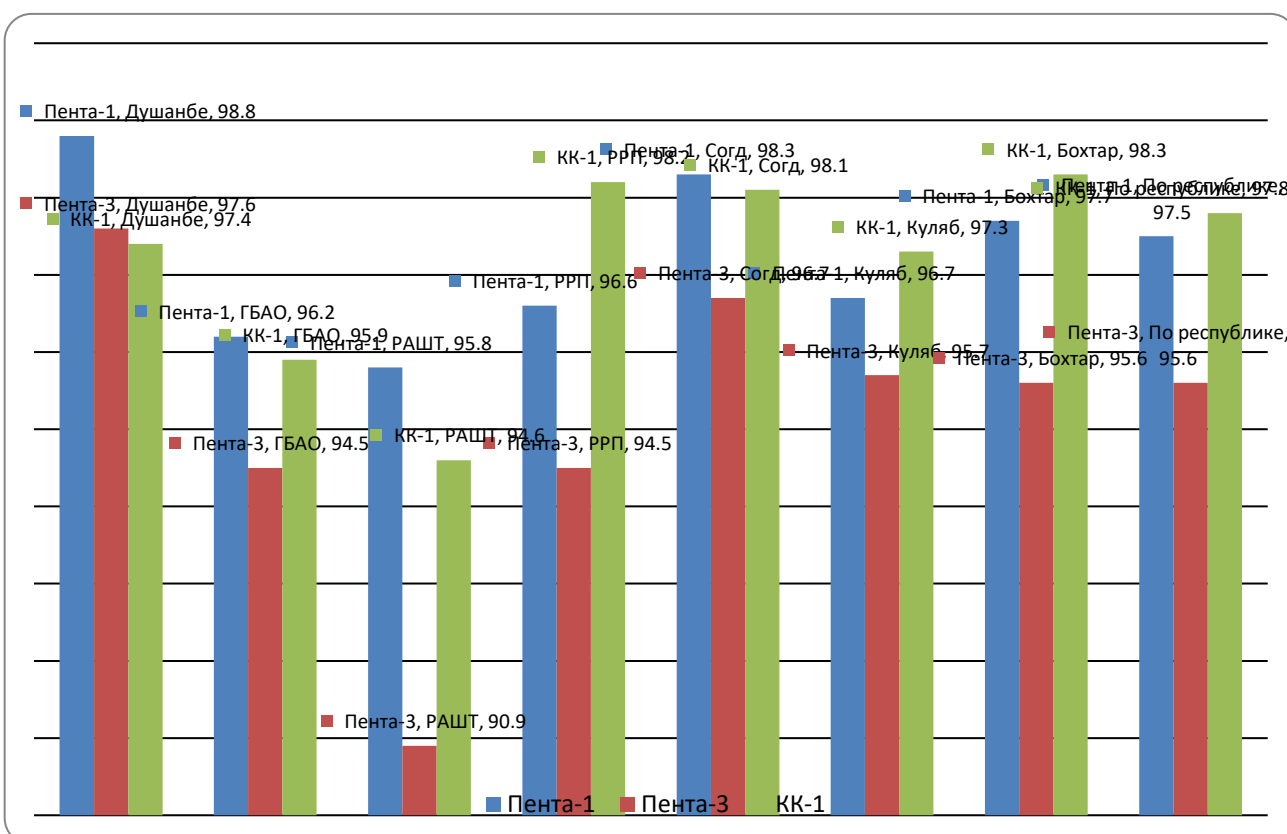
The results of the cold chain equipment inventory (2017) throughout the country revealed that at the level of health care facilities, the immunization coverage with some vaccines produced in multi-dose vials was low. This is mainly observed at facilities where immunization is carried out once or twice a month, and at least 6-7 children should be gathered to open a 10-dose MR vaccine vial. This method creates an environment for missed immunization opportunities and decrease in coverage.

To optimize the delivery of immunization services and ensure continuous service delivery to the population, it is necessary to consider the possibility of purchasing vaccines with smaller packaging (5-dose vials instead of 10-dose vials), at least for facilities with an annual target cohort of less than 50 children under 1. This will help to provide an opportunity to get a vaccine at least once a month and reduce the level of incomplete immunization with MR vaccine.

Immunization coverage by region

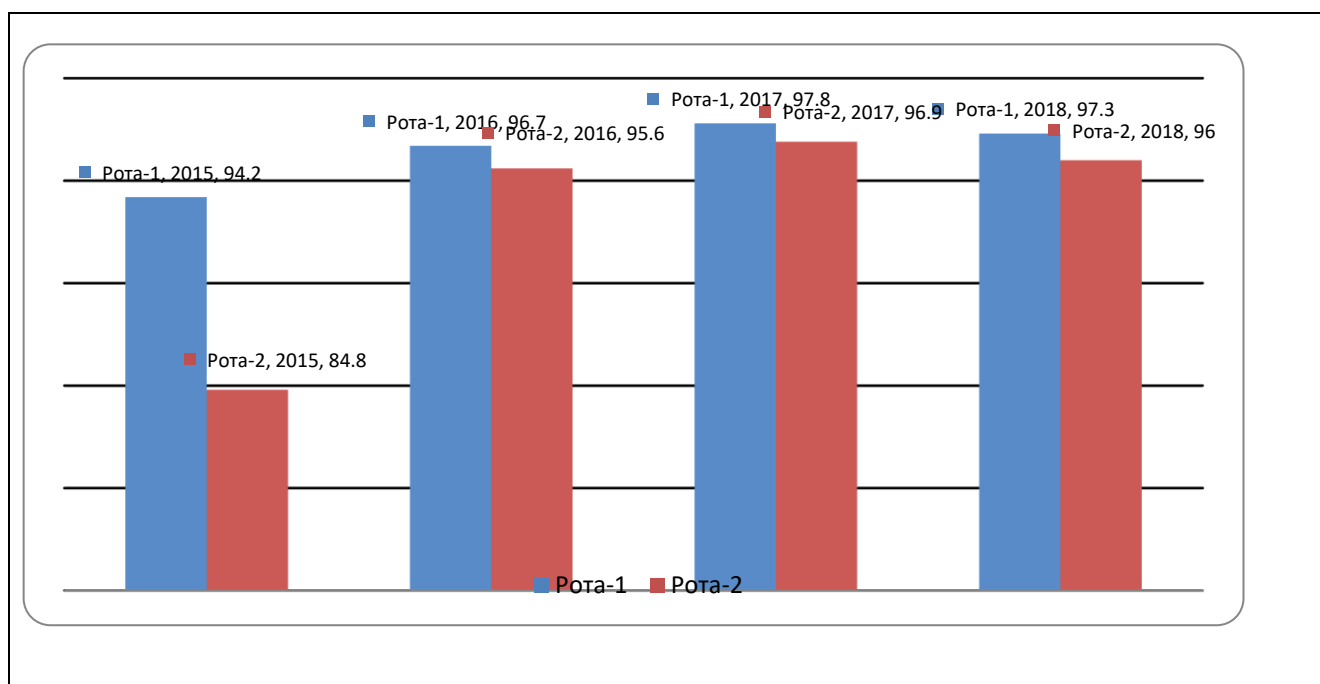
Many regions reached a high level of coverage with the third dose of pentavalent vaccine (Penta-3) and the first dose of measles-rubella vaccine >95% in 2018. The Gorno-Badakhshan Autonomous Region and the Rasht Valley areas had coverage below 95%, while the City of Dushanbe, Sughd and Khatlon regions had the coverage higher than 95%.

Figure 2. Rate of immunization coverage by region in the Republic of Tajikistan (SI RCIP administrative data for 2018)



The rotavirus vaccine was introduced into the national immunization calendar of the Republic of Tajikistan with the support of the Global Alliance for Vaccines and Immunization (Gavi) in January 2015. In the first year of vaccine introduction, the coverage rate for the second dose of rotavirus vaccine was below 90%, but in subsequent years the coverage rate increased and remained at a high level, i.e. above 95%.

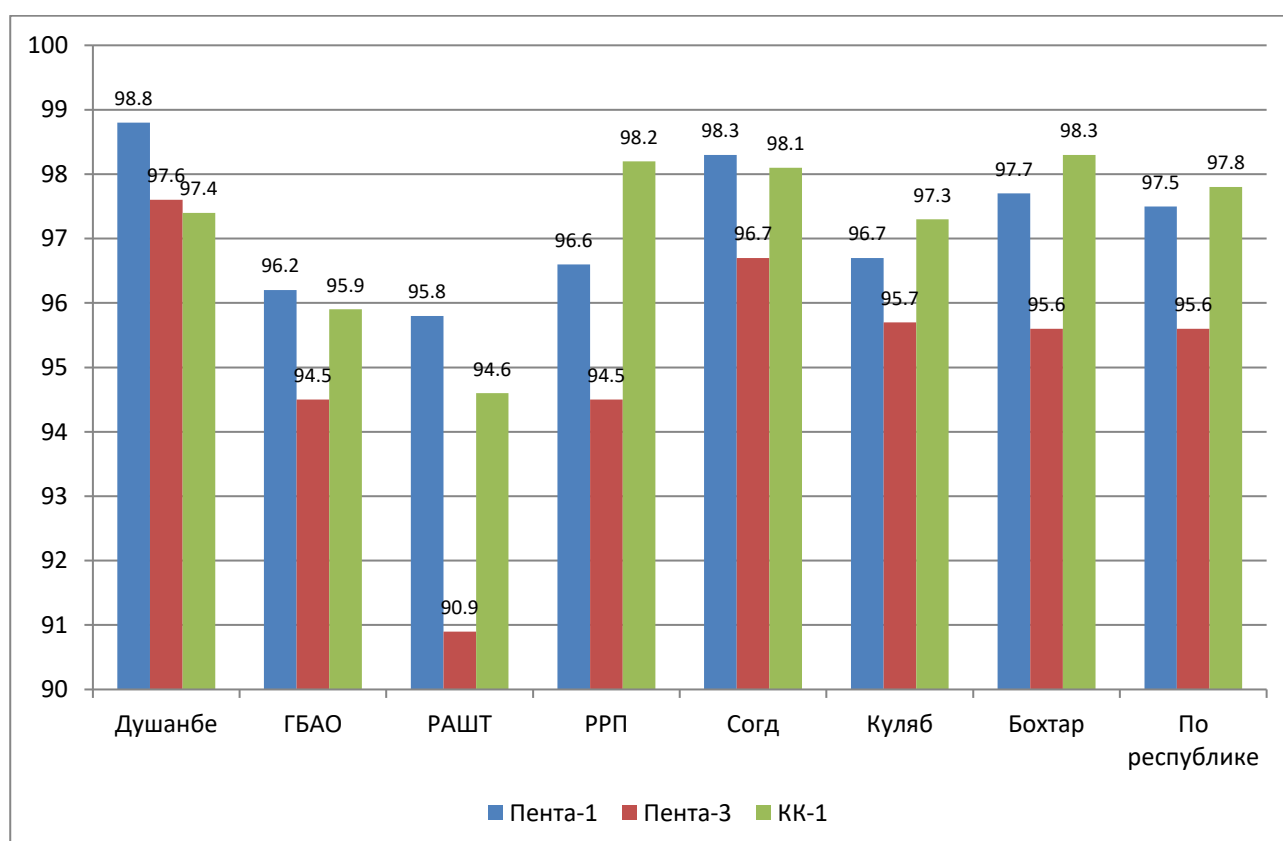
Figure 3. Rate of immunization coverage with the 1-2 doses of rotavirus vaccine in the Republic of Tajikistan in 2015-2018



Immunization coverage by region

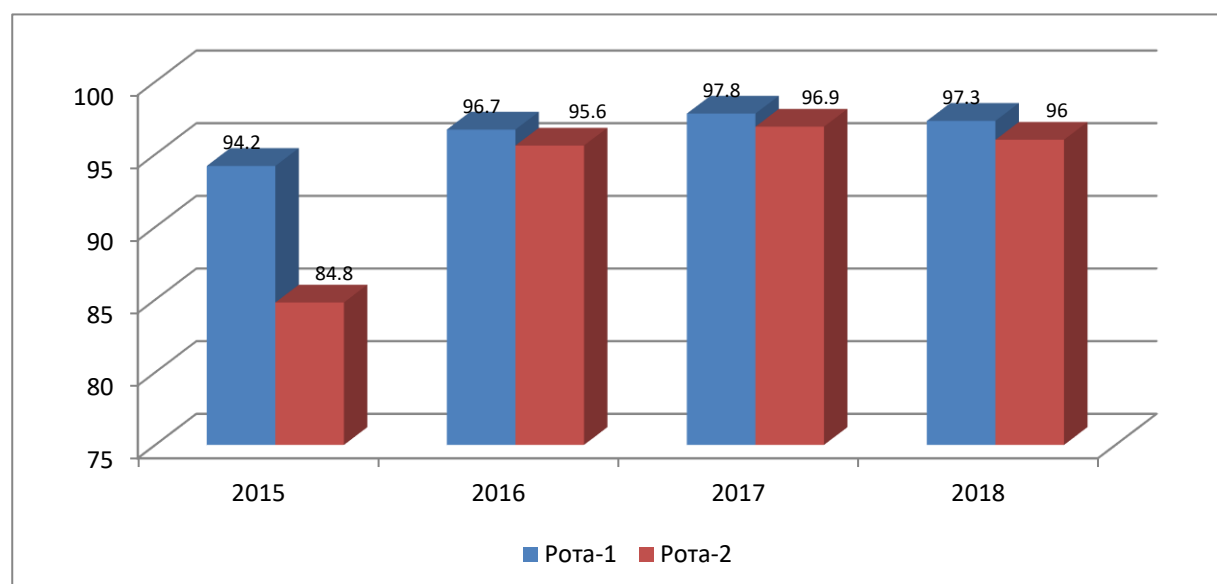
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Figure 3. Rate of immunization coverage with the 1-2 doses of rotavirus vaccine in the Republic of Tajikistan in 2015-2018



The Action plan for the health sector response to viral hepatitis in the WHO European Region set the following hepatitis B control targets by 2020:

- 95% coverage with the three doses of hepatitis B vaccine for infants;
- 90% coverage with timely birth dose of hepatitis B vaccine; and
- $\leq 0.5\%$ of hepatitis B surface antigen (HBsAg) prevalence in vaccinated cohorts.

Tajikistan introduced universal newborn hepatitis B immunization in 2002 and has been demonstrated sustainable high coverage with the birth dose of vaccine among newborns and three doses of hepatitis B vaccine among infants. However, current immunization reporting system counts as the birth dose any first dose of hepatitis B vaccine administered to child: within 24 hours after the birth, later in maternity hospital, or event later when child is taken to primary health care centre for the first time. Therefore the NIP does not have information about timeliness of hep B birth dose. Tajikistan is a highly endemic country for hepatitis B and in the period before vaccination, the main mode of hepatitis B virus transmission was perinatal. Timelines of hepatitis B birth dose is an important indicator of effectiveness of hepatitis B vaccination programme and a critical factor influencing the impact of hepatitis B vaccine. The NIP should conduct an assessment of timeliness of hepatitis B birth to make a decision on the need to conduct trainings for maternity hospitals staff (neonathologists, nurses) who have not participated in trainings on immunization in past.

5.3. Performance of Gavi CCEOP support (if country is receiving Gavi CCEOP support)

The country's application for Gavi support for CCEOP was approved by the Gavi Secretariat in May 2019. Preparatory work has been carried out in this direction:

- the Operational Deployment Plan (ODP) was developed at the health care facility level for 2019, which includes the distribution of purchased equipment in the amount of 542 units for 2019 (object location (region, city, district), object type, object address, type the model, brand, category and number of refrigerators and freezers, the number of employees who need to complete preventive maintenance training, etc.);
- the training plan for health care workers on the operation, use and maintenance of equipment was developed and approved;

- a list of spare parts and components for the cold chain equipment was prepared;
- a letter from the RT MoHSPP to UNICEF was prepared, initiating the cold chain equipment procurement process for 2019.

It is expected that work on CCEOP will begin in the fourth quarter of 2019.

5.4. Financial management performance

Table 5.1. Overall Planned HSS Grant for Tajikistan

Lead agency	Sub total	2017	2018	2019	2020	2021
UNDP	3,627,666	269,003	1,162,527	368,472	1,109,864	717,800
UNICEF	3,483,753	1,449,711	398,824	614,961	466,379	553,879
WHO	2,548,581	581,286	278,649	856,567	263,758	568,321
Total	9,660,000	2,300,000	1,840,000	1,840,000	1,840,000	1,840,000

Table 5.2. WHO funds utilization until June 2019

Expenditure Category	Commitments	Expenditure	Utilization
Work plan funding (July 2018-June 2019)			859.935
Staff and Other Personnel Costs	0	102,255	102,255
Activities	34,390	489,921	524,311
7% PSC	0	41,452	41,452
Total	34,390	633,628	668,019

Table 5.3. UNDP funds utilization until June 2019

Expenditure Category	Commitments	Expenditure	Utilization
Work plan funding (July 2018-June 2019)			
Staff and Other Personnel Costs	0	127,087.31	127,087.31
Activities	298,451.80	804,761.99	1,103,213.79
8% PSC	0	68833.51	68833.51
Total	298,451.80	1,000,682.81	1,299,134.61

Table 5.4. UNICEF funds utilization until June 2019

Expenditure Category	Commitments	Expenditure	Utilization
Work plan funding (July 2017-June 2019)			1,862.801
Staff and Other Personnel Costs	0	32,446.22	32,446.22
Activities	201,506.06	1,041,136.69	1,242,642.75
8% PSC	0	85,886.63	85,886.63
Total	201,506.06	1,159,469.54	1,360,975.60

*Out of the remaining amount there is a plan to use **US\$ 121,000** for home visiting and mobile team component including training of home visitors for about 800-1000 participants from the 12 selected HSS districts; **US\$ 100,000** for Communication strategy and IPC on immunization training; **US\$ 40,000** printing communication materials as per RCIP request; about **US\$ 110,000** will be utilized to procure additional equipment when RCIP request is received.

5.5. Transition plan monitoring (applicable if country is in accelerated transition phase)

NA

5.6. Technical Assistance (TA) (progress on ongoing TCA plan)

Gavi TCA (Targeted Country Assistance) 2018-2019

Targeted Country Assistance (TCA) - UNICEF

As part of the Gavi Partner Assistance Framework (TCA), tools (including the vaccine procurement budgeting methodology) have been developed to support the Government in the vaccine procurement forecasting and budgeting. In addition, thanks to the consultations conducted, and training received, employees of the Ministry of Health and Social Protection of the Population (MoHSPP) and the Ministry of Finance were able to use these tools in the vaccine procurement budget development process. The utilization of these tools is expected to contribute to an effective national budgeting process for vaccines as well as agreeing on a standard approach to the annual process of forecasting and planning the country's short-term and medium-term vaccine needs. It is expected that the new tools and skills acquired during the training will support budgeting for 2020, which has been held from April to September 2019 and will lay the foundation for the allocation of the state budget for vaccine procurement starting in 2020.

To link national budgeting with real-world vaccine needs and the expanded immunization program (EPI), UNICEF supported the MoHSPP in strengthening the capacity of the national and regional health care workers in forecasting and planning for vaccines. 22 national trainers and about 500 primary health care workers (PHC) in 10 selected districts acquired the knowledge and skills to effectively plan and forecast vaccine and vaccine-related needs in early 2019. In the framework of the Gavi Partner Relations Program, UNICEF supported the MoHSPP in strengthening the immunization data management chain. Standard operating procedures (SOPs) have been developed, tested and refined for the RCIP and IMCI supply chain management tools, as well as for data recording tools in order to simplify and improve data analysis and visualization for the key supply chain performance indicators.

At the end of 2018, UNICEF supported MoHSPP in building the capacity on the use of supply data: 84 national, regional and district managers and 450 primary health care workers in 11 districts of the Kulyab zone of the Khatlon region were trained in the use of the SOP Guidelines, reporting tools and dashboards. Currently, UNICEF has hired an international consultant who supports RCIP during the pilot evaluation of the implementation of data management tools in the supply chain. Based on the results of the assessment, the consultant will update training materials, reporting tools, guidelines and information panels to improve the implementation of management data at the national level in Tajikistan. The consultant will also identify possible improvements in the curatorial supervision tools. Training in seven other areas is scheduled for August – October 2019.

The TCA grant also supported the development and finalization of an application for the Cold Chain Equipment Optimization Platform (CCEOP). The aim of CCEOP is to support the country in improving its cold chain capacity and to contribute to ongoing efforts to improve coverage and equity in immunization. The CCEOP application was submitted to Gavi and approved for further implementation. UNICEF has hired a local company to support the MoHSPP and the UNICEF Supply Division in the development of the operational deployment plan. The process continues.

Targeted Country Assistance (TCA) - WHO

Conducting EPI review

At the national level, the 2018 Joint Assessment Report emphasized that, according to the official data, Tajikistan had achieved and maintained a high level of national coverage for all antigens over the past five years. However, the Demographic and Health Survey (DHS) conducted in 2012 and 2017 helped to identify some of the existing inequalities and differences in coverage, depending on the region, parents' level of education and socio-economic status. Information on fluctuations in the immunization coverage has been presented in various sources. The outbreak response experience in the last ten years shows that outbreaks occur mainly in cities and areas with high population density, where there is high internal and external migration.

A periodic review to determine if countries are compliant with these requirements provides insight not only as to the state of the national immunization program, but also allows to apply the best practices of other national programs to strengthen the health system. A joint national-international comprehensive review of the immunization program is becoming even more important in the global context of migration and trans-border movements.

The last review of the immunization program in Tajikistan was conducted in November 2012. Since then, quite a few activities have been implemented that contribute to the achievement of important immunization goals. In addition, several new vaccines have been successfully introduced. However, as in any national immunization program, there are problems associated with the achievement of national, regional and global goals and objectives. In 2018, Tajikistan also turned towards Gavi's principle of "initial self-financing" highlighting the problems that need to be addressed to ensure the future financial sustainability of the immunization program.

For the reasons mentioned, the Ministry of Health considered the issue of conducting a comprehensive joint national-international review of the immunization program to determine the current status of the immunization program, quantify achievements in controlling the spread of vaccine preventable diseases, find ways to improve the coverage and quality of immunization services, as well as solve problems impeding the fulfillment of goals and objectives in the field of national, regional and global immunization. The issue of financial sustainability will also be an important component of the review of the immunization program scheduled for May 20-29, 2019.

The components of the immunization program review were formed on the basis of the 7 major topics, according to the 2017 WHO EPI Guidelines. The objectives of the review were to cover all the system components of the immunization program with specific priority areas identified during the preparation of the analytical review, taking into account national, regional and global standards:

- Leadership, management and coordination of the immunization program;
- Human Resources Management;
- Procurement, quality assurance and vaccine logistics processes;
- Provision of services and introduction of new vaccines;
- Immunization coverage rate and AEFI control;
- Epidemiologic surveillance and outbreak response;
- Promotion and explanation of information, communication, as well as increasing demand.

The review process involved the key MoHSPP departments, as well as partners (UNICEF, WHO, and the Aga Khan Foundation).

Future financial sustainability was the main and priority task of this review and included specific objectives regarding the immunization program, in particular:

- Obtain updated data on the current state of public funding, and lobbying for the allocation of public funding for the purchase of vaccines among high-level government officials
- Review the general and budget planning processes for vaccines and other costs of immunization
- Review and/or promote immunization costs monitoring mechanisms (beyond vaccine procurement) and quantify the financial needs of immunization
- Identify the fundamental immunization functions that must be financially sustainable and areas at risk
- Identify mechanisms for reducing the costs of program implementation (for example, integration of service delivery, supervision and monitoring with other programs)

The review covered all levels of administration: national, regional, district levels, as well as the level of health care facilities. As a result of the review of the immunization program, an information base was created on the quality and accessibility of immunization, which will ensure the availability of evidence to determine strategic and programmatic directions in order to improve the efficiency of the immunization program, in particular:

- Current status of the immunization program;
- Current advances in the prevention of vaccine-preventable diseases;
- Gaps and weaknesses identified, ways to improve the effectiveness of immunization explored;
- Solutions to problems arising in the process of achieving national, regional and global goals and objectives identified;
- Future financial sustainability of the immunization program analyzed.

A summary of the findings and recommendations was provided to the leadership of the Ministry of Health and Social Protection of the Population. An immunization program review report has been provided for comments. It is expected that after finalizing the review report, a draft action plan will be developed.

External outreach with the Government and the Parliament of the Republic of Tajikistan on financial sustainability issues with a special emphasis on vaccine programs

In June 2019, a meeting of stakeholders of the National Immunization Program of the Republic of Tajikistan was held with the participation of the key representatives of the MoHSPP, the Ministry of Finance, in-country and regional partners, as well as donor organizations. At the meeting, they presented an overview of the financial profile of the National Immunization Program and ways to further strengthen its financial sustainability. The participants of the meeting discussed the existing threats to funding sustainability and opportunities for strengthening financial sustainability, as well as a plan for further action to strengthen financial sustainability with a focus on adequate funding for vaccine costs:

- Prioritizing immunization in the Government's agenda
 - Continuing education on the benefits of immunization to improve distribution efficiency in the context of universal coverage with health care services
- Increasing the level of collaboration between stakeholders to institutionalize the process of calculating resource requirements and ensure the budget planning process
- Diversification of funding sources (within the Government)
- Utilization of benefits of enhanced (technical/programmatic) effectiveness
- Development of win-win proposals for potential donors (introduction of new vaccines)

NITAG strengthening – Support in decision-making on the introduction of pneumococcal vaccine

Ongoing technical support is provided to NITAG to use a systematic approach to develop evidence-based recommendations for the introduction of pneumococcal vaccine. In particular, a NITAG working group on pneumococcal vaccine was established with the involvement of all stakeholders participating in the decision-making process. Work is underway to identify criteria for reviewing NITAG's recommendations. Members of the working group began collecting and evaluating the evidence. There are plans to prepare a rationale for the feasibility of introducing pneumococcal vaccine and NITAG draft recommendations for further discussion at the NITAG meeting.

Technical support for sentinel surveillance of rotaviruses, and evaluation of vaccination effectiveness (case control) against rotavirus infection for persons responsible for policy- and decision-making.

The rotavirus vaccine was introduced into the national immunization program in January 2015. One sentinel hospital in Dushanbe is involved in rotavirus surveillance. Children under 5 hospitalized due to acute gastroenteritis (defined as ≥ 3 liquid or semi-liquid stools / 24 hours and lasting ≤ 7 days) are eligible to participate in sentinel surveillance. In the period prior to vaccination, rotavirus infection was the main reason for hospitalization due to severe gastroenteritis, which accounted for $> 40\%$ of all cases among children under 5 in Tajikistan.

From January to June 2019, with the technical support of WHO EURO, rotavirus surveillance, diarrhea surveillance activities for children and participation in evaluating the effectiveness of the rotavirus vaccine (i.e. case-control study) have been ongoing.

Since the introduction of the rotavirus vaccine, the disease burden has decreased. Preliminary results for 2018 show that out of 989 children eligible to participate in the assessment and tested, 227 (24%) were positive. Rotavirus surveillance data collection continues in 2019; data is provided monthly to WHO EURO.

Technical Support / Capacity Strengthening Activities

- A workshop was held on the analysis and use of rotavirus surveillance data and rotavirus vaccine efficacy data in Copenhagen from January 29 to February 1, 2019 for participants from Tajikistan and Uzbekistan. The participants prepared national rotavirus surveillance data and evaluations of the effectiveness of the rotavirus vaccine, studied data management issues, analyzed surveillance data and epidemiological data, and prepared graphs and summary tables demonstrating the impact of the introduction of the rotavirus vaccine. The participants strengthened their communication skills on presenting the impact of rotavirus vaccine administration and the effectiveness of the rotavirus vaccine. The participants also discussed the publication of the results of the study of the effectiveness of rotavirus vaccine, subject to the assessment of a statistically significant assessment of vaccination. During a country visit in April 2019, follow-up training was conducted on data management, data analysis and the impact schedule of the rotavirus vaccine introduction.

- Technical support for rotavirus surveillance at the country level, child diarrhea surveillance, and rotavirus vaccine efficacy assessment was provided in April 2019 by a technical specialist from WHO EURO and a consultant from the US Centers for Disease Control and Prevention (US CDC). Teleconferences are held at least every 6 weeks by WHO EURO and US CDC representatives to discuss emerging issues regarding surveillance and coding of complex vaccination histories to evaluate the effectiveness of rotavirus vaccine.

- WHO EURO has provided technical assistance in random sampling of feces since 2018 to be sent to the regional rotavirus reference laboratory (RRL) for (a) the WHO external quality control program, (b) genotyping of rotavirus-positive samples using RRL and (c) testing for > 20 intestinal pathogens using the TaqMan Array Card technology.

Use of the existing rotavirus surveillance platform

- The existing rotavirus surveillance platform continues to be used to evaluate the effectiveness of rotavirus vaccine using a case-control study plan. The collection of additional clinical data and vaccination status data necessary for the case-control study is ongoing. It is assumed that after the registration of a sufficient number of cases and case controls, an evaluation of the effectiveness of rotavirus vaccine will be calculated. Evaluating the effectiveness of the rotavirus vaccine will allow decision-makers at the Ministry of Health and the Ministry of Finance to make evidence-based decisions regarding the continued procurement of the vaccine after Gavi discontinues its support to Tajikistan.
- The existing rotavirus surveillance platform continues to be used to identify the causes of diarrhea among children in Tajikistan. The TaqMan Array Card (TAC) diagnostic test is used to check stool samples for more than 20 intestinal pathogens, including rotavirus. With WHO EURO support, by random sampling of feces in 2018 for shipment to the Rotavirus Regional Reference Laboratory (RRL) in 2019, samples were sent to the RRL in the 2nd quarter of 2019. The preliminary results for 2017 were presented at the Global Rotavirus Surveillance Meeting in November 2018, and they indicate that rotavirus remains the leading cause of diarrhea among children requiring hospitalization in Tajikistan. Norovirus, astrovirus, shigella and cryptosporidia are the following most common causes of diarrhea in children. Continuous monitoring of pathogenic microorganisms of gastroenteritis will contribute to the adoption of decisions by politicians in Tajikistan regarding the future introduction of enteric vaccines that are currently under development.

Developing the adverse events following immunization (AEFI) guidelines and conducting ToT training on updated AEFI guidelines

With the technical support of WHO EURO, an evaluation of the system for epidemiologic surveillance of adverse events following immunization (AEFI) was carried out for the following components:

- Legal standards, regulations, and guidelines
- AEFI guidelines
- Organization and management
- Resources: human and financial resources, infrastructure and equipment
- Pharmacological surveillance and AEFI surveillance process
- Transparency, responsibility, and interaction

The strengths and weaknesses of the existing AEFI surveillance have been identified and presented. A working group has been established consisting of all key stakeholders to update the new guidelines. According to the WHO recommendations, a draft of the National AEFI Guidelines was developed, and the corresponding AEFI monitoring tools were developed. Upon their approval, training of trainers (ToT) is planned for updated AEFI guidelines and an assessment of cause-and-effect relations at the national level, as well as the establishment of a committee to assess the reasons including the development of the committee's terms of reference.

Support for the institutionalization of Standardized Operational Procedures (SOPs) for vaccine management

A working group has been established to review the national policy documents, as well as WHO guidelines for the distribution of vaccines and other pharmaceuticals requiring the cold chain, and to provide guidance on their integration into the national regulatory standards. With technical support from an international consultant, a capacity building workshop has been held to adopt the WHO Standard Operating Procedures (SOPs) on effective vaccine management (EVM). Work continues to develop a plan of action for further implementation of the national vaccine cold chain and SOP provisions for vaccine management at various levels of the health system. It is expected that members of the working group will prepare and submit for approval national SOPs on EVM to institutionalize the most effective vaccine management practices adapted to the Tajik context.

Targeted Country Assistance (TCA) – World Bank

One of the key findings of work under TCA18 is that, of the relatively low amount of public spending on health each year (currently less than US\$ 20 per person) more than 80% is allocated to the payroll of health workers. With TCA19 support, we are conducting several analyses to assess the efficiency of spending on human resources, and to identify that major sources of inefficiency and potential interventions for addressing these. This work focuses on service delivery at primary health care (PHC) level.

Work under TCA19 also involves examining the Per Capita Finance formula and mechanism currently used to pay for PHC in Tajikistan. Through consultation and analysis, we will look at whether the current system can be modified to: (i) increase the allocation to facilities with disproportionate numbers of children, to compensate for the immunizations they are required to provide; and (ii) assess the feasibility of adding incentives to the existing PCF payments, for example, to incentivize higher quality of immunizations and higher numbers of fully-immunized children.

6. UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

Provide the status of the prioritised strategic actions identified in the previous Joint Appraisal⁷ and any additional significant Independent Review Committee (IRC) or High Level Review Panel (HLRP) recommendations (if applicable).

Prioritised actions from previous Joint Appraisal	Current status
1. Improving financial sustainability through resource mobilization efforts	On-going
2. Cold chain improvement	On-going
3. Improving data quality	On-going
4. Vaccine safety	On-going
5. Solving immunization problems among urban migrants	Planning of actions for solving immunization related problems among urban migrants
6. Service delivery/ access to services	On-going
7. Decision making on introduction of new vaccines	On-going
8. Maintain rotavirus surveillance and assess rotavirus vaccine effectiveness (VE)	On-going
Additional significant IRC / HLRP recommendations (if applicable)	Current status

If findings have not been addressed and/or related actions have not taken place, provide a brief explanation and clarify whether this is being prioritised in the new action plan (section 7 below).

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9. ACTION PLAN: SUMMARY OF FINDINGS, ACTIONS AND RESOURCE/SUPPORT NEEDS IDENTIFIED AND AGREED DURING THE JOINT APPRAISAL

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This table draws from the previous JA sections, summarizing key findings and agreed actions, as well as indicating required resources and support, such as associated needs for technical assistance⁸.

Key finding / Action 1	Improving financial sustainability through resource mobilization efforts
Current response	Holding mid-level roundtable meeting with the involvement of decision-makers and stakeholders on advocacy and resource mobilization for immunization.

⁷ Refer to the section "Prioritised Country Needs" in last year's Joint Appraisal report

⁸ The needs indicated in the JA will inform the TCA planning. However, when specifying Technical Assistance (TA) needs, do not include elements of resource requirements. These will be discussed in the context of the Targeted Country Assistance (TCA) planning. TA needs should however describe - to the extent known to date - the type of TA required (staff, consultants, training, etc.), the provider of TA (core/expanded partner) the quantity/duration required, modality (embedded; sub-national; coaching; etc.), and any timeframes/deadlines. The TA menu of support is available as reference guide.

Agreed country actions	Holding high-level round-table meeting with the involvement of decision-makers and stakeholders on advocacy and resource mobilization for immunization. Intensify internal and external advocacy efforts to increase the government's input in immunization funding
Expected outputs / results	Increasing the share of the Government of Tajikistan in immunization funding
Associated timeline	2020
Required resources / support and TA	Support of activities aimed at advocacy and resource mobilization for immunization funding
Key finding / Action 2	Improving immunization data quality
Current response	Conducting an assessment of the immunization data quality. Carrying out intensive discussions with all partners involved over integration of the immunization module into the existing DHIS-2 platform.
Agreed country actions	<ol style="list-style-type: none"> 1. Define the quality of the denominator for all reporting systems; 2. 3. Integrate the existing reporting forms into the DHIS-2 platform. 4. Improvement of the monitoring system, including the necessary training on data monitoring and evaluation. 5. Improvement, updating and integration of the existing training packages; 6. Conduct regular supervisory visits to lower level facilities to provide supervisory support.
Expected outputs / results	Increasing the level of knowledge on improving the quality of immunization data
Associated timeline	2020
Required resources / support and TA	Financial and technical assistance
Key finding / Action 3	Vaccine safety
Current response	Training workshops on vaccine safety
Agreed country actions	<ol style="list-style-type: none"> 1. Manual on vaccine safety (WHO); 2. Training on the side effects of vaccines, adverse reactions and instructions for injection safety;
Expected outputs / results	Increase the level of knowledge on vaccine safety and immunization. Ensure safe immunization for every child.
Associated timeline	2020
Required resources / support and TA	Financial and technical assistance
Key finding / Action 4	Cold chain improvement
Current response	Conducting in-depth inventory of the cold chain equipment at the level of each health facility that provides immunization services. Procurement of cold chain equipment
Agreed country actions	<ol style="list-style-type: none"> 1. Improve the quality of the existing equipment and its maintenance; 2. Purchase additional equipment; 3. Continuous capacity development, including the development of staff capacity; 4. Assess the effectiveness of vaccine management and storage; 5. Consider the issues of delivery and transportation of vaccines; 6. Review the plan for EVM improvement and determine what has not yet been implemented; 7. Conduct a new EVM evaluation in the first half of 2020; 8. Develop a comprehensive training package. WHO and UNICEF need to coordinate their efforts to avoid duplication and fragmentation 9. Strengthen infrastructure; expand the national warehouse and build 5 of them at the regional level.
Expected outputs / results	Supply of cold chain equipment (CCE) prequalified by WHO to the country for health facilities: - where there is the obsolete CCEs

	- where domestic refrigerators are used Ensuring appropriate vaccine storage Training personnel for CC maintenance at all levels
Associated timeline	2020
Required resources / support and TA	Financial and technical assistance
Key finding / Action 5	Service delivery/ access to services
Current response	Assessment for identifying the need of mobile teams in hard to reach areas is being carried out by the national consultant. Assessment of the efficiency of human resource spending on PHC is being carried out by WB
Agreed country actions	1. Use mobile teams specifically for the hard to reach and migrant population; 2. Increase the frequency of immunization sessions; 3. Switch to 5-dose vials of measles and rubella vaccine to improve access to immunization or increase wastage rate for 10-dose vials of MR vaccine; 5. Strengthen communication; 6. Ensure safe injections by training and certification of vaccinators. 7. As part of a broader health sector mapping plan, recommend the distribution of primary health workers (all cadres) by region/district and facility
Expected outputs / results	Improve access to immunization services, ensuring timely immunization and value-for-money, raising public awareness of the importance of immunization in preventing vaccine-preventable infections.
Associated timeline	Quarter 1, quarter 2, quarter 3 and quarter 4 of 2020
Required resources / support and TA	Financial and technical assistance
Key finding / Action 6	Solving immunization problems among urban migrants
Current response	Attempts to track migrant groups at the level of each district
Agreed country actions	1. Work with migrant parents to increase their awareness of immunization; 2. Establish a definition of a migrant – internal and external; 3. Consider working with the local authorities at the place of residence; 4. Establish collaboration with other line Ministries; 5. Targeted communication on immunization;
Expected outputs / results	Timely detection, registration and immunization of each migrant child. Prevention of the occurrence and spread of vaccine-preventable infection.
Associated timeline	Quarter 1, quarter 2, quarter 3 and quarter 4 of 2020
Required resources / support and TA	Financial and technical assistance
Key finding / Action 7	Introduction of new vaccines
Current response	Establishment of a technical working group for preparation of the justification on introduction of the Pneumococcal vaccine (PCV vaccine) into the national immunization calendar for the Ministry of health and social protection of population of the Republic of Tajikistan
Agreed country actions	1. Support to NITAG in making evidence-based recommendations on introduction of PCV; 2. Advocacy to MoH for making an informed decision on the introduction of PCV 3. Preparing a proposal to GAVI for the support with introduction of PCV (Application, Introduction Plan, Timelines, and Budget a prepared) 4. Assessing burden of typhoid fever and establish surveillance for typhoid fever 5. Evidence on the burden and epidemiology of typhoid fever will be obtained to support decision making on introduction of typhoid vaccine
Expected outputs / results	MoH make an informed decision on introduction of PCV with GAVI support
Associated timeline	2020
Required resources / support and TA	Financial and technical assistance.
Key finding / Action 8	Maintain rotavirus surveillance and assess rotavirus vaccine effectiveness (VE)
Current response	Rotavirus surveillance in place with data collection for rotavirus vaccine effectiveness (VE) evaluation

Agreed country actions	Continued established surveillance of rotavirus disease Continued enhanced data collection for evaluation of rotavirus vaccine effectiveness evaluation
Expected outputs / results	Evidence on the impact of rotavirus vaccine introduction and vaccine effectiveness in Tajikistan to inform policy and decision makers for program planning and monitoring.
Associated timeline	2020
Required resources / support and TA	Technical and financial support

Based on the above action plan, please outline any specific technology or innovation demand that can be fulfilled by private sector entities or new innovative entrepreneurs.

10. JOINT APPRAISAL PROCESS, ENDORSEMENT BY THE NATIONAL COORDINATION FORUM (ICC, HSCC OR EQUIVALENT) AND ADDITIONAL COMMENTS

- Does the national Coordination Forum (ICC, HSCC or equivalent) meet the Gavi requirements (please refer to <http://www.gavi.org/support/coordination/> for the requirements)?
- Briefly describe how the Joint Appraisal was reviewed, discussed and endorsed by the relevant national Coordination Forum (ICC, HSCC or equivalent), including key discussion points, attendees, key recommendations and decisions, and whether the quorum was met. Alternatively, share the meeting minutes outlining these points.
- If applicable, provide any additional comments from the Ministry of Health, Gavi Alliance partners, or other stakeholders.

The composition and mandate of the ICC was revised with the technical support of the One23 consulting company and approved by the MoH SPP RT in 2018.

The ICC meeting was held in the RCIP meeting room on the August 30, 2019. A week before the meeting the Russian version of the document was shared with the non-English speaking members, and the English-speaking members who were mainly from the partner organizations and had access to the document through provided online link, agreed to make all necessary amendments into the document directly through online access.

Key discussion points:

- Update on the status of the prioritized actions identified during the previous Joint Appraisal;
- Prioritization of actions and required support identified during the last Joint Appraisal;
- Reprogramming of funds for the current prioritized activities;
- Changing some of the Grant performance indicators (GPI);
- Completeness of the report.

The list of attendees:

1. Kamolzoda M. - deputy minister of the health and social protection of the population of the Republic of Tajikistan, chairman;
2. Vohidov S.D. - head of the Department of sanitary and epidemiology, emergency medical care and emergency situations, MoH SPP, deputy of the chairman;
3. Bobokhonova M.S. - head of the Epidemiological department of the State institution "Republican center of immunoprophylaxis", secretary;
4. Nabiev Z.N. - head of the Department of organization of medical care for mother and child and family planning, MoH SPP, member;
5. Azizov Z.A. - general director of the State institution "Republican center of immunoprophylaxis", member;
6. Mukhtorova P.Sh. - director of the State institution "Republic center of establishment of healthy lifestyle"
7. Sadykova U. - representative of WHO CO;
8. Bakhtibekova Z. - representative of the UNICEF CO (on behalf of Bahruddinov M);
9. Maqsudova N. - representative of WHO CO (as a guest);

10. Nazurdinov A. - deputy of general director of the State institution "Republican center of immunoprophylaxis" (as a guest).

Key recommendations:

1. Thoroughly revise the whole document before the submission to GAVI;
2. Make all necessary amendment into the document based on the outcome of the current meeting.

Decisions:

1. Based on the revision and intensive discussion of the Joint Appraisal Report, we all endorse this document for submission.

The quorum was met.

11. ANNEX: Compliance with Gavi reporting requirements

Please confirm the status of reporting to Gavi, indicating whether the following reports have been uploaded onto the Country Portal. **It is important to note that in the case that key reporting requirements (marked with *) are not complied with, Gavi support will not be reviewed for renewal.**

	Yes	No	Not applicable
End of year stock level report (due 31 March) *	x		
Grant Performance Framework (GPF) * reporting against all due indicators	x		
Financial Reports *			
Periodic financial reports			x
Annual financial statement	x		
Annual financial audit report			x
Campaign reports *			
Supplementary Immunisation Activity technical report			x
Campaign coverage survey report			x
Immunisation financing and expenditure information			
Data quality and survey reporting			
Annual data quality desk review		x	
Data improvement plan (DIP)	x		
Progress report on data improvement plan implementation			x
In-depth data assessment (conducted in the last five years)		x	
Nationally representative coverage survey (conducted in the last five years)	x		
Annual progress update on the Effective Vaccine Management (EVM) improvement plan			
CCEOP: updated CCE inventory	x		
Post Introduction Evaluation (PIE) (specify vaccines):			x
Measles & rubella situation analysis and 5 year plan			
Operational plan for the immunisation programme		x	
HSS end of grant evaluation report			x
HPV demonstration programme evaluations			x
Coverage Survey			x
Costing analysis			x
Adolescent Health Assessment report			x
Reporting by partners on TCA and PEF functions			

In case any of the required reporting documents is not available at the time of the Joint Appraisal, provide information when the missing document/information will be provided.