**BASIC INFORMATION**

**A. Basic Project Data**

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Project Name</th>
<th>Parent Project ID (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>P169629</td>
<td>Cambodia Pre-Service Training for Health Workers Project</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated Appraisal Date</th>
<th>Estimated Board Date</th>
<th>Practice Area (Lead)</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Financing Instrument</th>
<th>Borrower(s)</th>
<th>Implementing Agency</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Project Financing</td>
<td>Kingdom of Cambodia</td>
<td>Ministry of Health</td>
<td></td>
</tr>
</tbody>
</table>

**Proposed Development Objective(s)**

To strengthen Cambodia’s pre-service education system for health professionals.

**Components**

- Component 1: strengthening health professionals’ education governance
- Component 2: improving competency-based teaching and learning capacity
- Component 3: Project management, monitoring and evaluation

**PROJECT FINANCING DATA (US$, Millions)**

**SUMMARY**

<table>
<thead>
<tr>
<th>Total Project Cost</th>
<th>26.50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Financing</td>
<td>16.50</td>
</tr>
<tr>
<td>of which IBRD/IDA</td>
<td>15.00</td>
</tr>
<tr>
<td>Financing Gap</td>
<td>10.00</td>
</tr>
</tbody>
</table>

**DETAILS**

**World Bank Group Financing**

<table>
<thead>
<tr>
<th>International Development Association (IDA)</th>
<th>15.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDA Credit</td>
<td>15.00</td>
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</table>
Non-World Bank Group Financing

<table>
<thead>
<tr>
<th>Counterpart Funding</th>
<th>1.50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrower/Recipient</td>
<td>1.50</td>
</tr>
</tbody>
</table>

Environmental and Social Risk Classification
Low

Decision
The review did authorize the team to appraise and negotiate.

Other Decision (as needed)

**B. Introduction and Context**

**Country Context**

Cambodia has experienced a remarkable transition over the past four decades. The country has transformed itself from a conflict-torn country to a peaceful one. Since 1993, Cambodia has focused on maintaining peace and stability, rebuilding infrastructure and institutions, fostering economic growth, and improving the living standards of the population. Over the past 20 years, the Cambodian economy has maintained a steady and robust growth rate at 8.0 percent per annum. Cambodia’s per capita gross national income (GNI) increased almost fourfold, from US$320 in 1997 to US$1,380 in 2018.\(^1\) Strong economic growth has also led to a dramatic decline in poverty from 47.8 percent in 2007 to 13.5 percent in 2017.

The country suffers from acute constraints in human capital. Persistent gaps in human and physical capital constrain Cambodia’s ability to make a shift towards more diversified and higher value-added economic activities. At present, 12 percent of firms already report poorly educated workers as a constraint to doing business.\(^2\) Cambodia’s score on a recently developed Human Capital Index (HCI) is 0.49, lower than the regional average of 0.65 in 2017. This means that children born in Cambodia today will only be 49 percent as productive when they grow up as they could be, if they had enjoyed complete education, good health, and a well-nourished childhood. Making further progress on health outcomes, early childhood nutrition, and educational quality will be critical to improve the productivity of Cambodia’s future labor force.

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\(^1\) World Bank. World Development Indicators.
\(^2\) Only two other factors ranked higher than poorly educated workers as a constraint to firms: the informal sector (28 percent) and political instability (16 percent).
Sectoral and Institutional Context

**Health Sector Overview**

Cambodia’s health outcomes have improved steadily over the past 20 years. Progress and innovation in health service delivery have contributed to the achievement of most health-related Millennium Development Goals (MDGs). Life expectancy has increased, while mortality rates for infants, children, and mothers have declined significantly (Table 1). Improvements in health service coverage have contributed to these achievements. For example, facility-based deliveries increased from 10 percent in 2000 to 83 percent in 2014; antenatal care coverage increased from 10 percent to 80 percent in this same period. The coverage of full vaccination among children aged 12-23 months increased from 40 percent in 2000 to 73 percent in 2014.3

<p>| Table 1: Health outcomes in Cambodia, 2000–2019 |</p>
<table>
<thead>
<tr>
<th>indicator</th>
<th>2000</th>
<th>2014</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Expectancy</td>
<td>58</td>
<td>68</td>
<td>69</td>
</tr>
<tr>
<td>Infant Mortality Rate</td>
<td>80</td>
<td>29</td>
<td>24 (estimate)</td>
</tr>
<tr>
<td>Neonatal Mortality Rate</td>
<td>36</td>
<td>17</td>
<td>14.4 (estimate)</td>
</tr>
<tr>
<td>Maternal Mortality Ratio</td>
<td>437</td>
<td>170</td>
<td>160 (estimate)</td>
</tr>
</tbody>
</table>

Sources: Cambodia census data 2019 (provisional), WDI 2018.

Despite improvements, there are persistent and growing disparities in health outcomes. Maternal mortality remains unacceptably high, and neonatal mortality has not declined proportionately to total child mortality. The country’s rural, remote, indigenous, and socioeconomically challenged women and children remain disproportionately affected by poor health and nutritional status. The wealth gap in child mortality has remained unchanged since 2005, at roughly three times higher for poor and rural children compared to wealthy and urban children.4 Stunting prevalence in the poorest wealth quintile (42 percent) is more than double that in the richest (18 percent). Full immunization of children is at 61 percent in the poorest quintile compared to 90 percent in the wealthiest.

While health service utilization has increased over the years, access to and quality of health services continues to be a challenge. Increases in resources have contributed to improvements in access to and utilization of health services, especially among the poor.5 Nonetheless, access to care remains a challenge, with availability of staff, opening hours, and waiting times identified as barriers. Among patients who seek

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5 Two major health financing initiatives have contributed to improved access to and utilization of health services, as well as the quality of services. First, the Health Equity Fund (HEF) aims to improve access to health services for the poor. Second, the Service Delivery Grant (SDG) is a financing program that has provided health facilities with flexible resources to improve the provision of quality health services at all levels of health facilities.
care at public facilities, feedback on how services could improve include improving skills and attitudes of staff, and improving diagnostic and treatment options, including the availability of equipment and medicine. Also, significant gaps exist in quality of care. Evidence-based standards are often not used in care practices and incomplete care is common. Access to and quality of care for Noncommunicable Diseases (NCDs) is particularly limited at the primary care level. In 2016, 43 percent of Cambodians aged 18–69 years never had their blood pressure measured, while 72 percent of respondents previously diagnosed with raised blood pressure were not on medication. Continuity of care for chronic conditions requiring ongoing management barely exists throughout the country. This will increasingly be a challenge as Cambodia’s burden of communicable disease (BoD) shifts towards one that is dominated by NCDs and as the population ages. These transitions will impact the health needs of the population and, correspondingly, the skills needed by the health workforce to deliver services that are appropriate to the needs.

Cambodia’s Health Workforce

Since 1990, Cambodia has been rebuilding the country’s health workforce. Lingering human resource capacity gaps are in part attributable to the decimation of the educated population under the Khmer Rouge, followed by a decade of instability. In 1980, there were roughly 50 physicians in the country. With a steady increase in training and employment, today, MOH employs 24,270 health personnel. Despite the increase in the health workforce, Cambodia continues to face a shortage of health professionals, especially in the public sector. Cambodia still only has 1.4 doctors and 9.5 nurses and midwives per 10,000 people. This is significantly below the average among low- and lower-middle income countries in the East Asia and Pacific region of 9.0 doctors and 19.0 nurses per 10,000 people.

There are also challenges in appropriate distribution of the health workforce. In terms of deployment in the public sector by qualification type, doctors typically work at secondary and tertiary level facilities, while primary care facilities are almost entirely staffed by nurses and midwives. While most general practitioners work at the provincial level (63 percent), most specialists are deployed to hospitals at the

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12 Based on data from MOH Cambodia’s Department of Planning and Health Information, as of 2018 there were 689 specialists, 2,743 general doctors, 613 medical assistants, 11 pharmacist doctors, 627 pharmacists, 82 pharmacist assistants, 25 pharmacy technicians, 304 dentists, 44 dental assistants, 149 dental nurses, 215 Bachelor of Nursing, 7,912 Secondary nurses, 2,864 Primary nurses, 272 Bachelor of Midwife, 4,279 Secondary midwives, 2,256 Primary midwives, 797 Secondary lab technicians, 65 primary lab technicians, 216 Kynetherapists, and 107 X-Ray technicians. Non health professionals include 134 IT personnel, 305 accountants, and 729 other non-medical personnel.
central level (79 percent). Most physician assistants (76 percent), dental assistants (82 percent), primary nurses (98 percent) and midwives (100 percent) work at the provincial and district levels. Cambodia does not delineate the distribution of its health workforce by urban vs. rural settings. Anecdotally, however, it is known that there are staff shortages in remote rural areas. Retention in the public sector is not a concern: the staff turnover rate in the public sector is negligible (~0.006 percent) and the attrition rate is about 0.5 percent.

19. **Gaps in the quality of health professionals remain a critical challenge.** A nationwide assessment conducted in 2015 assessed doctors, nurses, midwives, laboratory technicians, and health facility team leaders at health centers and referral hospitals for relevant competencies. The assessment found large variations in quality of care across different types of services, with, for example, very poor performance on triage and vital signs assessment (34 percent; mostly assessed on doctors) and post-natal care (36 to 48 percent; mostly assessed on nurses and midwives). Results from clinical vignettes also showed poor clinical knowledge and competency among providers on a range of topics, with an average of less than 50 percent of correct responses (see Figure 1). Private providers have similarly low competencies: only 54 percent of private providers have formal training in health. Competency tests did not reveal a significant difference in providers’ knowledge between public and private sectors. Inadequate training, in turn, is a major driver of poor quality of care.

![Figure 1: Level of clinical knowledge/competency by areas of clinical vignettes](source)

**Cambodia’s Pre-Service Education System for Health Workers**

Enrolment and graduation numbers have increased significantly over the past 10 years but have plateaued or decreased slightly in some programs in the most recent 2 to 3 years. In academic year 2009-2010, for example, there were just 79 medical graduates, 51 pharmacy graduates, 484 graduates from the Associate degree in Nursing program, and 154 graduates from the Associate degree in Midwifery.

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program.\textsuperscript{17} For the majority of training programs, graduation numbers increased significantly between 2009-2010 to 2015-2016.\textsuperscript{18} However, there has been a decrease in enrolment and graduation numbers in several programs in recent years (2017-2018 and 2018-2019).

The quality of pre-service training impacts health worker performance. While it is well documented that health worker performance is determined by a combination of factors including competence, capacity and effort (and that any of these elements may lead to poor performance),\textsuperscript{19} the quality of pre-service training is undoubtedly a critical factor. Key challenges in Cambodia’s pre-service training include weak governance and regulation of training systems, a mismatch between the competency of graduates and the population’s health needs, outdated curricula and regulations that do not permit updating, poor quality of instruction, ineffective use of practice sites, inadequate facilities and equipment, and poor assessment of students and programs.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)
To strengthen Cambodia’s pre-service education system for health professionals.

Key Results

- Number of national competency-based education curricula independently reviewed and approved;
- Percentage of students who pass the national exit examination;
- Percentage of faculty and preceptor certified as competency-based trainers; and
- Number of health facilities certified as practice sites.


\textsuperscript{18} Due to a paucity of data for earlier years and difficulties in matching data, trend analysis begins only from 2015-2016. There are also very poor records of enrolment numbers for 2009-2010. As such, we only compare graduation (and not enrolment) numbers between 2009-2010 and 2015-2016.

D. Project Description

The Project Development Objective (PDO) is to improve the quality of education for health professionals entering the workforce in Cambodia.

Component 1: Strengthening health professionals’ education governance (US$4 million).

This component will support to the HRDD to strengthen the governance of health professional education in Cambodia including: (i) regulations and standardization for health professionals’ education; (ii) national competency-based exit examinations (NCEE); and (iii) technical assistance and knowledge exchanges on health professional education.

Component 2: Improving competency-based teaching and learning capacity (US$10 million)

This component aims to strengthen the competency-based teaching and learning capacity in the UHS and the four RTCs, namely, RTC in Kompong Cham province, RTC in Kompot province, RTC in Battambang province, and RTC in Stung Treng province. Investments under this component will: (i) improve teaching competency of faculty and preceptors; (ii) develop and implement CBE courses; (iii) improve student assessment processes; (iv) modernize physical facilities; (v) strengthen clinical practice sites; (vi) establish an electronic feedback system for the ongoing reforms; and (vii) strengthen monitoring, evaluation and management capacity of HTIs as for improving the training quality and producing more competent graduates who will be able to pass the national exit examination before entering the health workforce.

The project will provide Service Delivery Grants (SDGs) to relevant MOH departments and HTIs to carry out planned activities under the component 1 and component 2 in accordance with an Operational Manual to be adopted prior to the project effectiveness. SDG is an innovative funding mechanism consisting of block grants that provide public service delivery organizations with a degree of autonomy in making optimal use of their human and financial resources to deliver services. With support from H-EQIP, MOH has established a functional SDG system with detailed manuals and institutional arrangements, with a strong ownership and accountability and is an acceptable and appreciated model of channeling funds to implementing entities at national and sub-national levels. Under the project, the payment of SDGs will be closely linked to performance of the HTIs and relevant health departments. Upon approval of annual operational plan and budget (AOPB) from each of the HTIs and relevant MOH departments, an initial advance payment will be made. Subsequent payments will be made based on a set of agreed performance targets.

Component 3: Project management, monitoring and evaluation (US$1 million)

This component will support day-to-day management, monitoring and evaluation of project activities, including planning and execution, financial management (FM), procurement, supervision and reporting, internal and external audits, environmental and social safeguards management, independent verification, and monitoring and evaluation. These activities will ensure efficient project management and early identification of corrective measures to solve implementation problems. In addition, this component will provide necessary vehicles, training/workshops, logistics and operational costs, and data collection survey. GMAG MOH, gender focal person of UHS, focal person of NEC, ACC and RTCs will be engaged to the project implementation and monitoring and evaluation.
The overall environmental and social risk classification is low. The screening of risks and impacts is based on discussion with the task team, consultations and observations undertaken during an identification mission, secondary data, and specialist experience with projects of this nature. The proposed project activities aim at improving the quality of health professional’s skills and competencies, particularly in the area of pre-service education, would focus on curricular reforms, building capacity for competency and skills training, improving testing and evaluation, and strengthening of quality assurance mechanisms and accreditation systems for medical and nursing education. Eight out of ten of the standards have been screened as relevant in terms of integrating good practices into project design.

The implementing ministry has good competency in implementing projects in accordance with national requirements as well as experience in delivering projects in line with Bank requirements. Prior to project appraisal, the project’s Human Resource Development for Inclusive Service Delivery Assessment and Plan will consider, in an integrated way, all relevant expected environmental and social risks and impacts of the project. This assessment and plan will be carried out to seek ways to promote the enrollment and inclusion of disadvantaged groups (women, indigenous population groups) as students in health schools (as doctors, nurses or midwives), promote entering workforce spaces and imbedding social inclusion and environmental sustainability aspects in the project activities during the implementation phase.

It will include specific provisions for Labor-Management Procedures (under ESS2) and a Stakeholder Engagement Plan and Project Grievance Mechanism (under ESS10). Both documents will be included at the Human Resource Development for Inclusive Service Delivery Assessment and Plan. An additional stand-alone document to be disclosed prior appraisal is the Environmental and Social Commitment Plan (ESCP).

E. Implementation

Institutional and Implementation Arrangements

A. Institutional and Implementation Arrangements

The project will be implemented by MOH over a period of six years. MOH will establish a high-level Steering Committee as an apex decision-making body. The committee will be chaired by the Minister of
Health and its members would include relevant Secretaries and Under-secretaries of State and Director Generals from MOH; and a senior representative from the Ministry of Economy and Finance (MEF). It will provide leadership, guidance, oversight, and strategic direction to the project management and implementation teams.

**The Minister of Health will appoint a Secretary of State as the Project Director, and a high-level government official with expertise in professional health education as the Project Manager.** Three senior MOH officials will be appointed as Team Leaders; first one from HRDD to oversee technical aspects of the project implementation, second one from Director General of Administration and Finance to oversee financial management and procurement, and third one from Preventive Medicine Department (PMD) to oversee the implementation of safeguards arrangements.

### CONTACT POINT

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**Borrower/Client/Recipient**

Kingdom of Cambodia

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Nareth Ly

Approved By

Environmental and Social Standards Advisor:

Practice Manager/Manager:

Country Director: Inguna Dobraja

09-Mar-2020

Note to Task Teams: End of system generated content, document is editable from here. Please delete this note when finalizing the document.