

Annex 1: Country developed road maps

Country	Overall Comments	Way forward	Planning assumptions	Support required
Lebanon		Develop a multi-year immunization forecast (currently only one year planning is done)	1. Enhancement of data exchange between the periphery and central warehouse to have more accurate forecast 2. All the required data is provided and meet the criteria for Gavi 3. To reach out to Government and NGOs to facilitate the packages for health workers supporting them to stay	1. Continuous support in systems strengthening as per EVM findings (already ongoing) 2. Strengthening of WASH programmes in the country to enhance effect of immunization efforts
		Finalise Lebanon culture profile to apply for Gavi eligibility.		
		Develop National Plan to ensure sustainability of Human Resource and minimising of work force burnout		
Egypt		Introduction of new vaccine (PCV)	1. Encourage coordination between all stakeholders to take a decision 2. To have more frequent and more active periodic meetings with stakeholders Strategic planning for new vaccine introduction	Encourage more support from partners to have more precise surveillance system
		To have integrated digitalised system linking all the entities included into the health care system		
		Proper training of service providers		

		<p>Resource management, including a) price negotiation to get the best price with highest quality; b) to specify the targeted population for each vaccine (as targeted age groups) c) community outreach and increase awareness of people towards vaccination and its importance, specially the new vaccine</p>		
		<p>To advocate for more flexible regulations and always be notified (e.g. to reconsider policy of vaccine exchange)</p>		
Morocco	<p>Three priority actions which cover a single major objective: the strengthening of good practices in terms of vaccine management and the vaccine supply chain.</p>	<p>1. Strengthening the cold chain equipment (started, continues in 2023)</p> <p>2. Strengthening the way to handle vaccine management by using new information technologies, integration with the existing system</p> <p>3. (EVM) Effective vaccine management (started, supported by UNICEF), plan to carry out this evaluation in two regions in late 2022, the work of refining and introducing the different variables into the system has been done and the process will start from November 2022 and continue in 2023 with financial and technical support to extend this evaluation to other regions.</p>		<p>Need for technical and financial support to ensure the activities continue as planned.</p>
Republic of Sudan	<p>The key drivers for vaccine</p>	<p>Generate evidence on disease burden for HPV</p>	<p>1. Need of decision making 2. Tools are developed and the roll</p>	<p>1. Support in tools is development and training to build staff capacity</p>

	<p>introduction in Sudan are:</p> <ol style="list-style-type: none"> 1. Burden of the disease (MR, YF, Men A and Malaria) 2. Availability of funding for the vaccine introduction through Gavi 3. Some of the vaccine brought to the country's attention by Gavi 	<p>Build the capacity of National and sub national level immunization staff on vaccine forecasting and budgeting and financing Data collection regarding HPV</p> <hr/> <p>Staff capacity building on Vaccine management, social mobilization/engagement, and demand creation</p> <hr/> <p>Develop advocacy for sustainable immunization financing including for lower level</p>	<p>out of training will give more accurate vaccine quantification</p> <ol style="list-style-type: none"> 3. Limited Staff Capacity is one of the identified gap areas by EVM assessment 4. Secure funding is critical and have it in the top of the agenda is very important 	<ol style="list-style-type: none"> 2. Advocate for securing funding, keep it in the top of the agenda
<p>Tunisia</p>		<p>Finalization of the EVM assessment with the implementation of a continuous improvement plan for the supply chain which will allow to strengthen it at all levels.</p> <hr/> <p>Production of more conclusive data in terms of vaccine use and vaccination coverage by studying the different disparities between regions by setting up a national information system that tracks all the vaccination of children and adults.</p> <hr/> <p>Cost-effectiveness study for the introduction of new vaccines with retrospective studies for vaccines that have recently been introduced at the level of the vaccination schedule.</p>	<p>All these priorities require very close coordination with the various partners involved in the vaccination circuit throughout the process</p>	<p>Quality technical assistance is highly required to ensure the implementation of identified actions.</p>

		Strengthen the vaccination system in terms of needs planning, costing, advocacy preparation and the maintenance of the cold chain.		
		Introduction of new vaccines: plan to introduce two new vaccines in Tunisia according to the priorities of the country and the epidemiological context.		
Algeria		<p>Digitalization is considered a priority</p> <ul style="list-style-type: none"> • First: At the peripheral levels of the monitoring system of the entire logistics chain, whether transportation or cold storage • Secondly, the use at vaccination centre level, i.e. the digitization of vaccine stock management • And thirdly, the digitization of vaccination programming, 	<p>1. Digitalisation requires the development of communication technology networks and user buy-in by establishing comprehensive communication with users to adhere to the digitization agenda and training users in the use of tools and programmes at multisectoral levels. , because for digitization it is not only health structures that are concerned but other structures also at the level of civil registration which is the most important source of population data, births, mortality etc.</p> <p>So it is a multisectoral work and communication and training must be done horizontally with everyone.</p>	<p>1. Country already works with partners on digitization of vaccination and we hope to continue throughout the year and complete it as soon as possible.</p> <p>2. For standardization of the supply chain: It is the accompaniment on two levels (i) by sharing existing standards and particularly with regard to UNICEF in their supply chain in terms of existing stocks in Copenhagen and the way in which they operate transport and distribution so that we can adapt at our level and (ii) we would also like support and training for the implementation of these standards.</p> <p>3. need upstream support for training and awareness because it will affect people at peripheral levels, so we need training for the entire logistics chain and downstream support for the effective implementation of the GEV</p>
		<p>Standardization of the supply chain both at central and peripheral levels by:</p> <ul style="list-style-type: none"> • The writing of detailed procedures for the maintenance and operation of storage infrastructures, means of transport and everything related to logistics. • The qualification of the equipment we already have and the acquisition in the future of new equipment compliant to PQS WHO standard. 		
		Effective and efficient introduction of EVM (EVM) Effective Vaccine Management.		

Iran	Development of quality cold chain capacity at all levels (national, provincial, district and health facility)	<ol style="list-style-type: none"> 1. Continuous cooperation with UN agencies (WHO, UNICEF, UNIDO) for improvement of cold chain and capacity building 2. High level policy makers to support vaccination reaching 95% every year 	Technical and Financial support for the above mentioned activities
	Advocacy at higher level policy makers to ensure commitment from the Government and social behaviour change activities at community level to prepare the population		
	Identify resources for new vaccine introduction, including Gavi support		
Jordan	Introduction of new vaccines that are Varicella and PCV	<ol style="list-style-type: none"> 1. Financing will be secured from the general government budget and increase the allocation for vaccines 2. Regularly National Immunization Technical Advisory Group meetings to guide on the new vaccine introduction. 3. Work with academic institutions for evidence generation 4. Modernization of the procurement procedure to access competitive prices. 	<ol style="list-style-type: none"> 1. Sign MOU between Jordan and UNICEF for procurement of vaccines. 2. Support Social mobilization and demand creation for new vaccines 4. Technical support to train service providers/health workers in the vaccine introduction
	Conduct comprehensive annual forecasting for vaccines and other related supplies at national and subnational level		
	Documentation of previous lesson-learned / landscape studies from recent vaccines introductions including COVID-19.		
	Have a functional eHIS for data capture and reporting		
Iraq	Adapting high quality surveillance system	<ol style="list-style-type: none"> 1. Advocacy with partners for technical support and digitalization of surveillance system 2. Surveillance system may reflect the epidemiological situation disease burden and support the 	<ol style="list-style-type: none"> 1. Technical support and training for surveillance system 2. Technical support to introduce management information system, incl. cold chain inventory and stock management system, including cold

		Enhance stock management system and forecasting process	decision making 3. Scaling up web-based Vaccine Stock Management System (VSSM) and connect new districts	chain 3. Advocacy in decision making related to sustainable budget.
		Advocacy with high level decision makers about sustainable financing for new vaccines	4. Conducting meeting with high level decision makers (together with partners) about importance of securing sustainable financing for EPI	
Palestine		How can we enhance the capacity of the current application/dashboard to improve vaccine and cold chain stock management	1. Immunization budget is available 2. Coordination between EPI, NITAG, UNICEF, WHO and UNRWA, NGOs is ongoing for decision making on NVI 3. Evaluation of impact of NVI on National Immunization Programme	1. Private Sector: supporting National Programme encouraging people to vaccinate children 2. UNRWA: continue to notify about cases and adverse events 3. WHO: technical support 4. UNICEF: logistics support 5. Supporting ensuring sustainable budget for immunization programme
		Multi-year forecast for immunization programme		
		To review the current surveillance system for communicable diseases and related data to ensure proper data quality		
		To maintain high vaccine coverage		

Annex 2: Post-event survey feedback

General feedback/suggestions for future global and regional Exchange Forums



Please describe how the lessons learned during the VPPN event, as well as the roadmap you developed during the Forum will support vaccine security around new vaccine introductions within your country?

“During the overview of the national immunization programs in the countries participating in the conference, we were able to identify key highlights of different program performances, most recent vaccine introductions in neighboring countries, challenges faced, and how other countries are managing the various challenges. Furthermore, during group work and panel discussions we shared our EPI program's experience, success stories, and challenges faced. As for the roadmap and the future plan of action, it was proposed to 1) develop a long-term immunization forecast (given that the forecast is being done annually, and was suggested to be done for 3 years); 2) finalize Lebanon's country profile for Lebanon to become eligible for GAVI, and 3) develop a national plan to ensure sustainability of human resources and minimize healthcare workforce burnout. With regards to the role of UNICEF, it was suggested that UNICEF shall strengthen the WASH programs to minimize the need to introduce new vaccines. In addition, UNICEF will continue to support in system strengthening as per EVM findings”

“The experiences of the countries will be transferred to the decision-makers in the Ministry to ensure that these experiences are used in improving the procedures for purchasing vaccines”

“Lessons learned from other countries were excellent. During the forum we got attention on the importance of introduction of new vaccine”

“We learned a lot about the topics discussed in Forum, especially the market intelligence, financing for New Vaccines Procurement, the current state of global vaccine supply, countries experiences ... The roadmap we have developed during the Forum : - Reinforce and renew vaccines cold chain : purchasing cold Equipment for vaccines and monitoring système - Improve the management of vaccine stocks at central and local level (IT solution for inventory management) - Generalization of the EVM tool”

Were there other topics you wished to see covered?

“How do we make people accept the vaccines ”

“Mechanisms of sparing part of national budget for the sake of vaccine procurement”

“Specific country needs according to their expectation of different support and collaboration”