



Joint Appraisal 2014

Cambodia

1. Brief Description of Process

The country accepted the proposal to conduct an in-country joint appraisal (JA) by GAVI Alliance partners soon after receipt of the APR materials in May 2015. Two colleagues from the Regional office of the WHO (WPRO) participated in the JA, Mr. S. Postma from HSS and Dr. J. Mendoza from EPI. There was no in-person participation from UNICEF (EAPRO) due to conflicting priorities, however, in-country UNICEF colleagues participated in the JA process. The appraisal also benefited from participation of Dr. J. Bilous who was in Cambodia at the time of mission on a EPI consultancy contract with WHO in addition to Dr. S. Hossain, the newly appointed Technical Officer (EPI) and Dr. Chham from WHO Country office. The Joint Reporting Format submitted to WHO and UNICEF was one of the central resource materials for the JA. The report was jointly prepared and mutually finalized.

The activities of the appraisal included presentations by the Government officials on the progress made; internal discussions among the partners; a visit to the National Vaccine Store; and debrief meeting with Secretary of State, Prof. Eng Huot. The MOH expressed a reluctance to present the JAR to the ICC/HSCC as the two bodies had recently signed off the APR for GAVI.

2. Achievements and Constraints

Cambodia has been a consistently high performing country as illustrated by the Cover Note graph.

The Pentavalent third dose coverage reported for 2013 is 92.13%. The coverage estimated by two surveys in 2010 and 2011 respectively was around 85% which is considered consistent with the reported data. Since 2000, there has been alignment between country and WHO/UNICEF reported coverage estimates. There have been no Measles cases reported since November 2011, further underscoring the high immunization coverage in Cambodia. Measles second dose coverage for 2013 was 63%.

The drop out between first and third dose for Pentavalent vaccine is 2.23%. Vaccine wastage for single dose Pentavalent vaccine has been reported as 1.02% and for 10 dose Measles vaccine as 40%.

Sex disaggregated information is available from the DHS in 2010 and does not show any difference between immunisation rates for boys and girls (84.6% and 85.1% respectively). The same survey did indicate higher differences in immunisation rates between urban and rural population (90.4% and 83.7% respectively) and among wealth quintiles (ranging from 73.5% and 92.6%). There were further geographic inequities illustrated by the fact that one district had coverage of less than 50% and another 17 districts have reported coverage between 50 to 79%. The variation in coverage can be explained by presence of large sections of high risk communities in specific districts.

There are approximately 2,000 high risk communities (remote, mobile, refugees and urban poor) in Cambodia, improving access to basic health services including immunisation to these groups is one of the biggest challenges within the country. The Government plans to focus on improving access to immunization services across these high risk communities in its new proposal for GAVI HSS. This proposal will specifically focus on supporting and scaling-up outreach activities to reach these groups.

3. Governance

Traditionally Cambodia has been promoting harmonization and alignment. The Government and development partners signed a Declaration on Harmonization and Alignment in 2004. This was further advanced in 2006 with the development of a 5-year Action Plan on Harmonization, Alignment and Results. A Coverage Improvement Plan (CIP) to reach every district and every

commune was included in this Plan. In addition a Communication Strategy to improve the awareness of immunisation amongst community members and support community development is also in place. National guidelines for fixed site integration with other national programs have also been developed.

As part of this effort, the Ministry of Health established in 2001 the Immunization Coordination Sub Committee (ICSC), chaired by the Deputy Director-General for Health. The members of the ICSC include government, partners, donors, and civil society. The Strategic Objective of this Committee is to provide a platform for coordinating support to the National Expanded Program on Immunization, with the aim to improve access to quality immunization services and accelerate the introduction of new vaccines into the Cambodian EPI. In addition the Committee promotes programmatic and financial sustainability of immunization services and secures funding for immunization services. The Committee meets quarterly to:

- discuss Plans prepared by the National Immunization Program;
- monitor progress in achieving milestones/objectives;
- identify constraints and recommend actions in order to achieve milestones/objectives;
- identify resource gaps and make available funds to fill the resource gaps to achieve objectives/milestones.

Since 2009 the Government has established Technical Working Groups for Health (TWGH) in 18 sectors or technical areas. The core function of the TWGH is to ensure effectiveness in coordination across the health sector and the groups are led by the Ministry of Health. The Ministry of Health decided that the Technical Working Group for Health (TWGH) should replace the Immunization Coordination Sub Committee (ICSC) as there was duplication in membership across the two groups. The TWGH meets monthly under the chairmanship of the Minister of Health and brings together around 80 government officials, partners, donors, and civil society representatives. The meeting minutes of TWGH are readily available and accessible. Cambodia joined the International Health Partnership (IHP) in 2007, this mechanism helps to support the co-ordination of donor efforts.

The GAVI/HSS grant is managed by H.E Professor Eng Huot , Secretary of State , MoH and Director of HSSP2. Seven different departments and 10 operational districts are utilizing the GAVI grant. The National Immunization Programme (NIP) is receiving funds for implementing the High Risk Communities Strategies (HRCS) which is managed by H.E. Prof. Sann Chan Soeung, Advisor to MoH and National EPI/ HSS Manager for the GAVI grant.

4. Programme Management

As mentioned before, there are six/seven departments and 10 operational districts under the Ministry of Health using the GAVI HSS grant in Cambodia. The NIP has multi-year strategic plan and annual work plan with the budget that covers the procurement of all traditional vaccines, operational costs and co-financing for Pentavalent vaccine. The Government fully finances the procurement of traditional EPI vaccines.

The NIP started to focus on High Risk Communities from 2011 SIAs. The overall objective of the high risk community strategy is to ensure that all infants, children and women in Cambodia, no matter where they live, are fully immunized according to the schedule of the National Immunization Programme. This strategy allows the country to reach its national, regional and global immunization goals and contribute to further improving the quality of life and the health of the population. The NIP is now implementing the strategy by using the HSS grant in all the Operational Districts and outcomes are visible.

The country is ready to introduce PCV vaccine in their immunization programme in January 2015 and the NIP has already started the activities to prepare for the introduction. Further to PCV introduction, Cambodia has sent an Expression of Interest (EOI) to apply for JE and IPV vaccines in September 2014, and for a HPV demonstration project in 2015. The HSS application for a new grant will be made in September 2014. The next deadline for GAVI applications is 25 January 2015.

5. Programme Delivery

A catch up measles rubella (MR) campaign targeting children 9 months to 15 years old with support from GAVI and partners was successfully conducted in a phased manner in 2013. This was followed by routine MR vaccine procurement through the national budget. The National Immunization Program used the MR campaign to identify the high risk villages and as a result identified 1,147 high risk villages. Earlier, it was assumed that Cambodia has 2,000 high risk communities. These villages are being targeted for the implementation of the high risk strategy in 2014. The post introduction evaluation (PIE) for MR campaign will be conducted end June/early July 2014.

The last national cold chain inventory was conducted in 2012. It was used to assess the cold chain storage capacity required for PCV and IPV introduction. These assessments included a mapping of storage capacity, temperature mapping of the cold room (WIC) and freeze room (WIF). The PCV application to GAVI included a request for USD 130,000 to be resourced from new vaccine introduction grant (VIG) to procure cold chain equipment to replace the old refrigerators and to fill critical cold chain gaps at the province and district level.

An EVM assessment was conducted in 2012. The one page EVM improvement plan was developed; however, there have been limited local resources to implement it. A mid-year review of the EVM assessment was conducted in May 2014. A first draft of SOP for the national cold stores was developed with translation on-going. Other activities for monitoring of the temperature management identified through the EVM assessment should be implemented in 2014-2015. The policy decisions related to maintenance, improving the storage capacity and increasing distribution frequency will require further discussion.

There was stock out of BCG, OPV, TT and HepB vaccine in early 2013 due to a funding gap for procurement of vaccines in 2012. In order to address these stock-out issues an additional US\$600,000 was allocated in second half of 2013 to assure the availability of vaccines by year end and in early 2014. The amount required for vaccine procurement in 2014 was fully funded from national budget. The coverage data for 2012 for all traditional vaccines (both administrative and WUENIC) does not show any dip. An independent consultant, contracted by UNICEF, presented an analysis of the gaps in cold chain inventory and resource requirements to the JAR mission. An important recommendation of the consultant was annual allocation of adequate resources for maintenance of the cold chain equipment.

6. Data Quality

Routine vaccination data is collected, aggregated and reported monthly from the local to the national level through a system outside the national immunisation programme, the National Health Information System (NHIS). This system collects routine health service delivery data at all levels of the health system. The performance of the health sector in Cambodia is assessed on an annual basis through the Joint Annual Performance Review and National Health Congress. NHIS planning began in July 1992 and its phased nationwide implementation was completed in 1995. Currently it is a web-based system; health facilities without internet connection send monthly paper reports to the health operational district (OD) office, where data are entered electronically into the online database. Hospitals and large health centres with internet connections can enter their monthly reports directly into the web-based system.

The NHIS regularly validates the quality of data reported against established criteria and provides feedback to the corresponding level. The system was externally assessed in 2011 and 2012 using the analysis methodology of the WHO data quality report card assessing four dimensions of data quality: completeness of reporting, internal consistency of reported data, and consistency of population denominators and external comparison of coverage rates.

The 2012 assessment found:

- Excellent completeness of data, with 99.8% of facilities submitting monthly reports for the year and no missing/zero values at the provincial and district level for the four tracer indicators (Antenatal care second visit–ANC2, measles immunization, institutional deliveries, and outpatient department –OPD).

- Good Internal consistency of the reported data; extreme outlying values from provinces were very rare. Although there were several provinces and Operational Districts that had poor consistency between DTP1 and DTP3.
- Fair consistency of population denominators; comparison with estimated number of pregnant women suggest that the national population denominators for immunization are too low.
- Poor correspondence with survey coverage rate for measles immunization but good consistency for antenatal care and health facility deliveries based on facility reporting.

Reported administrative immunisation data is also highly consistent with WHO-UNICEF estimates as shown in the table below

DTP3	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	54	69	85	82	80	82	91	94	92	94	95	92
Administrative	64	69	85	82	80	82	91	94	92	94	95	92
Survey			78					85				

MCV1	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	52	65	80	79	78	79	89	92	93	93	93	90
Administrative	62	65	80	79	78	79	89	92	93	93	93	90
Survey			77					82				

The CDHS 2010 indicated a significant discrepancy in coverage for DTP3 and Measles between reported coverage and the coverage found by the survey. A new CDHS is planned to be conducted later this year.

7. Global Polio Eradication Initiative, if relevant

Cambodia adopted the polio eradication programme in 1994. The National Immunization Programme under the Ministry of Health began administration of Oral Poliomyelitis Vaccine in the routine system and started the Acute Flaccid Paralysis (AFP) surveillance system. The NIP also started Supplementary Immunization Activities at the same time. The last case of poliomyelitis in Cambodia was detected in March 1997 which was also the last Polio cases in the WHO Western Pacific Region. The NIP has the annual work plan and budget for the polio eradication programme. In October 2013, the NIP included OPV vaccine in MR campaign and the coverage rates were high. Cambodia also has plan for the introduction of one dose IPV in the last quarter of 2015 with support from GAVI, application for which would be made in September 2014.

8. Health System Strengthening

During the period under review, the HSS grant supported the following activities: planning of immunization and other services in ten operational districts (ODs), finalization, printing and dissemination of the outreach and fixed site guidelines, community meetings in high risk areas, capacity development in health information systems, implementation of integrated management of childhood illnesses (IMCI) activities (though not linked to immunization services) and programme management costs, including performance based management contracts, supervision of the HSS grant, and internal audit.

The proposed coordination activities with the private sector were managed through a MOU with private clinics providing vaccination. About 10 big private hospitals and clinics in Phnom Penh and few big provinces with high numbers of delivery services received vaccines from the public sector (MoH). Some of the challenges include continued limited capacity for planning and use of data, limited joint supervision due to a lack of staff and other resources for outreach services, as well as identification of hard to reach communities. There is no engagement with civil society organizations. The grant is implemented by a number of units and departments in the Ministry of Health other than the NIP. There have been limited coordination across the various departments for these activities and this needs to be improved.

The immunization outcomes are positive as demonstrated by 9 out of the 10 supported ODs having achieved coverage rates equal to the better performing ODs in the country.

A new outreach strategy is being rolled out that will support the provision of services to high risk communities.

As the ISS grant has been discontinued it is proposed that the HSS grant will support the previous ISS activities with an emphasis on reaching the high risk populations. This means that in the next grant all high risk villages will be covered in the 24 provinces; currently about 1200 villages. There may be challenges related to limited funding being made available to support planning of immunization services in the new ODs, including capacity development for health information systems. Funding may be set aside for the replacement and maintenance of cold chain (CC) equipment including investments for additional CC to support new vaccines provision.

The current HSS grant is expected to run until end 2015. There have been discussions that if the grant funds are utilized by June 2015, Cambodia could possibly initiate a new grant from July 2015. The allocations of the new GAVI grant for HSS are substantially higher than the previous one, almost 2.5 times. This has allowed the country the opportunity to make bold moves towards scaling up its high risk communities' approach, resolving the vaccine cold chain issues (capital and maintenance) and establishing a strong delivery mechanism for all primary health care activities including immunisation to all communities. WHO is facilitating the development of new proposal and is in process of identifying a consultant. It was proposed, subject to a Government review and decision, that the next grant should be managed by the NIP seeking inputs from other departments as necessary.

The annual progress on the indicators and activities has been good and has been separately covered in the HSS pre assessment report.

9. Use of non-HSS Cash Grants from GAVI

During 2013, Cambodia received \$3.2 million to conduct the MR campaign, which was fully utilized. In addition, the Government provided \$880,000 from its own funds to complete the campaign. The campaign was considered high quality with coverage reaching 105% of the target population. Vitamin A, Metronidazole and OPV (in selected high risk areas only) were also provided during the campaign.

Cambodia also received an introduction grant of \$298,500 for Rubella vaccine after completion of MR campaign. This grant is currently being used for introductory activities for the vaccine. Rubella vaccine is planned to be introduced in Routine Immunization from 2014 after an evaluation of the MR campaign in June/July 2014.

10. Financial Management

The PFO team keeps track of the pending requirements and clarifications for financial management. The current status, as provided by PFO, is appended at end of Section 14 of this report. It should be noted that prior to any cash disbursement to the country, the importance of pending financial requirements/clarifications is carefully considered by the CRO vis-à-vis implementation of the planned activities ensuring critical milestones like a vaccine launch are not impacted.

11. NVS Targets

Cambodia introduced Hepatitis B vaccine including the use of AD syringes in 2001; DPT-Hep-*Hib* vaccine in year 2010; Measles second dose in year 2012 and MR vaccine in 2013. The country plans to introduce PCV13 vaccine in 2015 with a target of 343,963 children for three doses in first year. This is similar to the target for third dose of Pentavalent vaccine for year 2015. The targets seem to be realistic and achievable by the NIP.

12. EPI Financing and Sustainability

Total expenditure for the immunization programme is approximately 14.2 million USD of which 67% is provided by GAVI. Currently the government provides approximately 3.7 million USD for the immunization programme; this is approximately 2% of total government expenditure on health. This covers primarily routine immunization service (traditional vaccines and supplies) and contributes towards new vaccines.

Vaccine costs are approximately 8.2 Million USD or 57% for both traditional and new vaccines; 342,000 USD was used for HSS representing about 2.4% of the total budget. Barring for some activities implemented by UNICEF and WHO, there are no external donors for the Immunization program in Cambodia (except GAVI).

With the introduction of new vaccines in the coming years the total outlay for the vaccine costs alone will be approximately 18 Million USD by 2022. The government will not be in a position to take on all these costs even if the initial payments are co-financing only. Therefore careful choices will need to be made on the introduction and investment commitments for new vaccines.

Comments from Financial Sustainability Team: The joint appraisal's estimate of "18 Million USD by 2022" is not in line with GAVI projections, which also include the indicated future introductions. According to GAVI estimates, in 2022 the total cost of vaccines in Cambodia will be around \$12 million and the bulk of it, i.e. around \$9 million, will be covered by GAVI while just about 3 million will be paid by the country. At the moment Cambodia is a low-income country paying a fixed co-financing amount of \$0.20 per dose of GAVI supported vaccine. In 2022, Cambodia will be expected to be an intermediate country, and is projected to be paying about \$0.20-\$0.40 per dose, depending on vaccine. Therefore, the conclusion "careful choices will need to be made on the introduction and investment commitments for new vaccines", based on this evidence, appears not applicable. Further discussion will follow with the appropriate WHO WPRO focal point in the framework of the immunisation financing and sustainability work to identify a common position on Cambodia's situation.

13. Renewal Recommendations

Topic	Recommendation
Pentavalent vaccine	Renewal as per volumes estimated by GAVI secretariat. Cambodia has large stocks of AD syringes, hence no approval of ADs is recommended
Measles vaccine (second dose)	Renewal. Current stock situation and GAVI calculations indicate that Cambodia does not need further approval of Measles vaccine doses for 2015, also taking into account the pending shipments from UNICEF SD. Cambodia has large stocks of AD syringes
Pneumococcal vaccine	Planned for introduction from January 2015 (already approved)
HSS	Approval of last tranche of \$553,230

14. Other Recommended Actions

Topic	Action Point	Responsible	Timeline
<i>New HSS grant</i>	Technical assistance and stakeholders consultations to develop the next HSS grant.	WHO/TA and NIP/MoH	July-Aug 2014
<u>Financial clarifications recommended by PFO:</u>			
<i>HSS</i>			
<ul style="list-style-type: none"> Country to submit audit report for 2013 			

- Country to explain the difference of \$ 348,305 between the expenditure in the 2013 APR (\$ 1,123,338) and the expenditure in the 2013 financial statements (\$ 775,033).
- Country to explain the difference of \$ 347,945 between the closing balance in the 2013 APR (\$ 1,645,510) and the closing balance in the 2013 financial statements (\$ 1,985,623).

Campaign Operational Support (COS) Funds

- Country to submit audit report for 2013
- Country to provide 2013 financial statement for MR campaign funds (\$ 3,220,000), clearly showing opening balance, funds received, detailed expenditure (for example by activity) and closing balance