Joint Appraisal (JA) Report

The Joint Appraisal (JA) is an **essential element of Gavi's regular monitoring and performance management (MPM).** The JA has evolved to align with Gavi 5.0 strategic shifts.

The JA is an **annual, country-led, multi-stakeholder** review/discussion that represents an important opportunity for countries to engage Gavi Alliance partners and other key stakeholders on annual progress of routine immunisation programmes against national goals and objectives, and to **discuss how Gavi support is contributing to this progress**. Key stakeholders involved in the country's immunisation programme should be represented at the Joint Appraisal, including civil society organisations (CSOs).

As an integrated part of Gavi's portfolio management process, the JA discussion should review **Gavi's contribution to immunisation programme performance** in 2022/early 2023, including delivery of COVID-19 vaccines and the impact of the COVID-19 pandemic on immunisation. A key feature of the JA is the joint discussion about the **promising practices, challenges met and future needs** for improving immunisation performance with a focus on reaching zero-dose children and missed communities.

The modality of the Joint Appraisal exercise is tailored to the country context and may be scheduled taking into consideration other planning exercises such as Expanded Programme on Immunization (EPI) reviews or National Immunisation Strategy Development.[1] The JA process will involve preparatory work to assemble and analyse data in advance of the discussion, exchange on the trends and their implications for the EPI programme and will conclude with the finalisation of a report and relevant deliberation outcomes and follow-up actions. At least one live discussion (in person) of the multiple stakeholders engaged in the Joint Appraisal should be organised.

The 2022 Joint Appraisal template is structured as follows

- **Section 1: Country situation**: overview of performance of Gavi support & discussion on progress and challenges faced
- **Section 2: Looking forward**: summary of discussion points and follow up actions

The information and indicators contained in section 1 on the country immunisation programme performance and Gavi support are mostly based on standard reporting. They are part of Gavi's monitoring and performance management framework, which will inform ongoing portfolio discussions, the JA, as well as discussions at Gavi's High-Level Review Panel (HLRP).

Section 1 is also where Gavi expects reporting against the Grant-linked Key Performance Indicators developed during Full Portfolio Planning (FPP) applications. For these indicators, results are to be analysed as (1) the absolute change in the indicator as a trend over time and; (2) the percent change in the indicator against the baseline value from the FPP application. Changes over time will be assessed against the end of grant target set during the application stage. Please ensure that sufficient data is provided to conduct such analyses, including the baseline values, targets, and sufficient annual data to infer trends.

The below set of cross-cutting questions should be considered to structure qualitative information:

[1] Countries which are finalising in the course of 2023 a Full Portfolio Planning are not expected to conduct a JA.

Cross-cutting Questions

1. What factors have facilitated or impeded progress?
2. What promising practices and/or innovations have emerged?
3. What key contributions have partners made to drive performance?
4. What are the top risks that should be mitigated?

Section 1 forms the analytical foundation to structure the JA discussion with Section 2 summarising the outcome of the JA and follow-up actions.

The outcome of this Joint Appraisal will include a joint assessment of promising practices, perceived challenges and opportunities for Gavi investments, and should elaborate future actions with clear targets and assigned responsibilities which is owned by the full set of in-country stakeholders.

Section 1: Country situation: overview of performance of support & discussion on progress, challenges faced

A. Immunisation Programme Performance – Zero-dose, Routine immunisation coverage, Vaccine introductions, campaigns, and outbreak response

1. Learning Question: What progress has been made to reach zero-dose and under-immunised children with vaccinations?

Indicator	2019	2020	2021	2022	% change, 2019-2022	% change, 2021-2022
Percentage of zero-dose children at the national level[1]	6%	13%	12%	5%	-16%	-58.3%
Drop out from DTP1 to DTP3 at national level[1]	3%	2%	3%	2%	-33%	-33%
Drop out from DTP1 to last routine dose of MCV at national level[1]	11%	7%	7%	5%	-55%	-29%
Percentage of health facilities that reported no stock-outs for the full year for DTP[2]	NA	NA	94%	NA	NA	NA

[1]Source: WHO/UNICEF Estimates of National Immunisation Coverage (WUENIC), July 2023. https://immunizationdata.who.int/listing.html?topic=coverage

[2]Country data as reported to WHO/UNICEF through the electronic Joint Reporting Form (eJRF), July 2023. https://www.who.int/teams/immunization-vaccines-and-biologicals/immunization-analysis-and-insights/global-monitoring/who-unicef-joint-reporting-process

Country comments (please consider the set of cross-cutting questions to structure comments):

India has made remarkable progress in improving the immunization coverage in the country and has also been able to reverse the backslide in immunization coverage due to Covid-19 pandemic. As per WUENIC 2022, DTP 1 coverage has reached 95% surpassing the levels achieved in 2019 (94%); similarly, DTP 3 coverage has also reached an impressive 93%. The estimated number of

zero-dose children in India, dropped substantially from 2021 level to 2022 level, even lower than the pre-pandemic levels of 2019.

What factors have facilitated or impeded progress?

The achievements under Universal Immunization Program (UIP) are a result of years of incessant efforts for strengthening service delivery as well as improving demand for vaccination from the community. Robust microplanning and meticulously managed vaccine and logistic supply chain have enabled ensuring uninterrupted delivery of vaccination services to the remotest areas. Program implementation has been further strengthened by innovations and tailored interventions for areas which pose specific challenge. Some of which are cited below:

- **Urban Immunization:** Under HSS-2, a pilot for strengthening urban immunization was conducted by MoHFW in 14 selected urban cities to identify gaps and prepare a road map to address those gaps. Based on learnings from the pilot**, A** Framework for Action for Strengthening Immunization in Urban Areas was prepared and shared with the States/UTs. Through the pilot, processes of immunization program were streamlined and the microplans were updated in all the 14 cities along with the Task forces were constituted which met regularly. Trainings were supported for all the health workers and frontline workers including Mahila Arogya Samiti (MAS). BRIDGE training were customised for urban areas and training of trainers was conducted in these 14 cities. High risk areas were prioritised in these areas such as slums with migration, nomads, brick-kiln, construction sites, Hard to reach areas, VPD Out Break areas, vaccine hesitancy/ refusal areas. MoHFW has also conceptualized City Embrace Model (CEM) for strengthening Urban Immunization. Under City Embrace Model (CEM), 104 low performing cities have been selected and allocated to a single lead partner. The lead partner for the city is responsible for improving the immunization coverage of the city in a sustainable manner, by collaborating with other key partners with expertise in specific thematic areas of UIP. Surge monitoring was conducted in high priority areas including urban areas identified under City Embrace Model in last quarter of 2022 with an objective to enhance the quantum of monitoring and track the progress made.
- **Risk categorisation & preparation of State Specific Action Plans**: Risk categorisation of districts was taken up in 2022 to identify high priority districts by triangulating immunization coverage data, NFHS 5, Concurrent monitoring data, VPD surveillance data, areas with vaccine hesitancy etc. 278 districts were categorised as high-risk districts for strengthening immunization. Subsequently, State Governments developed State action plans with specific interventions for high, medium, and low priority districts. High priority districts were targeted with surge monitoring, surge HR, regular Task force meetings at State and district level and also at Block level.
- **Immunization intensification drives**: Improvement in immunization coverage in India can also be attributed to the immunization intensification drives- Mission Indradhanush and Intensified Mission Indradhanush, conducted from time to time. IMI was instrumental in putting the routine immunization coverage back on track after the COVID-19 pandemic related disruptions. India conducted IMI 5.0 in 2023, which was the biggest catch up campaign as it was carried out in all the districts in the country targeting children up to 5 years and pregnant women. It was held in 3 rounds from August- October 2023. 270 districts were flagged as High Priority Districts (HPDs), based on low immunization coverage or areas with Measles outbreaks and Diphtheria outbreaks. GoI communicated the list of these HPDs to States for focussed activity for IMI 5.0 and beyond. Till date, 12 phases of MI/IMI have been conducted wherein during the various phases of Mission Indradhanush.
- **Strengthened Review mechanism:** Strong accountability and review system has further enabled to ensure delivery of quality vaccination services. The State Task Force on Immunization (STFI) meetings and District Task Force on Immunization (DTFI) meetings are regularly monitored. While the immunization coverage in India has shown considerable improvement over the years, some inter-state variations still exist. Comprehensive Review of

the Universal Immunization Programme (UIP) in North Eastern states was also undertaken. The review included field level observations around key thematic areas of UIP like Programme Implementation, Programme Communication, Cold chain and logistics supply, AEFI and VPD surveillance, Data Recording and Reporting and Urban immunization. Review findings suggested that there are substantial state-level and intra state variations, which demand tailored planning and subsequent time bound implementation. The observation exercise was followed by dissemination of findings to the respective states. Subsequently, Immunization Coverage Improvement Plan (iCIP) were developed by the states. States have shared the signed copies ICIP, the implementation of which will be tracked quarterly and progress report will be shared with States and MoHFW based on identified indicators.

- **Improved Data Recording & Reporting- Roll out of U-Win:** Taking learnings from the successful implementation of Electronic Vaccine Intelligence Network (eVIN) and CoWIN, India has rolled out its electronic immunization registry- U-WIN, which is a name-based registry for children and pregnant women. It will enable to capture the vaccination status of all the beneficiaries and also improve data quality. After the successful pilot in 65 districts (across the country), India is being scaled up U-WIN to the entire nation during IMI 5.0. U-WIN was utilized as single source for coverage reporting, during all the 3 rounds of Intensified mission Indradhanush.
- **Robust AEFI Surveillance and Management System:** India has one of the world's largest AEFI Surveillance system. The AEFI surveillance programme of the Immunization Division was assessed by the World Health Organization (WHO) as part of the Indian National Regulatory Authority (NRA) Assessment in 2017. The pharmaco-vigilance function of NRA which includes vaccine safety and AEFI surveillance received the maximum possible maturity level rating of 4. India has met the AEFI surveillance sensitivity indicator (GVAP, 2016) of ten AEFIs reported per 100,000 live births per year. National Quality Assurance Standards for AEFI surveillance programme are in place in the country. The national level processes are quality certified.
- **Improved demand from the community:** Focus is being given on enhancing program visibility by leveraging platforms like Mass media (revised TV Commercials, newspaper advertisements, Radio Jingles), Mid media (posters, banners, hoardings) and social media (Facebook, Twitter, Whatsapp etc.). Gender-responsive re-branding of the UIP has been undertaken through mascots Teeku & Teeki. Improved outreach and awareness campaigns have played a vital role in increasing vaccine uptake. A special communication strategy through community radio stations reached an audience of nearly 30 million people with messages pertaining to Covid Appropriate Behaviour, Routine Immunization, and Nutrition. Partnerships were established with National Rural Livelihoods Mission, Ministry of Rural Development which helped in reaching out to nearly 80 million women across 29 states with messages on immunization and Infant and Young Child Feeding. The partnership with NRLM supported the implementation of Food-Nutrition-Health-WASH programmes, promoting high-impact behaviours focusing on the first 1,000 days. Initiatives were also undertaken to strengthen capacities of states for planning and implementation of the behaviour change strategies. BRIDGE refresher training and ToT on IPC were held in preparation for IMI and RI. It has been particularly instrumental in enhancing the ability of FLWs to engage with communities effectively and promote RI services. Recent evaluation of the BRIDGE programme found that approximately 72 per cent of the 200,000 FLWs trained were capable of developing communication plans for their respective villages and 89 per cent of the FLWs used their enhanced IPC skills to educate community members about the importance of vaccines. Additionally, 87 per cent of the FLWs reported a positive impact on their interactions with caregivers after taking part in the capacity-building activities.

- **Enhanced VPD Surveillance:** India has a robust VPD surveillance network, wherein the AFP surveillance and MR surveillance have continued to maintain the global standards even during the COVID-19 pandemic. Additionally, DPT surveillance has been expanded to the entire

nation. India initiated acute flaccid paralysis (AFP) surveillance for polio in 1997. In March 2014 India was declared polio-free. Besides AFP surveillance, country also initiated environmental surveillance (ES) for poliovirus detection. Currently there are 32 cities in the country where ES is functional. There are eight WHO accredited polio labs and two environmental sample concentration labs in the country supporting the polio eradication efforts of the country. Utilizing the same polio surveillance network, country expanded the outbreak-based surveillance for measles-rubella in all the states of the country by 2015. To achieve the goal of measles-rubella elimination, the outbreak-based surveillance got modified to case-based fever-rash surveillance in 2021. There are 28 labs in the country which are supporting in testing the samples collected from fever-rash cases. To measure the impact of vaccination program, MoHFW rolled-out the lab-supported case-based surveillance for diphtheria, pertussis and neonatal tetanus (DPT) in the country. From August 2022, DPT surveillance has become functional in all the states of the country. India was declared maternal and neonatal tetanus eliminated (MNTE) in 2015. The neonatal tetanus surveillance shows that the elimination status of country is maintained.

- **Cold chain systems: S**trengthening of national resource centres NCCVMRC and NCCRC has been done which finally led to its successful institutionalisation in the government system. These are nodal resource centre for all immunization supply chain related research, training, planning and policy initiatives in India. The centre has also been designated as the secretariat for effective vaccine management (EVM) assessment, and cold chain equipment specifications. The institute undertakes capacity building of cold chain technicians, program managers and policy makers at all levels. Since 2018-2022, 843 Cold Chain Technicians have received training on ILR/DF repair and maintenance. Additionally, 273 Cold Chain Technicians underwent training on WIC/WIF repair and maintenance. 285 managers have completed training on TVaCC. Furthermore, the temperature monitoring study in collaboration with NIHFW was conducted to understand reasons and constraints related to temperature management and improve the quality of temperature monitoring at all levels of Immunization supply chain. A workshop on National EVM 2.0 and the National Improvement Plan was successfully conducted. In alignment with the Gavi HSS-2 target of 16, a total of 20 EVM assessments have been carried out. Additionally, 7 Improvement Plans (IP) have been developed specifically for the selected states.

Over the period, the performance of UIP has improved tremendously and remaining gaps such as regional disparities in immunization coverage due to challenges in reaching zero-dose and under-immunized children, vaccine hesitancy areas etc. are being further detailed out and tailored strategies are being developed to overcome these specific gaps.

What promising practices / innovations have emerged?

- **eVIN:** The Electronic Vaccine Intelligence Network is a smartphone and cloud technology-based app that digitizes information on vaccine stocks and temperatures across the country. An initiative of the Ministry of Health and Family Welfare, Government of India, eVIN has been developed and implemented with support from the UNDP. The unique innovation brings together technology, people and processes to strengthen the vaccine supply and ensure vaccine availability for every mother and child in time, every time. After transforming the vaccine supply chain to encourage improved vaccination coverage, an upgraded version of eVIN has been developed with the core fundamental of sustainability. The eVIN Advance Edition is a completely open-source platform and adheres to the security protocols and best practices recommended globally by the Government of India. Integration of an end-to-end supply chain solution initiated from the manufacturer till the vaccination session site is envisaged in eVIN AE. eVIN has been supporting continued immunization during the pandemic with uninterrupted vaccine stocks and flows and their efficient management.

- **CoWIN:** COVID-19 Vaccine Intelligence Network (CoWIN) is the digital backbone of India's rapidly expanding and one of the world's largest COVID-19 vaccination programmes. It is a scalable, inclusive, and open platform for universal vaccination, and enables monitoring of vaccine utilization, coverage, and wastage throughout the system. The citizen-centric solution facilitates registration and booking of appointments for vaccination, regular reminders and communication, provision of vaccination certificates for citizens and helps programme managers and vaccinators to create and manage sessions, develop reports and monitor progress.
- **U- WIN:** Based on the learnings from eVIN and CoWIN, an electronic immunization registry-U-WIN (Winning of UIP) has been developed for tracking and recording the immunization of all eligible beneficiaries. It has both citizen and administrator interfaces, it offers a user-friendly simple interface to register and select a convenient facility and real-time dashboards to visualise and disaggregate demographic data on vaccine coverage, consumption, and wastage.
- **RISE**: Rapid Immunization Skills Enhancement (RISE) package is a capacity-building framework to cater to vaccinators in India. This framework is an integrated/ blended-learning approach in which skills or learnings at each stage of training build off each other. The innovative platform of digital learning- RISE, has also emerged as a promising innovation which is being scaled up under HSS-3.
- **SAFEVAC (Surveillance and Action for Events following Vaccination):** A digital platform has been developed for AEFI reporting. This software application is used by government health system from district level and upwards to speed-up the processes of recording and reporting of cases of Adverse Event Following Immunization (AEFI). This has fast track the response time following AEFI, reduced data loss and time while transmitting the AEFI data and has strengthened the causality assessment of AEFI cases.
- **Community engagement initiatives**, including involving local communities, Civil Society Organizations (CSOs) and leaders, have helped build trust and encourage vaccine uptake in traditionally underserved areas. Some of the key activities of CSOs were coordination with health officials and AAAs to get the LODOR (Left out drop out and resistant) list, tracking each LODOR family through invitation slip each month, strengthening by District Coordinator for Teeka Sakhis and AAAs (front line health workers) in motivating LODOR families , taking support of key influencers in the society and concurrent communication with beneficiary families through various means, male engagement and religious leaders engagement; capacity building of local community based platform/structures/influencers on RI community consultations to discuss status of immunization facilities at the village level, household Visits and small group sessions, community mobilization and support on Immunization days.
- **BeSD:** One of the promising practices that has emerged is the embedment of key questions of the BeSD framework in the monitoring & mentorship formats of UIP. This will not only enhance the understanding the behavioural and social drivers of immunization but also help in taking appropriate corrective measures.

What key contributions have partners made to drive performance?

The key immunization partners in India- WHO, UNICEF, UNDP, JSI have supported the UIP and have been pivotal in driving performance and enhancing immunization coverage in India. Their contributions encompass technical assistance, monitoring and supervision, capacity building etc. to strengthen the vaccination system. They have played a pivotal role in mitigating risks and enhancing performance to reach zero-dose and under-immunized children in India, ensuring every child's access to life-saving vaccines. Under the established mechanism of IAG/ICC, the immunization partners work collaboratively and collectively to address the challenges that impede UIPs progress like implementing tailored strategies to reach zero dose children and under vaccinated children, responding to VPD outbreak or sustaining Routine Immunization during COVID-19 pandemic etc. Specifically, the immunization partners have supported the planning, monitoring, capacity building, new vaccine introductions, VPD surveillance and RI intensification

drives (MI/IMI) and other Supplementary Immunization Activities (NID/SNIDs for Polio, MR campaigns etc.). Few of the key interventions implemented by identified partners are:

1. UNDP: eVIN, CoWIN and U-WIN.
2. UNICEF: strengthening the cold chain system, EVM, advocacy and community engagement.
3. WHO: microplanning and capacity building, pilot of Urban Immunization in 14 urban cities, VPD surveillance, SAFEVAC.
4. JSI: RISE, New Vaccine Introductions and Urban Project.

What are the top risks that should be mitigated?

One of the major challenges identified is tailored immunization in urban and peri-urban areas due to poor demarcation among urban and rural areas and linkages with UPHCs and vaccinator, migratory settlements etc. Further, issues around estimating target population of infants under UIP at different administrative level and specifically in cities posed a challenge which being resolved with the implementation of U-WIN in the country. Another issue is around an apprehension to multiple injections due to introduction of many new vaccines under UIP and it may have an adverse impact on immunization coverage of co-administered vaccines. Country has also identified future pandemics or other disruptions to healthcare services as critical factors which may cause setbacks in vaccination progress. Behavioural insights along with strategic focus of community engagement interventions with tailored solutions is required for improving the vaccine uptake. Also, the immunization program is such a large program with each intervention is generating data and triangulation of these data sets for better decision making all levels from PHC/Block level up to the National level is needed. Therefore, such data sets need to be triangulated and analysed and UIP reviews should be based on the such analytics. Data analytics is one of the approved interventions under HSS-3.

2. Information Question? Forecasted routine introduction dates should be discussed and validated during the JA discussion

Please insert a table with vaccine introductions currently being forecasted with timelines and at what stage of preparation the introductions are at:	

Country comments (please consider the set of cross-cutting questions to structure comments):

National Technical Advisory Group for Immunization (NTAGI) is the apex technical advisory body to advice Ministry of Health and Family Welfare on immunization programme and any vaccine introduction under Universal Immunization Programme. It has recommended the introduction of Human Papilloma Virus (HPV) vaccine and Typhoid Conjugate Vaccine (TCV) under UIP.

HPV: In June 28, 2022, based on fresh evidence on disease burden, evidence on effectiveness of single dose of HPV vaccine, clinical trial data and experience of the Government of Sikkim on the introduction of HPV vaccine 17th NTAGI recommended the introduction of HPV vaccine in the Universal Immunization Programme (UIP) with a one-time catch-up for 9–14-year-old adolescent girls followed with routine introduction at 9 years of age. The introduction and nationwide scale up of HPV vaccine is planned in a phased manner over a period of 3 to 4 years subject to the availability of sufficient vaccine doses by the manufacturers.

TCV: On June 28, 2022, 17th NTAGI recommended that indigenous Typhoid Conjugate Vaccines (TCV) are safe and efficacious and there is sufficient burden in the country to consider this disease as a public health problem. Therefore, it is worthwhile to introduce Typhoid Conjugate Vaccine in the Universal Immunization Program. Program managers at Immunization Division may consider

one of the recommended strategies on introduction of the Typhoid Conjugate vaccines in Universal immunization program. NTAGI recommended the following TCV introduction strategies in the order of preference:

- Initiate routine vaccination along with MCV at 9-12 months. One-time school-based campaigns for all children (urban and rural), and vaccination at school entry for next three years. (Includes campaign)
- Routine vaccination along with MCV at 9-12 months with one-time urban school-based campaigns. (Includes campaign)
- Routine vaccination along with MCV 9-12 to be introduced, and for 4 years at school entry and in class 5th (along with HPV vaccine?); for next five years. (No campaign strategy).

On July 29, 2022, the 5th meeting of Typhoid Working Group (TWG), NTAGI recommended for the setting up a Surveillance for Typhoid Fever in order to determine burden to plan control strategies, to help target vaccination strategy, given heterogeneity, to monitor impact of vaccine campaigns on disease epidemiology, to monitor antimicrobial resistance to inform treatment and control and for outbreak detection, plan strategies for next phase, need for boosters or not, disease elimination, bivalent vaccine switch.

What factors have facilitated or impeded progress?

Preparedness for TCV introduction is facilitated by Gavi HSS-3 funding for setting up of enteric fever surveillance and also due to existence of four domestic suppliers. Though India has an HPV vaccine introduction experience from Sikkim and Punjab, its introduction is impeded by supply constraints of HPV vaccine doses by manufacturers globally.

What promising practices / innovations have emerged?

- For the inter-ministerial coordination & oversight National Advisory Group (NAG) on HPV vaccination is constituted which is chaired by the Additional Secretary and Mission Director (NHM), MoHFW and members are from Ministry of Education and Ministry of Women and Child Development. Further, to develop operational plan for HPV vaccine introduction, a National Operations Group (NOG) is set up under the chair of the Additional Commissioner (Immunization), MoHFW. It is comprised of officials from Immunization Division, Adolescent Health Division and representatives from AIIMS, ICMR-NCDIR SIO (Sikkim, Punjab), NCCVMRC-NIHFW, WHO, UNICEF, UNDP, JSI, BMGF, ITSU & JHPIEGO. For developing communication strategy on HPV vaccination, a Working Group on Communication Strategy for HPV vaccination was set up under the chair of the Additional Commissioner (Immunization), MoHFW with members from BMGF, Girl Effect, UNICEF, JHPIEGO, Group M, CSBC, AIIMS-Rishikesh, Adolescent Health, SNA Division, ITSU, JSI, WHO.
- MoHFW has identified UDISE plus and Prabandh portal of Ministry of Education for leveraging to line list schools and grade wise girl students and out of school girls respectively.
- MoHFW constituted a Typhoid Surveillance Group (TSG) and Typhoid Operation Group with of experts from medical colleges/institutions, and partner agencies.

What key contributions have partners made to drive performance?

Various partners are members of vaccine group as mentioned above and they are contributing for the development of vaccine introduction strategies.

What are the top risks that should be mitigated?

- For HPV vaccine, globally supplies to be improved before any country introduces this vaccine. Any introduction is to be preceded by readiness assessment of the States as done for any other new vaccine introduction this includes orientation of schools, ample cold chain space, capacity building of front line workers, health care workers, teachers, local leaders.

- For TCV, simultaneous introduction of two vaccines (TCV & HPV) in some state should have a robust strategy supported by required capacity building of all stakeholders. Also, multi-injection apprehensions among caregivers, healthcare workers and program managers to be resolved through an evidence backed strategy.

3. Learning Question: How has the introduction of the COVID-19 vaccine progressed?

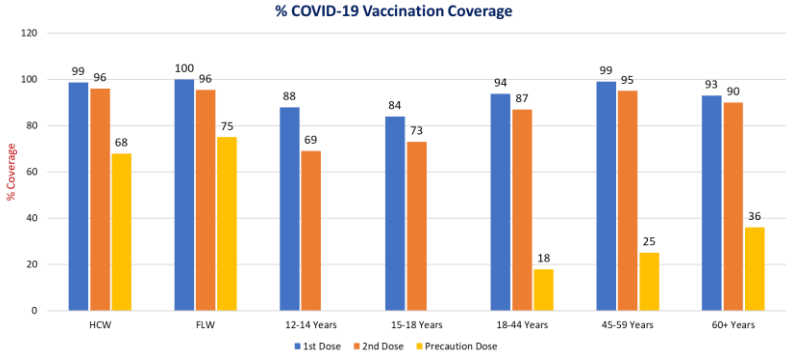
Indicator(s):

- Reflect on current coverage levels of the adult population and key at-risk populations.
- Describe how the country plans to use opportunities for integrated delivery of COVID-19 vaccine with routine immunisation & and other primary health care services.

(if applicable)

COVID-19 vaccine	No of doses
Dose-1	1,02,58,31,638
Dose-2	95,21,28,773
Precautionary	22,88,16,382

Graphs:



Data updated as of 12-01-2024 @ 7 AM

Country comments (please consider the set of cross-cutting questions to structure comments):

What factors have facilitated or impeded progress?

The National COVID-19 Vaccination Programme was rolled out on 16th January 2021. The success of the vaccination drive could largely be attributed to high political commitment, good governance and coordination at all levels. The key factors that facilitated the progress of the COVID-19 vaccination drive are as follows:

- **Political Commitment:** The commitment of political leadership to managing the COVID-19 pandemic was unwavering. The COVID-19 vaccination drive was launched and meticulously reviewed from the highest level at the national level.
- **Efficient Vaccine and Logistic supply chain:** A robust system was in place to ensure the timely availability of a wide range of vaccines, with meticulous monitoring facilitated through the eVIN portal. This system was essential to ensure that all eligible beneficiaries received their vaccines promptly, and that logistical supplies were well-coordinated.
- **Utilizing CoWIN for Data Monitoring:** The CoWIN platform played a pivotal role in the vaccination process, with daily monitoring and comprehensive data reviews. This digital tool allowed for efficient tracking of vaccination progress, contributing to the overall

success of the vaccination campaign. During the COVID-19 pandemic, the MoHFW has mandated UNDP to expand the immunization technical assistance to support the world's largest COVID-19 vaccination drive. Under the guidance of MoHFW, UNDP developed the Co-WIN (Winning Over COVID) digital platform, with three rounds of funding support from Gavi (i) COVAX Technical Assistance (ii) COVID-19 Vaccine Delivery Support (CDS) - Early Access and (iii) CDS - Need-Based and some gap funding from MoHFW.

- **Prior Experience of conducting large scale campaigns:** India has experience in running large-scale vaccination programs (e.g. MR campaigns, polio, Routine Immunization intensification drives, Td vaccinations for adolescents), which was beneficial for planning and execution.
- **Global Initiatives:** Participation in global initiative of COVAX, played a vital role in ensuring critical supply of 240 million vaccine doses in the country and receiving delivery support for the successful deployment of Covid-19 vaccines.

What promising practices/innovations have emerged?

- **CoWIN**: - India's approach to digital health service delivery, anchored in the principles of "Antyodaya," evolved into an indispensable tool for combatting the pandemic. Recognizing the necessity of a comprehensive digital solution for mass vaccination, India expedited the development of the Co-WIN. Building upon the foundation of the eVIN platform, Co-WIN emerged as a pivotal cloud-based IT solution for planning, executing, monitoring, and assessing the National Covid-19 Vaccination Programme. It has both citizen and administrator interfaces, it offers a user-friendly simple interface to register and select a convenient facility and real-time dashboards to visualise and disaggregate demographic data on vaccine coverage, consumption, and wastage.
- **Har Ghar Dastak**: Reaching Every Doorstep - The "Har Ghar Dastak" campaign was initiated in November 2021, followed by its second phase in June 2022. The campaign's primary objective was to ensure that first, second, and precaution doses reached all eligible population groups through door-to-door initiatives. Special attention was given to bolster the coverage of individuals aged 60 years and above for precautionary doses, as well as targeting age-appropriate coverage for the 12-14 years cohort. Focused campaigns targeted diverse settings, including old age homes, schools/colleges (inclusive of out-of-school children), prisons, and brick kilns, optimizing vaccination accessibility.

What key contributions have partners made to drive performance?

- **Community Engagement and Mobilization:** UNICEF has played a crucial role in community engagement by working with various local entities such as Van Dhan Vikas Kendras, Haat Bazaars, Self-help groups, and Panchayati Raj Institutions (PRIs). This has helped in mapping and strengthening local networks, advocating for vaccine promotion, addressing vaccine hesitancy, and promoting Routine Immunization (RI) in tribal communities. They have also focused on capacity building for all stakeholders, including tribal leaders, Self-Help Groups (SHGs), PRIs, and faith healers. Lessons learnt include avoiding mass campaigns that are generic and cost ineffective, instead apply inter-personal tailored approaches and focus on evidence based approaches that go down to the resistant pockets with a combination of solutions accepted and supported by the community.
- **Partnerships with Community Radio Associations:** UNICEF has strengthened partnerships with Community Radio Associations to broadcast innovative programming in local tribal dialects. This approach helps in reaching different listener groups and engaging communities effectively. They have also procured supplies and equipment to support community engagement and social mobilization efforts. It is estimated that the community radio stations have reached 30 million listeners including tribal and hard to reach communities in local dialects. Integrated messages have been incorporated in open air

discussions, community listener club meetings, listening circles and dramas. Case studies have documented the role of community radio in promoting immunization, mother and child health related behaviours.

- **Influencer Engagement:** UNICEF has identified and on boarded national, state, and sub-district influencers and celebrities to promote COVID-19 vaccination, address vaccine hesitancy, and promote Routine Immunization (RI). This includes actors, singers, sportspersons, and others who can resonate with specific target audiences, and even share personal experiences.
- **Digital Media Strategy:** UNICEF has adopted a digital media strategic approach to expand the reach and engagement on social media platforms, helping to disseminate accurate information and encourage vaccine uptake.
- **CoWIN:** UNDP has contributed by expanding the infrastructure for hosting the CoWIN system, which is central to the vaccination program's management. They have also played a role in the development, upgradation, and troubleshooting support of the CoWIN system, ensuring its smooth operation. For the Co-WIN rollout, UNDP along with partners trained nearly 1.2 million frontline workers who ensured access of vaccines against COVID-19 to citizens across the country (28 states and 8 union territories) through the Co-WIN digital platform. Co-WIN registered 1.1 billion Indians and recorded the administration of 2.2 million vaccine doses within the short span of 20 months and tracked beneficiaries on a real-time basis. UNDP's technical helpline addressed more than 900,000 grievances through the Co-WIN 24X7 technical helpline.
- **eVIN:** UNDP has supported the Electronic Vaccine Intelligence Network (eVIN) system, contributing to its hosting, development, maintenance, and providing temperature loggers, which are essential for the cold chain management of vaccines.
- **Deployment of Rapid Response Teams:** WHO has deployed Rapid Response Teams to support COVID-19 vaccination efforts, which can respond quickly to any issues or challenges that may arise.
- **Post Introduction evaluation (Covid PIE):** Post Introduction evaluation (Covid PIE) was taken up by the WHO with the support of Government and partners, report shared with Ministry.

What are the top risks that should be mitigated?

Likewise, under UIP, vaccine hesitancy was one of the most import barriers identified for Covid-19 vaccination drive. It was fuelled by misinformation, mistrust, or concerns about vaccine safety which is detrimental to undermine any vaccination efforts. This risk by mitigated at large by effective risk communication strategy, community engagement, and education campaigns. Initially, vaccine supplies were constrained across the globe which was later on improved with the incoming of domestic suppliers.

Opportunity for integrated delivery of COVID-19 vaccine with routine immunisation & and other primary health care services (if applicable):

Not Applicable for India

4. Learning Question: Trajectory and progress against targets set

- **How does the progress over the past year compare with your Theory of Change or programme objectives?**
- How has **COVID-19** and **COVID-19 vaccination** impacted your routine immunisation programme, what has been done to maintain and restore immunisation and what has been the impact of it (please include reference to trends in DTP3 and MCV1 coverage)?

- If there are **other factors** (e.g., government transitions, natural disasters, other disease outbreaks, etc.) which have led to disruptions in your immunization programme over the last year, please also reflect on those.

Country comments (please consider the set of cross-cutting questions to structure comments):

COVID-19 pandemic has adversely impacted immunization coverage across the globe. In India too, Covid-19 pandemic disrupted RI services that resulted in a fall in immunization coverage. As per WUENIC, India experienced a decline in coverage in 2020 (91% in 2019 to 85% in 2020, DTP 3) having most unvaccinated and under vaccinated children. However, DTP-3 coverage showed a progress from 85% in 2021 to 93% in 2022 and MCV-1 coverage from 89% in 2021 to 95% in 2022. The latest estimates depict that except for BCG, India has achieved the pre-pandemic coverage levels of MCV-1 (measles-containing vaccine), and RCV-1 (rubella-containing vaccine) and has surpassed the pre-pandemic (2019) coverage levels for most of the other vaccines i.e. DPT-1, DPT-3, OPV-3 (Oral Polio Vaccine), IPV-1 (Inactivated Polio Vaccine), MCV-2, Hep-B (Hepatitis-B) Birth Dose, RVV-3 (Rotavirus Vaccine) and PCV-3 (Pneumococcal Conjugate Vaccine).

What factors have facilitated or impeded progress?

- The global healthcare systems faced significant challenges during the COVID-19 pandemic, causing severe disruptions to essential health services, including the delivery of routine immunization. In India, routine immunization services got affected by the sudden onset of the pandemic, lockdown measures, and the mass movement of the migrant population.
- **Sustaining immunization services during the Pandemic:** Recognizing the distressing consequences of disruption, Government of India, issued guidelines in April 2020, declaring immunization as an essential health service and instructed the states to resume routine immunization. Health services including immunization were deemed as essential as per Ministry of Home Affairs (MHA). Accordingly, MoHFW developed and disseminated guidelines for delivering immunization services during and post COVID-19 outbreak. These guidelines were in alignment with the COVID-19 Containment strategy of the country, wherein containment and buffer zones were identified based on COVID-19 cases.
- **Virtual Reviews**: To understand the challenges faced by the states in continuing the RI services, concurrent monitoring tools were adopted to generate evidence on implementation of risk mitigation measures; and a mechanism was established for review of immunization programme with state governments through virtual platforms. These reviews were of immense value as they provided a platform for exchange of ideas and cross learning to understand various local measures that were being adopted by the states for restoring immunization services.
- **Special Vaccination Drive–Intensified Mission Indradhanush and Outreach Sessions:** Recognizing the urgency to reach and immunize the children who had been left behind, India introduced the Intensified Mission Indradhanush (IMI) 3.0 initiative in early 2021. This attempt aimed to bridge the immunization gaps, encompassing the backlog of missed vaccinations, dropouts, and unvaccinated individuals by focusing on areas where routine immunization services were maximum affected by the pandemic. Subsequently, another round – IMI 4.0 was conducted in 2022 to catch up on any existing gaps in immunization coverage due to the pandemic. In 2023, India's commitment to immunization and public health remains steadfast and the nation has launched yet another milestone initiative – IMI 5.0. With its goals set on eliminating the highly contagious disease of measles and rubella, IMI 5.0 is more than just a vaccination drive; it is a visionary pursuit of a measles-free India. IMI 5.0 is the largest and the biggest vaccination catch up, targeting all districts in the country and children up to 5 years with focus on MR vaccination.

- **State specific campaigns:** State specific catch-up campaign for routine immunization other than IMI were held at 22 of 36 States/UTs.

What promising practices / innovations have emerged?

- **Co-WIN to U-WIN:** Government of India received a confidence to develop Co-WIN from the existing successful digital platform called the Electronic Vaccine Intelligence Network (eVIN) which was introduced in 2013 under UIP. The Co-WIN app played a crucial role in streamlining the vaccination process. It allowed individuals to register, book appointments, and receive digital certificates after vaccination. This experience of individualistic tracking of beneficiary provided confidence to develop U-WIN to track infants and pregnant women for vaccination under UIP.
- **Public-Private Partnerships:** Collaborations between the government and private healthcare providers accelerated vaccine distribution and administration. This experience has also opened new avenues of engagement and collaborative partnerships to reach zero dose children in the country.
- **Rapid Immunization Skill Enhancement (RISE)**– RISE is an innovative capacity building platform that leverages technology to impart knowledge and upskill immunization health workers in India's UIP. In this program five e-learning modules are delivered to vaccinators through a mobile app which serves as an efficient and effective learning management system. RISE was piloted in March 2020, at a time when all face to face training interventions came to a halt. Starting from a pilot to cater to approximately 2600 users, RISE now helps 37000+ vaccinators across 100+ districts access learning content on their mobile phones, anytime anywhere. It proved to be a successful model of refresher trainings even in case of emergency situations like Covid-19. RISE is now being customized for the self-learning of Medical Officers and ASHSs.

What key contributions have partners made to drive performance?

The contributions of partner organizations have been instrumental in enhancing the performance of India's COVID-19 vaccination drive as well as sustaining routine immunization during the pandemic. The support provided is especially in terms of ensuring equitable access, data management, healthcare worker training, and the overall effectiveness of the vaccination program.

- Leveraging learnings from eVIN and CoWIN, UNDP provided technical and implementation support to Ministry of Health and Family Welfare to develop U-WIN (Universal Immunization Program -WIN) and initiated pilot across 65 identified districts in 36 states and UTs. Later in all 3 rounds of Intensified Mission Indradhanush 5.0, U-WIN was utilized as single source for coverage reporting.
- Outbreak Response Immunization (ORI) guidelines were developed for MR outbreaks with support of WHO and Special vaccination campaigns on MR were conducted.
- Public health response following Diphtheria outbreaks: WHO has provided technical support to MoHFW and states to initiate and expand case-based lab supported surveillance for diphtheria. From August 2022, diphtheria as part of DPT surveillance is functional in all the states of the country. For all suspected diphtheria cases, active case search in the community must be made by the health team. Under public health response, the team has to vaccinate the un and under immunized with diphtheria containing vaccine and to provide prophylactic antibiotics to the close contacts.
- IMI 5.0: All partners (WHO, UNDP, UNICEF, JSI, CHAI, JHPIEO, ITSU, BMGF) supported in the planning of the biggest catch-up campaign IMI 5.0 to reach out to all children up to 5 years of age missed any vaccine dose due to pandemic. Partners also supported in the monitoring in the high priority districts for the campaign during the three rounds of IMI 5.0. ITSU developed communication strategy for the campaign.

What are the top risks that should be mitigated?
Vaccine Hesitancy in few pockets is one of the challenges for vaccination and UIP has developed tailored strategy by undertaking root cause analysis through BeSD survey for the reasons of vaccine hesitancy and to further develop bespoke strategies under the guidance of CoP-Demand.

B. Programme Management

Financial implementation of Gavi cash grants Cash[2]

Support Summary*

Grant	Recipient	Period	Status of June 2023					Cash Bal	Compliance	
			Grant Value	Appr.	Disb.	Exp.	Uti. Rate		Fin. Rep	Audit
COVID19-CDS-CDS	UNDP	10/12/2021-31/12/2022	7,767,000	7,767,000	7,767,000	12,898,471	71%	5,317,947	Yes	N/A
COVID19-CDS-III	UNDP	16/05/2023-15/5/2025	4,281,720	4,281,720	3,501,116				Yes	N/A
COVID19-CDS-NBF	UNDP	22/07/2022-21/7/2024	6,948,302	6,948,302	6,948,302				Yes	N/A
COVID19-CDS-CDS	UNICEF	5/11/2021-31/12/2022	3,100,000	3,100,000	3,100,000	3,579,572	89%	420,428	Yes	N/A
COVID19-CDS-NBF	UNICEF	22/07/2022-21/7/2024	900,000	900,000	900,000				Yes	N/A
COVID19-CDS-CDS	WHO	14/01/2022-31/12/2022	4,132,875	4,132,875	4,132,875	5,893,797	83%	1,539,078	Yes	N/A
COVID19-CDS-NBF	WHO	8/8/2022-7/8/2024	3,300,000	3,300,000	3,300,000				Yes	N/A
COVID19-CDS-III	JSI	1/5/2023-10/5/2025	762,667	762,667	109,444	491,757	100%	-		
COVID19-CDS-NBF	JSI	17/11/2022-16/11/202	746,639	746,639	382,313					

[2] All HSIS grants (HSS, VIGs, OPS, Switch), EAF and CDS cash support as applicable.

		4								
HSS-2-	JSI	29/08/2017-31/12/2020	2,968,700	2,968,700	2,968,700	2,968,535	100.0%	-		
HSS-2-	UNDP	20/09/2017-30/06/2023	40,015,053	40,015,053	40,015,053	36,400,605	91%	3,614,448	Yes	N/A
HSS-2-	UNICEF	14/08/2017-31/12/2020	34,440,218	34,440,218	34,440,218	34,440,588	100%		Yes	N/A
HSS-2-	WHO	20/08/2017-31/12/2020	24,793,590	24,793,590	24,793,290	24,587,647	99.0%	205,643	Yes	N/A

*All amounts are in USD

Comment below in case of non-compliance

-Not Applicable

5. Learning Question: How well is the country able to absorb Gavi funding and what are the drivers? (This should cover all funding including funds channelled through partners.)

- Comment on the financial implementation progress of grants including but not limited to the utilisation rates. What are the key issues?

Indicator(s):

- Percentage of grant funds utilised
- Amount of cash balance in-country

Country comments:

- Comment on the financial implementation progress of grants including but not limited to the utilisation rates. What are the key issues?

UNDP updates till June 2023

1. Under COVAX TA, USD 4,652,750 has been budgeted in which 96% funds has been utilized. USD 3,635,486 has been budgeted for cloud server for hosting COWIN System in which 105% funds has been utilized. In addition, USD 354,167 has been budgeted for SMS gateway services for COWIN and 11% funds has been utilized and USD 663,097 has been budgeted for the procurement of temperature loggers for Cold Chain equipment's in which 95% funds has been utilized. No funds have been budgeted and utilized for the procurement of SIM cards for temperature loggers.
2. Overall, USD 77,67,000 has been budgeted under CDS – Early Window activities in which 98% fund has been utilized. USD 50,40,500 has been budgeted for the infrastructure support for CoWIN hosting in which 109% fund has been utilized, USD 23,98,500 has been budgeted for the development and upgradation of CoWIN system in which 80% fund has been utilized. Additionally, USD 3,28,000 has been budgeted for providing the troubleshooting support to the beneficiaries and system users in which 62% fund has been utilized. No funds have been allocated and utilized for the communication activities.
3. Overall USD 69,48,302 has been budgeted for CDS- Need based activities in which 76% fund has been utilized. USD 43,14,822 has been budgeted for the infrastructure support for CoWIN hosting in which 91% funds has been utilized. USD 15,50,459 has been budgeted for the

development and upgradation of CoWIN system in which 77% funds has been utilized. Additionally, USD 3,28,000 has been budgeted for providing troubleshooting support to the beneficiaries and system users in which only 16% funds have been utilized. USD 2,44,507 has been budgeted for communication activities and funds have not been utilized.

4. Under GAVI HSS-2, since grant start date, USD $40,015,053 has been budgeted in which 91% funds has been utilized.
5. For establishing an effective platform for various stakeholders to work together in the area of research and immunization, since inception USD $27,80,000 has been budgeted in which 66% funds have been utilized.
6. For GAVI Secretariat - Project Management Cell, since inception USD 580,000 has been budgeted in which 41% funds have been utilized whereas the annual budget for the year 2022 was USD 386,974 in which 11% expenditure has been incurred.
7. For establishing eVIN system infrastructure in the additional new States/UT, since inception USD 3,66,55,053 has been budgeted in which 101% funds have been utilized whereas the annual budget in 2022 for establishing eVIN system infrastructure in the additional new States/UT was USD 4,092,615 in which 116% expenditure has been incurred

JSI RISE updates

The HSS2 Grant has been completely utilized. Two No Cost Extensions (NCEs) were used to continue the RISE operations and scale up in new geographies. CDS-2 Grant was also further utilized to strengthen the program and further geographical extension.

WHO updates

1. Financial utilization GAVI HSS 2.0, PEF, CDS, Need based etc.
2. There were some unutilised funds as few activities could not be implemented based on the evolving pandemic situation. WHO, in consultation with MoHFW, proposed to establish and develop active surveillance in the country for Covid-19 and UIP vaccines, with the objective to build safety aspects of Covid-19 vaccines for younger age-group, and to extend the learnings to other routine immunization vaccines as per the need and requirement of Government of India. The initial plan included prospective monitoring of adverse events of special interest or cohort event monitoring following COVID 19 vaccinations in the age group <12 years in the country. Since COVID 19 vaccinations was not extended to this age group, it was not possible to implement the planned active surveillance.
3. Similarly, proposal to develop signal detection module for Covid-19 vaccines in Co-WIN SAFE-VAC was not approved as Covid-19 vaccination reduced significantly in country since second half of 2022.Though the revised proposals were submitted to MoHFW which included active and sentinel surveillance on UIP vaccine safety and related research activities but were not approved. A revised proposal from WHO for three activities (i.e., Dissemination Workshops on revised AEFI Operational Guidelines at regional and state level, Revised Routine Immunization handbooks / manuals designing/printing & procurement of training kits and Strengthening immunization in urban areas of Mumbai & Delhi) has been approved by Gavi in concurrence with MoHFW to be implemented by December 2024.

UNICEF Updates:

1. No key issues identified in implementation and utilization of funds. The Gavi funds were successfully utilized for various demand generation activities such as CSO engagement for mobilization of Left Out/Drop Out (LODOR) children, capacity building of FLWs for effective interpersonal communication, strengthening of SBCC cells for development and implementation of integrated communication plans, reaching the marginalised and vulnerable communities through tailored strategies etc.
2. Harmonised approach to Cash transfers (HACT), an operational framework of UNICEF ensures and guides the systematic disbursement of funds and reporting of expenditure for all UNICEF funded CSO, govt partners and partnerships. It also serves as robust accountability

mechanism which monitors and tracks the efficient utilization of financial resources. The HACT mechanism was utilised to ensure timely disbursement of funds for effective implementation of activities at all levels.

3. Emerging needs such as measles outbreak response have been supported through convergent RCCE and immunization SBC interventions.
4. The grants have been timely disbursed and utilised at the national, state and below level.

6. Learning Question: How well is the country resolving issues arising from the audit action plan activities? What issues are left to solve and what is the path forward?

- How has the country addressed recommendations arising from the past audit (Gavi Programme Audit in 2022)?

Country comments:

Program audit was conducted by the Gavi Audit team in 2022. The audit period in scope was from 1 January 2016 to 31 December 2021, and for purposes of Covid 19 response and vaccination roll out the period in scope was extended up to 30 June 2022. An audit scoping mission was completed between 6 and 15 June 2022, followed by fieldwork between 29 August and 30 September 2022.

The key issues identified by the audit team were around Sustainability of Gavi investments, Vaccine Supply Chain Management, Governance and Oversight and Budgeting and Financial Management, Immunisation Data Management and monitoring of Cold Chain Equipment functionality. Most of the Audit recommendations have been considered and corrective measures have been initiated, like:

- As per Gavi audit recommendations, a comprehensive quantification of all fixed and recurring operational costs for eVIN maintenance should be prepared and shared with the UIP. Norms have been established for budgeting operational cost eVIN under PIPs.
- Considering the Gavi Audit recommendations, eVIN security audit is planned every year.
- Data management, governance, master data management, and change management policy is developed and shared with MoHFW. The current data back policy document has also been developed.
- NCCMIS will be integrated with eVIN. This process will also establish a singular data warehouse vaccine and logistics data for improving visibility and reduce cases of duplication. Baseline data matching activity to be prepared.
- As per the recommendations of the Gavi Audit team scope of IAG has been expanded to review all aspects of UIP (beyond Gavi support) and now the states, districts and the CSOs would also have representation in IAG under HSS-3 on quarterly basis.
- Implementation of EVM recommendations is being tracked by NCCMIS and the improvement plans are being proposed under state programme implementation plan (PIP).
- The MR campaigns in Delhi & West Bengal which were delayed due to unavoidable reasons, have been successfully completed in 2023, wherein all children in the age group of 9 months to 15 years (9months to 5 years in Delhi) were vaccinated with campaign dose of MR vaccine. The coverage of both the States reached >95%.
- UNICEF has a robust fund tracking mechanism to ensure financial accountability. Following the audit, the recommendations have been carefully considered, and necessary tweaking are being made to the existing system. These modifications aim to effectively address and incorporate the suggested improvements for an even more streamlined and accountable financial process.
- Many of the other recommendations will be addressed by interventions planned under HSS-3 like Monitoring & Mentorship will strengthen supportive supervision at various levels of vaccine stores including GMSDs. Most of the issues pertaining to immunization coverage data will be addressed by the roll out of U-WIN and data analytics for action intervention that is being undertaken under HSS-3.

7. Learning Question: Please comment on any other financial management-related bottlenecks for implementation and compliance (if applicable).

Not Applicable

8. Learning Question: Is the country effectively addressing gender related barriers (e.g. faced by caregivers or adolescents in accessing immunisation services and barriers faced by health workers in delivering immunisation services)?

Indicator(s):

- Has the country implemented or will implement initiatives that remove or reduce gender related barriers? Qualitative information

Country comments:

UIP ensures that all available vaccines are provided free of cost to all infants and adolescent irrespective of any gender. Country is also cognizant of the gender related barriers may be faced by caregivers or adolescents in accessing immunisation services and barriers faced by health workers in delivering immunisation services. Thus, all the initiatives that the program undertakes, considerations are made to remove or reduce gender related barriers. Few of the illustrations are:

- Gender-responsive re-branding of the UIP has been undertaken through mascots Teeku & Teeki.
- Majority of the Cold Chain Handlers (nearly 60%) involved in the immunization programme are women, who closely work with 2.5 Lakh female vaccinators (ANMs) and 10 Lakh female community mobilisers (ASHAs) for the provision of immunization services. All the digital innovations offered by UNDP such as eVIN, CoWIN and U-WIN empower last-mile female healthcare workers, by introducing them to digital technology for vaccine and beneficiary management. This digital empowerment contributed to their (i) empowerment (ii) digital literacy (iii) increased sense of confidence (iv) strengthened agency (v) improved networking (vi) informed decision-making and (vii) ease of work.
- Through Co-WIN, UNDP empowered all genders which ensured equitable access to COVID-19 vaccines.
- RISE which is a digital learning platform has helped learners who are predominantly women to improve their digital literacy and also helped them build knowledge and skills for their professional development. The content of RISE modules often narrates scenarios which show the involvement of the father and other male members who actively bring pregnant women and children to the health centre for their vaccination. This helps sensitize the learners about the role of the men folk in decision making for immunization and guides them to constructively engage with all members of the community to improve vaccine acceptance.
- The country has successfully implemented the interpersonal capacity building (BRIDGE course) for ANMs/ASHAs/AWWs (AAAs). This strategic initiative aims to enhance the accessibility of immunization services while addressing communication-related barriers and other challenges faced by health workers. Though the BRIDGE IPC skills training and the module addressed ‘equity’ under the coverage of Left Out/Drop Out (LODOR) families for RI, the training module did not explicitly emphasize vaccinating boy or girl child.
- As part of Gavi HSS-3 programming with an aim to increase the demand of immunization services and reduce the number of zero dose children, key strategies that are being adopted include evidence based community engagement, strengthening the partnerships with CSOs and CBOs, community based monitoring and feedback, use of human-centered design approaches and social data to co-create gender-responsive local strategies to promote positive behaviours, social norms, and demand , support capacity building of health

functionaries on human-centred design approaches, social listening and interpersonal communication on immunization.

- Under the Community of Practice on Demand intervention, proof-of-concept pilots will be undertaken and social data in selected places will be utilized, which can test and inform interventions for addressing gender disparities and mainstreaming gender with immunization. This will be finally tailored to undertake gender-responsive and gender-transformative approaches in the project. CSO engagement will also work through looking at the existing gender barriers in the communities and applying tailored interventions based on evidence and insights, to overcome these barriers through a cohesive demand generation approach. Additionally, gender transformative approaches will be used to enhance women's decision making related to health of the children. Community platforms such as PRIs, CBOs, women's self-help groups 'Mahila Arogya Samiti' etc. will be used to this effect.

9. Learning Question: How well is the country implementing its health information systems and data strengthening, monitoring and learning activities?

- What is the progress of planning and implementing health information system and data strengthening, monitoring and learning activities? Do these collectively constitute at least 10% of your HSIS grant budget?
- How will the country address remaining data-related gaps or barriers to immunization programme performance?
- Comment on key results or findings for identified learning priorities from the FPP application. Specifically, what actions have been taken to improve immunization programme performance based on these data? e.g. better understand specific barriers to immunisation, successfully guide implementation, inform course correction for grant activities

Please share any documentation of learning results if available (e.g. reports, evaluations, assessments, etc).

Country comments:

Two Immunization dashboards are developed by MoHFW with technical support from ITSU, every month. Immunization dashboard reflects overall performance of the immunization program and urban immunization dashboard reflects performance of urban immunization. These dashboards provide a common platform to analyse administrative (HMIS, MCTS/RCH), evaluated and concurrent monitoring data to provide state specific feedback for initiating corrective measures. The dashboards not only provide feedback to the states with respect to their performance but also highlight any data issues. The monthly immunization dashboards are being digitalized for better utilization of data for action.

Under the Gavi HSS-III grant, a number of interventions are being undertaken which will not only improve health information systems and strengthen data but also better understand specific barriers to immunisation, successfully guide implementation, inform course correction for grant activities.

- **Data Analytics and Review Mechanism:** A data analytics intervention is being undertaken to support the decision-makers at the district level to make informed decisions by understanding the gaps in the programme implementation. Enhanced data use for reviewing and undertaking corrective measures in the RI programs of the targeted districts will further add value to the monitoring process of the zero-dose cohorts and missing communities. The primary purpose of this intervention is to strengthen the data quality and the review mechanism to improve vaccination coverage.
- **U-WIN:** India has rolled out its electronic immunization registry- U-WIN, which is a name-based registry for children and pregnant women. It will enable to capture the vaccination status of all the beneficiaries and also improve data quality.
- **Monitoring & mentoring**: Based on the understanding from stakeholder consultations during the FPP process, an intervention on enhanced monitoring and mentoring has been planned under Gavi HSS-3 support. The enhanced focus on Monitoring will enable to better understand the barriers and challenges in vaccination and subsequently take data guided corrective actions.

C. Implementation of Technical Assistance (TA)

10. Learning Question: Is the country implementing TA and COVAX TA as expected? Please explain how the TA has helped to support the achievement of the country objectives.

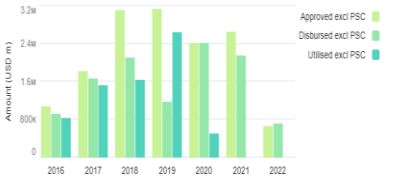
Indicator(s):

- Country analysis on partner performance as per workplans

Graphs:

(Examples to be replaced with specific country versions)

Year	Approved excl PSC	Disbursed excl PSC	Utilised excl PSC
2016	$1,077,849	$820,953	$834,135
2017	$1,823,216	$1,666,390	$1,524,042
2018	$3,104,880	$2,108,660	$1,638,787
2019	$3,129,892	$1,176,234	$2,641,124
2020	$2,414,138	$2,414,138	$507,557
2021	$2,652,460	$2,150,440	$0
2022	$662,143	$716,813	$0



Country comments:

Yes, the country has been able to successfully implement TA and COVAX TA effectively to support the achievements of country's Universal Immunization Program as well as the COVID-19 vaccination program.

Grant	Partner	Approved(US$)	Expenditure(US$)
HSS 2	WHO	2,47,93,590	24,587,647
HSS 2	UNICEF	3,44,40,218	3,44,40,588
HSS 2	UNDP	4,00,15,053	36,400,605
HSS 2	JSI	29,68,700	29,68,535
CDS EA	WHO	41,32,875	58,93,797
CDS NB	WHO	33,00,000	
CDS EA	UNICEF	31,00,000	35,79,572
CDS NB	UNICEF	9,00,000	
CDS EA	UNDP	77,67,000	1,28,98,471
CDS NB	UNDP	69,48,302	
CDS TW	UNDP	42,81,720	
CDS NB	JSI	7,46,639	491,757
CDS TW	JSI	7,62,667	

COVAX TA: Under COVAX TA support of US$ 30 million as Technical Assistance (TA) of US$ 21.3 million through partners (WHO: US$10.18 million, UNICEF: US$ 6.4 million & UNDP: 4.65 million) and supply of Passive Cold Chain Equipment worth of US$8.73 million for successfully delivery of Covid-19 vaccines to beneficiary. The country has been able to successfully able to support the roll out and conduction of COVID-19 vaccination program.

Under COVAX TA to WHO, 50 RRT members were deployed across the country to support COVID-19 vaccination. Both capacity building and monitoring support of COVID-19 was supported with this budget. Following activities were undertaken:

- Operational guidelines for COVID-19 vaccine introduction
- Training materials including animated films developed
- Roll out of cascaded trainings for COVID vaccination facilitated at state and district level:
- Phase 1 trainings: ~75,000 programme officers/ Medical officers and 730,000 health workers trained
- Phase 2 trainings: 160,000 additional frontline workers trained

- Capacity building of DIOs and district data handlers on CoWIN SAFEVAC
- Expansion of AEFI committees: 300 specialists identified and added
    - Assessment of preparedness for COVID-19 vaccine roll out
    - "Dry run" monitored to identify bottlenecks
    - Monitoring of COVID-19 vaccination activities to identify gaps for mid-course corrections
    - ~598,000 COVID-19 vaccination sessions monitored
    - More than 4 million beneficiaries monitored through house- house monitoring
    - Field level support to identify areas with poor vaccination coverage and need-based support
- Data analysis and feedback to State and district task forces regularly

Under COVAX TA for UNDP, USD 4,652,750 has been budgeted in which 96% funds has been utilized. USD 3,635,486 has been budgeted for cloud server for hosting COWIN System which have been utilized. In addition, USD 354,167 has been budgeted for MS gateway services for COWIN and 11% funds has been utilized and USD 663,097 has been budgeted for the procurement of temperature loggers for Cold Chain equipment's in which 95% funds has been utilized.

Under TA & COVAX TA for UNICEF: The support was utilized for the following:

- Augmentation of cold chain network to include more than 26k cold boxes and more than 2 lakh vaccine carrier (Standard and Freeze Free)
- Distribution and installation of CCE and their update in NCCMIS
- Technical support provided for National and State EVM, pool of national assessors trained, and data collection across all selected states
- Sensitization and awareness generation for covid -19 precautionary dose. In several states, UNICEF engaged volunteers and CSOs to reach out to the most marginalized children, adolescents, parents and community members for awareness, and demand generation through partnerships with tribal federations, SHGs, adolescent groups, and NGOs for community radio, announcements, and other such outreach activities. For example , In Gujarat, 230 traditional and folk media artists groups were trained to build community awareness and engagement on health, nutrition, and education issues along with COVID-19 communication, 40 traditional and folk media artists intensively engaged and went to four districts to advocate adoption of CAB and COVID-19 vaccine through 60 performances, reaching out to 41 villages of Gujarat.
- Using Entertainment-Education approach, UNICEF developed Duur Se Namaste (Greetings from a distance) in partnership with Doordarshan, National Public Broadcaster highlighting the importance of the COVID-19 vaccine, addressing vaccine hesitancy, promoting continuation of COVID Appropriate Behaviour (CAB) and other key behaviours.
- Involvement of FLWs and NGO volunteers for community mobilization and RCCE communication.
- Training/ Capacity buildings on Covid Vaccination (Govt. Officials, District partners, Youth groups (NYKS, NSS, Bharat scout and guide) Volunteers, School teachers, Local NGO etc.).
- Capacity building of states cadre on repair and maintenance of CCE, NCCMIS and supportive supervision.
- Supportive Supervision of Covid-19 and RI sessions.

WHO PEF TCA: 4 cities have been supported under PEF TCA for urban immunization activities. This funding was utilized to roll out the activities on microplanning, capacity building, monitoring support and best practises. Based on this, a document on urban immunization, framework for action was developed.

Section 2: Looking forward: Summary of key discussion points and follow up actions

Briefly summarise the **key discussion points**, including **identified needs and follow up** actions resulting from the Joint Appraisal review and dialogue.
This may include

- Identified (future) needs and priorities
- Follow-up actions to accelerate planned activities
- Expected adjustments to activities and as applicable the Gavi workplan, targets and budget, such as budget reallocations, modifications in TA planning, revision of dates for anticipated new vaccine applications or introductions, etc. 2
- Roll-out or expansion of promising practices and innovations
- Other aspects and follow up actions

Ministry of Health and Family Welfare (MoHFW), Government of India along with Gavi conducted Joint Appraisal from 11th to 14th December 2023. On 11th and 12th December, field visit was conducted at NCCVMRC, Delhi and PHC-Bhangrola and Apollo Cradle Hospital in Gurugram. Additional Commissioner (Immunization), MoHFW led the field visit to show the cold chain management and trainings at NCCVMRC and functioning of eVIN and U-WIN in Gurugram.

On 13th and 14th December, joint appraisal workshop was conducted under the Chairpersonship of Additional Secretary & Mission Director (NHM) and the Co-Chairmanship of Joint Secretary (RCH). The Gavi Mission was led by Ms Aurelia Nguyen, Chief Programme Officer, Dr Adetokunbo Olushola, Director High Impact Countries, Ms Jackie von Gottberg, Adviser to the Chief Programme Officer, Mr Homero Hernandez, Senior Country Manager India, Ms Sabrina Clement, Programme Manager India and Mr Sachin Bhardwaj, Senior Specialist, Strategy Design & Delivery. The JA mission was also attended by Mr Chris Wolff, Deputy Director, Vaccine Service Delivery Platform from BMGF HQ, Dr Vinod Kumar Bura, Coordinator-Immunization and Vaccine Development from WHO SEARO and Ms. Mariya Kathiwada, Health Financing Specialist from UNICEF ROSA. The two days' review was attended by the in-country immunization stakeholder viz. UNICEF, UNDP, WHO, JSI, ITSU, NCCVMRC, BMGF, and USAID. The minutes of the JA along with list of participants is annexed.

- **Identified (future) needs and priorities:**
    - Reducing the number of zero dose children to ZERO in India with special focus in 143 districts with Gavi HSS-3 support.
    - Strengthening Routine Immunization so that there is no need of conducting periodic catching up of missed children and pregnant women.
    - Introduction of new vaccines i.e. HPV and TCV as per the recommendation of NTAGI.
    - Elimination of Measles and Rubella from the country.
    - U-WIN scale up across the country and U-WIN integration with existing State digital initiatives. Explore wider engagement with private sector on U-WIN utilization.
    - Reduce vaccine hesitancy among the communities by undertaking deeper analysis of the causes behind refusals and apprehensions through setting up of CoPD, behavioural insight studies, BeSD, ASHA module of U-WIN and other independent surveys.
    - Demand generation and mobilization by exploring new grass root partnerships line CSOs and CBOs.
    - Setting up of enteric fever surveillance for impact assessment of TCV introduction.
    - Systematized capacity building of various cadres under UIP.
    - Strengthened review mechanism based on data triangulation and analytics.
    - Setting up of a single system of monitoring and mentorship (M&M) across the country under UIP.

[2] This refers to all types of Gavi support

- Pilot incentivization of mobilizers for infant registration and recording of vaccination on U-WIN.

- **Follow-up actions to accelerate planned activities:**
  - Orientation of States under HSS-3 on the planned activities so that implementation of all the interventions in 143 districts could be accelerated and States are involved in the monitoring and evaluation framework.
  - Dissemination of Zero Dose Implementation Plan of India under HSS-3 for all the States, implementing partners, other stakeholders.
  - Setting up of CoP-Demand by nominating experts from different domains so that all demand side interventions are guided and monitored by the CoPD.
  - Conducting a work plan meeting with all the implementing partners to collaborate so that partners define their tangible quarterly plans with Program Division and there is established accountability among the stakeholders.
  - Organizing quarterly Immunization Action Group (IAG) and Pre IAG meetings along with 11 States to review HSS-3 activities implemented by identified partners.
  - Undertaking preparatory activities with the TA support of partners that are required in advance of new vaccine introduction date decision. If there are gaps in TA, support may be requested accordingly from Gavi and partners. State Readiness Assessments is to be strongly considered in advance of an introduction date gets confirmed.
  - Include a feature in UWIN to capture reasons for vaccine hesitancy/refusal under mobilizer module which will give a much bigger sampling frame given all beneficiaries are technically registered on U-WIN vis-a-vis the data coming from WHO's concurrent monitoring.
  - Ensuring that WHO and other partners adhere and use the interface/platform for M&M currently being developed by UNICEF.
  - Relook sample size for BeSD survey under the guidance of CoPD.
  - Revitalizing existing iTMIS as the single training solution and all the partners plan the training calendar and feed in the training completion on iTMIS till the PHC level.
  - Convening a technical working group meeting on TCV to consider TCV introduction strategies and timeline.
  - Finalize the the zero-dose marker methodology (6 week vaccines i.e. Pentavalent-1 plus other, vs birth dose vaccination) for incentivization of ASHAs.

- **Expected adjustments to activities and as applicable the Gavi workplan, targets and budget, such as budget reallocations, modifications in TA planning, revision of dates for anticipated new vaccine applications or introductions, etc.**

  Not applicable as HSS-3 first year disbursement has started recently.

- **Roll-out or expansion of promising practices and innovations**

  Under Gavi HSS-3 interventions, many innovative and promising practices are being undertaken.
  - One of the key HSS-3 intervention is Electronic Immunization Registry- U-WIN which is being scaled up after a successful pilot testing in 65 districts of the country. U-WIN was pilot tested with the support of COVAX CDS support and planned to be rolled out across the country with HSS-3 support.
  - Rapid Immunization Skill Enhancement (RISE) was piloted in 5 districts under HSS-2 and was expanded to other districts with the support from other resources. RISE is a self-paced, self-administered digital training module on key components of immunization program for ANMs. It is being further expanded to other districts under HSS-3 support.
  - Other promising initiatives like Monitoring & Mentorship, mobilizer incentivization, strengthening microplanning, BeSD survey, Program Monitoring for Action, data strengthening and analytics for review, Institutionalizing capacity building, Community of Practice on Demand and CSO engagement are planned under HSS-3.