

SUBJECT: CASE STUDY: ALLIANCE PARTNERS JOINING EFFORTS TOWARDS IMPROVING EQUITABLE AND SUSTAINABLE IMMUNISATION COVERAGE IN PAKISTAN

Agenda item: 07b

Category: For Information

Section A: Summary

- This case study presents Pakistan's progress and challenges towards improving equitable and sustainable immunisation coverage.
- One out of ten under-immunised children within Gavi-eligible countries are living in Pakistan. Gavi has committed more resources to Pakistan than any other country, exceeding US\$ 1.16 billion.
- Pakistan is an encouraging example of the Alliance partners coming together and leveraging their institutional mandate to support national and provincial leadership to gain momentum on immunisation in a very challenging context.
- Through strategic and sustained engagement, with annual high-level joint Alliance missions mounted by Gavi, Alliance partners have galvanised political commitment and supported evidence-based decision-making.
- The implementation of the National Immunisation Support Project (NISP) has created a unique and innovative partnership for routine immunisation. The national and provincial governments of Pakistan have invested more than US\$ 370 million in their immunisation programmes, with a partial reimbursement based on results. To support this, resources have been brought together by the Alliance that include US\$ 84 million from Gavi, US\$ 50 million from the World Bank (as a loan with a potential US\$ 25 million buy-down by Bill & Melinda Gates Foundation) and US\$ 10 million from USAID. The NISP Performance and Results Framework is shared by all parties and is independently validated.
- These joint interventions and investments are beginning to deliver significant results. Independent surveys in Punjab, the province that hosts half of the country's population, show a 22% increase in DTP-3 coverage over the past two years. Administrative data from other provinces also suggest coverage is increasing, though less rapidly.
- Despite this progress, significant challenges remain and continued high-level and strategic engagement by the Alliance is critical for Pakistan to reach every child with life-saving vaccines in the years to come.

Section B: Country context

1. Immunisation in Pakistan after Devolution of the Health System

- 1.1 In 2011, the 18th Amendment of Pakistan's constitution fully devolved the subject of health to its provincial governments and the Ministry of Health was disbanded. This caused significant confusion around the roles and responsibilities of different actors, including management of EPI and financing for health commodities and vaccine co-financing.
- 1.2 In the absence of an effective national entity for coordination of donor resources, and considering the complexity of having different types of provincial legislation, rules and procedures, many key donors focused their resources to specific provinces. Individual development partners chose to channel their technical and financial support towards certain districts or Union Councils, often without the government being in the lead or considered responsible. At the same time, Gavi suspended cash support to the Government of Pakistan due to concerns around accountability.
- 1.3 At the end of 2014, routine immunisation coverage had stagnated at 72%. There were more than 1.4 million children not receiving a full course of diphtheria-tetanus-pertussis containing vaccine in Pakistan with immunisation coverage varying according to geography, wealth and other factors. Measles was claiming hundreds of lives¹ and other vaccine-preventable diseases were prevalent. A significant surge in polio cases affected the country and vaccinators were spending most of their time on polio campaigns. Emergency Operations Centres for polio were established, but there was little emphasis on synergies with routine immunisation, as the limited political interest in immunisation was focused on polio eradication. The notable exception was Punjab, where the Chief Minister included routine immunisation among four priorities in Punjab's Health Roadmap² in April 2014.
- 1.4 With the establishment of the Ministry of National Health Services, Regulations and Coordination (MoNHSRC) in 2013, the federal government took on some of its pre-2011 responsibilities. However, there were some key EPI functions that were not provided by the federal government or the provinces, leading to sub-optimal oversight, low quality service provision and poor management of vaccines and supplies.
- 1.5 In February 2015, 1.3 million doses of pentavalent vaccine were lost due to exposure to high temperatures. This was a turning point in the federal and provincial governments' focus on routine immunisation and closer engagement by Gavi and partners, with the Alliance joining efforts to

¹ - Between January 2012 and May 2013, measles outbreaks in Pakistan led to 26,000 cases and 570 deaths, with an increasing trend. <http://reliefweb.int/disaster/ep-2012-000211-pak>

² - An approach to implementation which, if applied correctly, promises to achieve transformation. The Roadmap builds on DELIVER experience from a range of countries including Australia, Bahrain, Ethiopia, Kuwait, Malaysia, South Africa, United Kingdom and United States.

leverage its resources towards sustainable and equitable immunisation coverage.

Section C: Progress to date

2. Stronger Mutual Engagement

- 2.1 Since 2015, political commitment to immunisation has increased in Pakistan. The government has included routine immunisation among its top priorities in health, increased domestic financing for EPI and is using immunisation indicators to track health system performance and accountability. Routine immunisation is reviewed with all Chief Ministers alongside with polio and the Inter-ministerial High-Level Forum, chaired by the State Minister, discusses routine immunisation.
- 2.2 The increase in political will is in part due to the Alliance's strategic engagement with the country's leadership, joint planning and monitoring, and annual joint high-level missions to the country. The first high-level mission in 2015 focused on additional clarity on the federal and provincial roles and responsibilities and conveyed the message that polio cannot be eradicated without a strong routine immunisation system. The second mission in 2016 looked at different aspects of programme delivery and helped ensure government commitment to funding the immunisation programme. The third mission in 2017 engaged with provincial and federal leaders on their progress toward equitable coverage. Both federal and provincial counterparts have welcomed, agreed and implemented recommendations made on high-level missions and jointly monitored the progress.
- 2.3 Punjab, the most populated province of Pakistan with an estimated 50% of the country's population, has taken the lead in terms of driving for accountability in EPI. This is primarily due to the personal commitment of the Chief Minister, who leads regular Health Roadmap stock-take sessions, backed by rigorous data and dashboards, on the province's progress on immunisation coverage and equity. DfID's contribution to the development of the Health Roadmap has been instrumental in this achievement and it is being replicated in Khyber Pakhtunkhwa. The lessons learnt have also been taken to Balochistan.

3. Using Country Systems to Strengthen Ownership, Accountability and Sustainability

- 3.1 The NISP has been catalytic as it has created a unique partnership for routine immunisation between the Government of Pakistan and development partners. The NISP uses country systems and creates ownership and accountability. By virtue of NISP, development partners have channelled financial support (currently US\$ 84 million health system strengthening from Gavi and US\$10 million from USAID) to a World Bank administered multi-donor trust fund, that is linked to a US\$ 50 million

International Development Association loan, with a buy-down of up to US\$ 25 million by Bill & Melinda Gates Foundation. This contributes to the government's approved NISP budget of US\$ 370 million at federal level.

- 3.2 As part of the NISP, a mechanism for pooled vaccine procurement and co-financing was stipulated. For this to be realised, all of the provinces endorsed the federal EPI as their vaccine procurement agent. In addition, the government established a clear financing mechanism for vaccines (both traditional vaccines and Gavi co-financing) at both federal and provincial levels, addressing concerns that federal financing for EPI would end in July 2015. This financing mechanism is based on a decentralised approach to development financing allowing funds to flow to sub-national levels, while strengthening provincial capacities and accountability. Through the NISP, provincial finance departments are funding EPI and are partially reimbursed as soon as the province delivers on its targets and achieves its expected results. This is a major shift in focus from input-based and activity financing to a result-based system. By this mechanism, all aid has become part of the government annual budget and is reviewed and approved by the legislators, increasing transparency, ownership and sustainability.
- 3.3 The NISP Performance and Results Framework is shared by all parties and is independently validated. Joint monitoring and supervisory missions are conducted biannually, meeting the oversight, fiduciary and reporting obligations of the World Bank, Gavi and other partners. This also contributes to a decrease in transaction costs for both the government and partners. NISP's governance gives the lead to the government, with the Steering Committee of the multi-donor trust-fund being co-chaired by the government and the World Bank, and the National Interagency Coordination Committee responsible for programmatic reporting.
- 3.4 Based on analytic work and policy dialogue held with the government around the economic case for immunisation, provincial governments are now moving immunisation costs from the development side of their budgets³ to the recurrent side. Human resource costs are targeted first, to be followed by operational expenses and lastly, by vaccine costs in 2021. This will significantly strengthen the financial sustainability of immunisation. Preparation of the national immunisation accounts, supported by the World Bank, is another important step towards strengthening governance and financial management of EPI.

4. Strategic Use of Alliance Resources to Improve Equitable Coverage

- 4.1 The Alliance has provided flexibilities to Pakistan through the application of the Country Tailored Approach under Gavi's fragility and immunisation policy, enabling provinces to repurpose existing grants to deliver on priority coverage and equity interventions while the NISP became effective. These resources, managed by WHO and UNICEF, on the basis of their

³ - Development budget in Pakistan is prepared by the Planning Commission and follows a project mode which needs renewal. Recurrent side of budget, in contrast, is approved as a ceiling by the Finance Ministry and is disbursed directly.

comparative advantage, were invested in improving data quality, improved service delivery, programme management and equity work.

- 4.2 With an annual budget of US\$ 2 million, the Targeted Country Assistance under the Partner Engagement Framework has focused on addressing provincial needs. Out of the 19 WHO and UNICEF staff supported through PEF in 2017, 12 of them are based in provinces and Areas and all of them are aligned with strategic focus areas and priorities identified during High-Level missions and Joint Appraisals. With coordinated and joint supervisory missions by Gavi and the World Bank, allocation of financial resources for technical assistance is becoming an integral part of the NISP, with the government leading the review of technical assistance plans and defining priority needs.
- 4.3 Peri-urban areas and slums have grown significantly in the country over the past years, with populations exceeding 32 million (46% of total urban population).⁴ In the urban population, wealth inequity is significant, with the richest communities enjoying 84% coverage of pentavalent vaccine, whereas for the poorest communities this is only 57%.⁵ UNICEF is supporting the government with the mapping of urban slums in Karachi and other major cities and the development of a comprehensive package of services for children living in these localities. This work, which is supported by local civil society organisations, will be critical towards seeing significant improvement in immunisation coverage in the near future, in particular in Sindh.
- 4.4 As a result of all vaccinators being male, there is a significant gender barrier to immunisation in Pakistan. Lady Health Workers have been mobilised and trained with the support of the Alliance to become a major force in linking communities to EPI centres, and addressing this gender related barrier.

Supply and Cold Chain Investments

- 4.5 Following the vaccine loss of February 2015, the government took a number of steps, with the support of partners, to strengthen vaccine management. The federal warehouse went through a comprehensive overhaul with the support of USAID. A state of the art vaccine logistics management information system was installed including the standardisation of storage and distribution of cold chain and dry items and a vaccine logistics operations room. The warehouse received ISO certification for management in 2015. An additional 19 vaccine warehouses were constructed or refurbished by UNICEF with Gavi support.
- 4.6 A re-design of the vaccine supply chain system is currently being conducted by UNICEF to improve efficiency and support efforts to improve equity in coverage. An additional US\$ 50 million of cold chain equipment, partially

⁴ - United Nations Statistics Division. Millennium Development Goals Database: Slum populations. UN Data (2016).

⁵ - World Health Organization. DTP3 Immunization data by urban wealth quintile. *Global Health Observatory Data Repository* (2016).

supported through the CCEOP, will replace sub-standard or failing equipment and expand refrigeration where needed to accommodate new vaccines (Pakistan has introduced Inactivated Polio Vaccine and Rotavirus vaccine since 2015), and equip new immunisation points to help increase equity. Furthermore, the vaccine supply chain in the country will soon be equipped with remote temperature monitors to ensure vaccines are kept at the right temperature and reduce the risk of potential closed-vial vaccine losses.

Data Improvement and Use of Technology

- 4.7 The use of innovative approaches and advanced technologies has significantly helped Pakistan to improve programme management and accountability. Smart-phone based tracking systems for vaccinators and child immunisation apps (e-VACC), a mHealth-based vaccine registry, digitally enabled vaccination cards, vaccine indicator reminder bands, and mobile-enabled payments to vaccinators are being tested and used to improve transparency, accountability and performance of the routine immunisation program. E-VACC, initiated in 2014 in Punjab by its Information Technology Board, was developed on the basis of an application for tracking of field workers involved in Dengue control and is now being rolled-out to Khyber Pakhtunkhwa and Balochistan.
- 4.8 Other data challenges are also being addressed. Population estimates – which were last counted in 1998 – will be updated as a result of the 2017 national census, which is currently underway after delays of almost a decade. During 2016, all provinces conducted data quality audits and developed improvement plans and regular EPI programme monitoring reviews are undertaken. The Health Planning Unit of the Ministry of National Health Services is becoming a reference point for all collected health data. In 2017, a measles risk assessment was conducted by using the available data. There have also been improvements noted in completeness and timeliness of vaccine preventable disease surveillance reporting.

Leveraging Polio Assets

- 4.9 In the past two years, polio and routine immunisation have slowly started working together. Recognising the importance of synergies between the programmes, the Prime Minister’s Task Force on Polio has requested the establishment of monthly reviews of the routine programme performance by polio oversight mechanisms. Routine indicators are now incorporated in polio surveys and the information on “zero routine dose” children, identified during polio activities, are made available to EPI.
- 4.10 A significant gain in equity in immunisation, specifically in Punjab, has been achieved through polio-routine collaboration and synergies by reaching those children who had never received any dose of vaccines through routine immunisation but were reached through polio campaigns. There were over 450,000 “zero-dose” children in Punjab, for example, of whom 99% have now been reached after being identified through polio campaigns. The

2016/17 Polio National Emergency Action Plan set a target of 80% IPV-1 and Penta-3 coverage for under 1 children. Community volunteers and communicators have helped in addressing vaccine misconceptions and hesitancy, both for polio and for routine vaccines. More than 17,000 community based vaccinators have been deployed since August 2016 by the polio programme, effectively releasing Lady Health Workers and EPI vaccinators from polio duties.

Moving towards equitable coverage

- 4.11 These interventions are beginning to deliver results. Independent surveys in Punjab, the province that hosts half of the country's population, show 22% increase in DTP-3 coverage in two years.⁶ Administrative data from other provinces also suggest coverage is increasing, though less rapidly. This will be verified by an upcoming district-powered household survey to be carried out by WHO.
- 4.12 In Balochistan and Khyber Pakhtunkhwa stronger political commitment is also noticed. As an example, the resource-poor province of Balochistan had a 50-fold increase in its immunisation budget over the past 3 years.

5. Lessons and remaining challenges

- 5.1 While progress in Pakistan is encouraging, it is uneven, fragile and the remaining challenges are significant. Punjab province, due to high-level political commitment and increased accountability is making rapid progress on immunisation coverage, equity and sustainability. Nonetheless, significant inequities remain. Coverage in the district of Rajanpur remains below 50%, while many other districts have coverage of over 90%. Other provinces are advancing less quickly. The latest survey in Balochistan shows coverage of 27%. Sindh, the second largest province, has an estimated half a million children who are under-immunised, with 200,000 of them living in Karachi, the provincial capital. Without strong political commitment to reach missed children in these urban settings, it would be difficult to see the coverage in this province improving significantly.
- 5.2 Although NISP has decreased the fiduciary risk of the Alliance's investment in the country, programmatic risks are substantial. Insecurity and limited road access and infrastructure continues to impede progress and makes provision of immunisation services extremely challenging in some areas. In addition, population movement is significant with millions of people moving within Pakistan and across the border with Afghanistan and urbanisation is on the rise.
- 5.3 Vaccinators form the core workforce for outreach immunisation services in Pakistan. However, poor human resource management have resulted in sub-optimal workforce distribution and frequent absenteeism. The use of new technologies has increased oversight and accountability in Punjab, but

⁶ - Penta-3 coverage increased from 64% (Nielsen Wave 1, December 2014) to 86% (Punjab Health Survey, November 2016)

further rationalisation of EPI workforce in other provinces is critical. Some of this work has started in Sindh and Balochistan. Khyber Pakhtunkhwa has increased its EPI capacity by creating more than 1,500 new vaccinators/EPI technician positions, doubling the total number involved in immunisation in the province. The population growth would have longer term implications on immunisation demand. With task shifting and the more rational distribution of the current workforce in immunisation services, the human resource gap can be better managed.

- 5.4 Most provinces still lack the required human resources for financial management and data monitoring. Through NISP, it is expected that at least one financial management officer and one data analyst will be recruited by the provincial governments to support EPI. According to a federal EPI functional review, conducted in 2016, the EPI management structure and human resources will need to adjust to the new roles and strategic functions of the federal government. These changes are expected to be featured in the next federal planning cycle.
- 5.5 There are critical opportunities for the Alliance partners to further ensure that the achievements of the polio programme enhance routine immunisation. The polio programme's clear direction, targets, responsibility and an accountability mechanism can be replicated by routine immunisation.
- 5.6 Finally, continued high-level and strategic engagement by the Alliance with each of the four provincial and federal governments, combined with the day-to-day support provided through targeted country assistance as well as active cross-learning and sharing of best practices between the provinces, are critical for Pakistan to reach every child with life-saving vaccines in the years to come.