Board of Directors

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R165-18
21 November 2018

Proposed Loan and Administration of Grant Second Health Human Resources Development Project (Viet Nam)

1. The Report and Recommendation of the President (RRP: VIE 40354-017) on the proposed loan and administration of grant to Viet Nam for the Second Health Human Resources Development Project is circulated herewith.

2. This Report and Recommendation should be read with (i) *Country Partnership Strategy: Viet Nam, 2016–2020: Fostering More Inclusive and Environmentally Sustainable Growth*, which was circulated to the Board on 9 September 2016 (DOC.Sec.M28-16); and (ii) *Country Operations Business Plan: Viet Nam, 2018–2020*, which was circulated to the Board on 16 November 2017 (DOC.IN.421-17).

3. In the absence of any request for discussion and in the absence of a sufficient number of abstentions or oppositions (which should be communicated to The Secretary by the close of business on 12 December 2018), the recommendation in paragraph 32 of the paper will be deemed to have been approved, to be so recorded in the minutes of a subsequent Board meeting. Any notified abstentions or oppositions will also be recorded in the minutes.

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Report and Recommendation of the President to the Board of Directors

Project Number: 40354-017
November 2018

Proposed Loan and Administration of Grant Socialist Republic of Viet Nam: Second Health Human Resources Development Project

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 30 October 2018)

Currency unit	–	dong (D)
D1.00	=	$0.00004
$1.00	=	D23,344

ABBREVIATIONS

ADB	–	Asian Development Bank
CHS	–	commune health station
CME	–	continuing medical education
HEPTI	–	health education and professional training institutions
HHR	–	health human resources
HMU	–	Hanoi Medical University
IT	–	information technology
LHC	–	local health care
MOH	–	Ministry of Health
PAM	–	project administration manual
UHC	–	universal health coverage
UMP	–	University of Medicine and Pharmacy at Ho Chi Minh City

NOTES

(i) The fiscal year of the Government of Viet Nam ends on 31 December.

(ii) In this report, "$" refers to United States dollars.

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PROJECT AT A GLANCE

1. Basic Data			Project Number: 40354-017
Project Name	Second Health Human Resources Development Project	**Department /Division**	SERD/SEHS
Country	Viet Nam, Socialist Republic of	**Executing Agency**	Ministry of Health
Borrower	Government of Viet Nam		

2. Sector	Subsector(s)	ADB Financing ($ million)
✓ **Health**	Health sector development and reform	40.00
Education	Tertiary	40.00
	Total	**80.00**

3. Strategic Agenda	Subcomponents	Climate Change Information	
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	Climate Change impact on the Project	Low

4. Drivers of Change	Components	Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Institutional development Organizational development	Effective gender mainstreaming (EGM)	✓
Knowledge solutions (KNS)	Application and use of new knowledge solutions in key operational areas		
Partnerships (PAR)	Civil society organizations Implementation		

5. Poverty and SDG Targeting		Location Impact	
Geographic Targeting	No	Rural	High
Household Targeting	No		
SDG Targeting	Yes		
SDG Goals	SDG3		

6. Risk Categorization: Low

7. Safeguard Categorization **Environment:** B **Involuntary Resettlement:** B **Indigenous Peoples:** C

8. Financing

Modality and Sources	Amount ($ million)
ADB	**80.00**
Sovereign Project (Concessional Loan): Ordinary capital resources	80.00
Cofinancing	**3.00**
Japan Fund for Poverty Reduction - Project grant (Full ADB Administration)	3.00
Counterpart	**15.80**
Government	15.80
Total	**98.80**

Currency of ADB Financing: USD

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed loan to the Socialist Republic of Viet Nam for the Second Health Human Resources Development Project.[1] The report also describes the proposed administration of a grant to be provided by the Japan Fund for Poverty Reduction for the Second Health Human Resources Development Project, and if the Board approves the proposed loan, I, acting under the authority delegated to me by the Board, approve the administration of the grant.

2. The project will assist the Government of Viet Nam in achieving universal health coverage (UHC), including access to essential health care services, by increasing the supply of a skilled health workforce.[2] It builds on the achievements of the Health Human Resources Sector Development Program by expanding and improving the quality of undergraduate health professional training programs. Specifically, the project will design and operationalize new campuses in Hanoi Medical University (HMU) and the University of Medicine and Pharmacy at Ho Chi Minh City (UMP).[3] It will feature climate-resilient teaching and ancillary infrastructure, helping the universities to increase undergraduate enrolment and teaching capacity. The project will complement the proposed Local Health Care for Disadvantaged Areas Sector Development Program through innovative models of engaging teaching institutions in community health, including the application of information technology-based learning.[4] This will enhance the quality of health care in rural and underserved areas in response to the population's evolving health needs.

II. THE PROJECT

A. Rationale

3. **Development context.** Viet Nam's sustained economic growth has bolstered the country's progress in reducing poverty. Gross domestic product grew by an average of 6.5% per year from 1991 to 2017. Gross domestic product per capita reached $2,389 in 2017. The poverty rate (i.e., the share of the population living on less than $1.90 per day in purchasing power parity) fell from 52.9% in 1992 to 2.0% in 2016, while the Gini coefficient decreased slightly from 35.7 to 35.3 over the same period.[5] However, poverty incidence varies significantly across regions. Ethnic minorities, who account for 14.5% of the population, make up more than half of the poor.[6] The government has recognized that inclusive growth and public health are intricately linked, as shown by disparities in the key health indicators by region. For example, in the impoverished Central Highlands, the infant mortality rate was 24.8 per 1,000 live births in 2015, while in the affluent South East region it was 8.6 per 1,000 live births. Similar variations

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[1] The proposed project is included in Asian Development Bank (ADB). 2017. *Country Operations Business Plan: Viet Nam, 2018–2020*. Manila.

[2] UHC means that all people have access to the health services they need (prevention, promotion, treatment, rehabilitation, and palliative care) without the risk of financial hardship when paying for them. World Health Organization. Universal health coverage.

[3] ADB. Viet Nam: Health Human Resources Sector Development Program.

[4] ADB. Viet Nam: Local Health Care for Disadvantaged Areas Sector Development Program.

[5] ADB. 2018. *Asian Development Outlook*. Manila; ADB (Viet Nam Resident Mission). 2018. Country Information: Socialist Republic of Viet Nam. Information note. 25 October (internal); and World Bank. World Development Indicators (accessed 18 October 2018).

[6] ADB. 2016. *Country Partnership Strategy: Viet Nam, 2016–2020—Fostering More Inclusive and Environmentally Sustainable Growth*. Manila.

are also found in reproductive health and maternal mortality outcomes.[7] Disparities in health outcomes perpetuate socio-economic disadvantage.[8] Inclusive growth is further threatened by the growing financial burden associated with the treatment of noncommunicable diseases.[9] In 2015, the proportion of the total disease burden attributable to noncommunicable diseases reached 73%,[10] partly because of Viet Nam's aging population (footnote 7). Improving access to quality health services, particularly in poorer rural areas, will have a positive impact on health outcomes.

4. **Insufficient number of health professionals.** The insufficient number of skilled health care professionals hampers efforts to achieve UHC. An estimated additional 43,250 doctors, 249,416 nurses, and 22,199 pharmacists are required by 2030 to meet the country's health workforce coverage targets. Viet Nam's health education and professional training institutions (HEPTI) produce an insufficient number of professionals to meet these targets. While demand for admission to HEPTI is strong, inadequate infrastructure restricts the capacity of universities to increase enrolments. This is most evident at HMU and UMP, Viet Nam's leading HEPTI. In 2017, only 7%–8% of the total applicants for undergraduate medicine at each university could be offered places.

5. **Deficiencies in skills.** Deficiencies in skills compound the adverse effects of the health workforce shortage, particularly in local health care (LHC).[11] Medical doctors have inadequate knowledge of clinical guidelines. They ask patients, on average, less than 50% of the required questions about their medical history and conduct less than 60% of the physical examinations specified in clinical guidelines. Knowledge of case management protocols is also inadequate, with many doctors prescribing unnecessary and harmful treatments. Half of the medical doctors working in the poorest areas fall in the bottom two quintiles of the national ability scale. These deficiencies result in poor treatment quality, low service use, and poor health outcomes, particularly in disadvantaged areas.[12]

6. **Teaching programs are poorly aligned with population health needs.** The Ministry of Health (MOH) has issued competency standards for general medical practitioners.[13] However, HEPTI have been slow to operationalize these through their curriculum. HEPTI require assistance to transition the health professional training programs from a knowledge-based to competency-based curriculum.[14] This requires introducing faculty development programs to train educators in interactive teaching methods and clinical skills teaching. Further, limited opportunities for students to undertake practice in poor and vulnerable communities should be addressed as this leaves graduates ill-equipped to work with underserved populations.[15]

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[7] Government of Viet Nam, Ministry of Health (MOH). 2017. *Joint Annual Health Review 2016: Towards Healthy Aging in Vietnam*. Hanoi.

[8] Government of Viet Nam, MOH. 2016. *Joint Annual Health Review 2015: Strengthening Primary Health Care at the Grassroots Towards Universal Health Coverage*. Hanoi.

[9] A noncommunicable disease is a medical condition or disease that is not caused by an infectious agent.

[10] Institute for Health Metrics and Evaluation (accessed 26 April 2018).

[11] The LHC system serves as the first point of contact between health services and the population. It encompasses the network of commune health stations (CHSs) and district-level health facilities.

[12] World Bank. 2016. *Quality and Equity in Basic Health Care Services in Vietnam: Findings from the 2015 Vietnam District and Commune Health Facility Survey.* Washington, DC.

[13] Government of Viet Nam, MOH. *Decision No. 1854/QD-BYT (18 May 2015) on competence standards for general practitioners.* Hanoi.

[14] K. Foster and J. Morris. Forthcoming. *Doctors for the Future in Viet Nam: A Report for the World Health Organization.*

[15] For example, 5th year medical students at HMU currently undertake practice placements in well-resourced urban health facilities.

7. **Uneven distribution of the health workforce.** Distribution of the health workforce is skewed, with remote and mountainous areas underserviced. For example, the Central Highlands has 43 health workers per 10,000 people, while the Red River Delta region has 71 health workers per 10,000 people.[16] The proportion of commune health stations (CHSs) served by a doctor and a midwife or assistant doctor[17] is lowest in the Central Highlands and Northern Midlands and Mountain regions (footnote 7). Higher health workforce density is statistically associated with lower infant mortality, and longer life expectancy.[18]

8. **Limited professional development opportunities in remote areas.** A 2015 study found that only 50% of doctors working in district hospitals received some form of training in the previous 12 months. Among the CHS staff, the proportion who received any training ranged from 58% to 81%, depending on the province (footnote 14). For health care workers who choose to serve in remote areas, access to professional development is limited. Innovative distance-learning technologies can improve such access. HMU and UMP are licensed continuing medical education (CME) providers, but lack access to these new technologies.[19]

9. **Government's plan and strategy.** The National Action Plan for the Implementation of the 2030 Sustainable Development Agenda confirms the government's commitment to ensure an adequate supply of skilled health workforce toward achieving UHC.[20] The government prioritizes the development of health human resources (HHR).[21] The MOH will transition HMU and UMP into health sciences universities, capable of increasing graduate numbers across disciplines, in line with the country's evolving health needs. The MOH has undertaken reforms to redress deficiencies in LHC workforce quantity and quality, rapidly increase the number of graduates, and improve training quality.[22] It will also redress the imbalance in HHR distribution, prioritizing the LHC level.[23] Various MOH programs, including the deployment of graduate doctors to difficult areas and granting students from disadvantaged locations preferential access to HEPTI, have contributed to increasing the health workforce in LHC facilities.[24]

10. The medium-term development plans of HMU and UMP detail the increase in student intake required to meet health workforce needs.[25] The MOH has prepared health sciences facility master plans for HMU and UMP and has requested the Asian Development Bank (ADB)

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[16] World Health Organization. 2016. *Human Resources for Health Country Profiles: Viet Nam.* Manila.

[17] Assistant doctors complete a four-year training program while medical doctors complete a six-year program.

[18] M.P. Nguyen, T. Mirzoev, and T.M. Le. 2016. Contribution of health workforce to health outcomes: empirical evidence from Vietnam. *Human Resources for Health*. 14 (68). pp. 1–11.

[19] CME refers to training undertaken by a health professional to meet licensing requirements. K. Takashima et al. 2017. *A review of Vietnam's healthcare reform through the Direction of Healthcare Activities (DOHA). Environmental Health and Preventive Medicine*. 22 (74). pp. 1–7.

[20] Government of Viet Nam, Office of the Prime Minister. 2017. *National Action Plan for the Implementation of the 2030 Sustainable Development Agenda.* Hanoi.

[21] Government of Viet Nam. 12th Party Central Committee*. Resolution No. 20-NQ/TW (25 October 2017) of the on the Protection, Care and Improvement of People's Health in the New Situation*. Hanoi

[22] Government of Viet Nam, MOH. *Decision No. 816/QĐ-BYT (16 March 2012) on the plan for development of health human resources for the period 2012–2020.* Hanoi.

[23] Government of Viet Nam. Prime Minister. *Decision No. 2348/QD-TTg (5 December 2016) on the master plan on building and developing of the LHC network in the new situation.* Hanoi.

[24] In 2017, the proportion of CHSs nationwide served by a medical doctor reached 88.0%, up from 78.5% in 2014.

[25] Government of Viet Nam. MOH. *Decision No. 3680/QD-BYT (2 October 2009) on approval of the overall plan for development of HMU until 2020, with a vision to 2030*. Hanoi; and Government of Viet Nam. MOH. *Decision No. 2670/QD-BYT (27 July 2009) on approval of the overall plan for development of UMP until 2020, with a vision to 2030*. Hanoi.

to support a phased implementation. Phase 1 involves the construction of undergraduate teaching, administrative, and service infrastructure. Each university will recruit additional academic staff to ensure undergraduate teaching commences once civil works are completed. Subsequent phases incorporate the development of graduate and postgraduate training facilities, research institutes, teaching hospitals, and medical technology centers.

11. **ADB sector experience and strategy.** ADB's engagement with Viet Nam's health sector has focused on improving the population's access to quality health services. During 1995–2005, ADB improved primary health and hospital facilities, service delivery, and the health workforce in rural and mountainous provinces.[26] During 2006–2016, it invested in health services in remote areas,[27] communicable disease control, and health security.[28] The Health Human Resources Sector Development Program supported sector-wide reforms in health professional education and health staff management, and strengthened infrastructure and teaching capacity in 17 HEPTI, including HMU and UMP (footnote 3). ADB's health sector strategy supports government efforts toward achieving UHC—use of health services, quality of health care, and health financial risk protection. It pursues coordinated interventions that focus on (i) reforms to strengthen the LHC system (footnote 4); (ii) strengthening health care service delivery in selected areas (footnote 27); (iii) developing HHR (footnote 3); (iv) improving health security, including its regional dimensions (footnote 28); and (v) enhancing health financing through social health insurance.[29] The project is aligned with ADB's Strategy 2030 (Table 1).[30]

Table 1: Alignment with Strategy 2030

Strategy 2030 Priorities	Project
1. Addressing remaining poverty and reducing inequalities	Achieving better health for all (i) Pursuing universal health coverage and improving access to quality health services by addressing undersupply of skilled health professionals at LHC facilities. (ii) Promoting the use of innovative distance training technologies to enhance the quality of LHC workforce in remote areas.
2. Strengthening governance and institutional capacity	Strengthening service delivery and strengthening capacity and standards (i) Building institutional capacity of HEPTI to deliver training programs that produce cohorts of skilled health workers over time. (ii) Fostering collaboration between the Ministry of Health, Ministry of Education and Training, and leading HEPTI to strengthen health human resources and enhance public service delivery at the LHC level.
3. Tackling climate change and building climate and disaster resilience	Ensuring a comprehensive approach to build climate and disaster resilience (i) Mainstreaming climate change resilience features in campus design, such as flooding protection, building orientation, and design to facilitate maximum ventilation.
4. Accelerating progress in gender equality	Pursuing gender equality in human development (i) Ensuring a learning environment for women, including women with children, to pursue health science education through gender responsive campus designs. (ii) Supplying LHC facilities with equipment and enhance LHC staff's skills to address the unmet reproductive and other health needs of women and girls and gender-based violence.

[26] ADB. Viet Nam: Rural Health Project; ADB. Viet Nam: Health Care in the Central Highlands Project; and ADB. Viet Nam: Health Care in the South Central Coast Region Project.
[27] ADB. Viet Nam: Second Health Care in the Central Highlands Project.
[28] ADB. Greater Mekong Subregion Regional Communicable Diseases Control Project; ADB. Regional: Second Greater Mekong Subregion Regional Communicable Diseases Control Project; and ADB. Regional: Greater Mekong Subregion Health Security Project.
[29] ADB. Viet Nam: Strengthening the Policy and Institutional Framework of Social Health Insurance.
[30] ADB. 2018. *Strategy 2030. Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific*. Manila.

HEPTI = health education and professional training institutions, LHC = local health care.
Source: Asian Development Bank.

12. **Lessons.** The Health Human Resources Sector Development Program demonstrated that for developing a sustainable high-quality health workforce, strengthening of HHR institutions and systems, and expansion of HEPTI infrastructure are both required (footnote 3). Tertiary education projects with infrastructure components require strong country ownership, design clarity, and an experienced executing agency. Incorporating these lessons, the project aligns with the national HHR development strategy (footnote 22) and the universities' development plans (footnote 25). The health minister has already approved the master plans and basic architectural designs of both campuses, which will expedite project implementation while providing the required design clarity. The executing agency is experienced, having a proven record of implementing large infrastructure projects.

13. **ADB value addition.** ADB synergizes individual health sector investments to maximize cumulative impacts toward UHC. The proposed Local Health Care for Disadvantaged Areas Sector Development Program complements the project by strengthening LHC public investment management, improving the LHC service delivery model, and enhancing health workforce development and management. The project will increase the supply of health staff with necessary skills to provide care at LHC level. Current technical assistance also supports strengthening of the regulatory and institutional framework to ensure equitable access to and accountability of health financing (footnote 29). Based on past and ongoing ADB technical assistance, the project design incorporates climate-resilient building and features IT-based distance learning.[31] This consolidates ADB's value addition as a provider of knowledge and innovative technology solutions.

14. **Development coordination.** To sustain HHR improvements, a systematic and sector-wide approach is required covering training, accreditation and standards, and residency programs for new doctors and nurses. ADB focuses on improving HHR training infrastructure, training program quality, and HHR management to increase the number, quality and allocation of health care practitioners. The World Health Organization is helping to introduce minimum qualification criteria for newly graduated health professionals, including a national licensing exam and a national medical council. Several development partners, including the World Bank and the Partnership for Health Advancement in Viet Nam, are updating curricula for medical education at both the undergraduate and postgraduate level. The Partnership for Health Advancement in Viet Nam has developed a 3-year hospital-based postgraduate surgical residency training program. Japan International Cooperation Agency is supporting the development and pilot testing of a standardized clinical training program for nursing graduates.[32]

B. Impact and Outcome

15. The project is aligned with the following impact: UHC, including access to essential health care services, achieved. The project will have the following outcome: supply of skilled health workforce increased.[33]

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[31] ADB. Regional: Results for Malaria Elimination and Control of Communicable Disease Threats in Asia and the Pacific; and ADB. Strengthening Resilience to Climate Change in the Health Sector in the Greater Mekong Subregion.

[32] World Bank. Health Professionals Education and Training for Health System Reforms; The Partnership for Health Advancement in Vietnam. IMPACT MED Alliance; and Japan International Cooperation Agency. Strengthening Clinical Training System of newly-graduated nurses.

[33] The design and monitoring framework is in Appendix 1.

C. Outputs

16. **Output 1: Undergraduate education facilities in the new Hanoi Medical University and University of Medicine and Pharmacy at Ho Chi Minh City campuses operationalized.** The project will support phase 1 of the HMU and UMP health sciences facility master plans by establishing undergraduate teaching at each newly completed campus. Upper-class, graduate, and doctorate students will remain at the existing campuses. The project will deliver (i) a detailed engineering design for phase 1 covering undergraduate facilities and infrastructure, which incorporates gender-specific design features and complies with international greenhouse and urban climate change resilience standards; (ii) site preparation and construction of phase 1 facilities; and (iii) classroom and laboratory equipment. At project completion, HMU and UMP's combined annual intake of undergraduate students will increase by 2,200, contributing 1,863 additional health professionals to the workforce annually by 2032.

17. **Output 2: Competency of graduates to respond to community health needs strengthened.** The project will (i) conduct assessments of the health needs of women and men in the 35 disadvantaged rural and urban communes; (ii) update the curriculum for four key degree programs, focusing on competencies for work at the LHC level;[34] (iii) rotate 700 students under a pilot model of practice placements at CHSs servicing poor populations; (iv) equip 35 CHSs in pilot sites;[35] and (v) strengthen faculty capacity in interactive teaching methods and clinical skills teaching.

18. **Output 3: Quality of health workforce in disadvantaged communities enhanced.** The project will (i) equip health facilities in four remote districts to support the CME pilot project, (ii) develop 40 CME modules covering primary health care topics including modules specific to the health needs of women,[36] (iii) pilot test the delivery of distance CME for the health workforce in four districts and evaluate the efficacy of the approach, and (iv) apply pilot testing evidence to inform replication by HEPTI and registered CME providers.

D. Summary Cost Estimates and Financing Plan

19. The project is estimated to cost $98.8 million (Table 2). The government has requested a concessional loan of $80.0 million from ADB's ordinary capital resources to help finance the project. The loan will have a 25-year term, including a grace period of 5 years; an interest rate of 2.0% per year during the grace period and thereafter; and such other terms and conditions set forth in the draft loan and grant agreements. The summary financing plan is in Table 3. ADB will finance the expenditures for civil works, equipment, and consulting services. The Japan Fund for Poverty Reduction will provide grant cofinancing equivalent to $3.0 million. This includes taxes and duties of $0.2 million. The grant will finance activities under Outputs 2 and 3. The government's contribution of $15.8 million includes taxes, consulting services, resettlement costs, financing charges during implementation, and in-kind contributions. Detailed cost estimates by expenditure category and by financier are included in the project administration manual (PAM).[37]

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[34] HMU will review the curriculum for the undergraduate medical program. UMP will review the curriculum for the undergraduate public health, traditional medicine, and pharmacy degree programs.

[35] The pilot model serves to strengthen health service delivery to poor and vulnerable populations, while providing students with experience of practice in disadvantaged and underserved communities.

[36] For example, sexual and reproductive health and rights, including maternal health, family planning, sexually transmitted infections and HIV/AIDS, and gender-based violence.

[37] Project Administration Manual (accessible from the list of linked documents in Appendix 2).

Table 2: Summary Cost Estimates
($ million)

Item	Amount[a]
A. Base Cost[b]	
1. Undergraduate education facilities in the new HMU and UMP campuses operationalized	77.2
2. Competency of graduates to respond to community health needs strengthened	2.3
3. Quality of health workforce in disadvantaged communities enhanced	0.5
Subtotal (A)	**80.0**
B. Contingencies[c]	14.3
C. Financial Charges During Implementation[d]	4.5
Total (A+B+C)	**98.8**

HMU = Hanoi Medical University, UMP = University of Medicine and Pharmacy at Ho Chi Minh City.
[a] Includes taxes and duties of $5.8 million. Such amount does not represent an excessive share of the project cost. The government will finance project loan taxes and duties on civil works and equipment of $5.6 million in form of cash. The grant will finance taxes and duties of $0.2 million.
[b] In mid-2018 prices as of June 2018.
[c] Physical contingencies are at 2% for all cost categories. Price contingencies computed at the average of 1.6% on foreign exchange costs and 5.0% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.
[d] Includes interest during construction. Interest for the ordinary capital resources concessional loan has been computed at 2%; there are no commitment charges on the undisbursed loan amount.
Source: Asian Development Bank estimates.

Table 3: Summary Financing Plan

Source	Amount ($ million)	Share of Total (%)
Asian Development Bank		
Ordinary capital resources (concessional loan)	80.0	81.0
Japan Fund for Poverty Reduction	3.0	3.0
Government	15.8	16.0
Total	**98.8**	**100.0**

Source: Asian Development Bank estimates.

E. Implementation Arrangements

20. The MOH is the executing agency for the project. HMU and UMP are the implementing agencies. A project coordination unit and three project implementing units will be established to manage the loan and the grant. The implementation arrangements are summarized in Table 4 and described in detail in the PAM (footnote 37). Procurement Regulations for ADB Borrowers (2017, as amended from time to time) will be applied for the project.

Table 4: Implementation Arrangements

Aspects	Arrangements			
	Loan		Grant	
Implementation period	April 2019–June 2025		April 2019–March 2023	
Estimated completion date	30 June 2025		31 March 2023	
Estimated closing date	31 December 2025		30 September 2023	
Management				
(i) Oversight body	Project Steering Committee: Health minister (chair); Ministry of Education, MOH Department of Planning and Finance, presidents of HMU and UMP (members)			
(ii) Executing agency	MOH			
(iii) Key implementing agencies	UMP and HMU			
(iv) Implementation units	PCU, 1 Project Director, 2 Deputy Project Directors; PIU HMU, 4 staff and 3 consultants; PIU UMP, 4 staff and 3 consultants			
Procurement		Loan		Grant	

Procurement		Loan		Grant	
		Contracts	($ million)	Contracts	($ million)
	OCB for works	4	65.0	NA	NA
	OCB for goods	3	3.78	4	0.72

	RFQ	1	0.10	8	0.32
Consulting services	OCB-QCBS	3	4.34	2	0.24
	OCB-LCS	5	0.20	NA	NA
	ICS	0	0	6	0.52
Retroactive financing and/or advance contracting	Advance actions include finalizing terms of reference for consultants; advertising recruitment requests and proposal and/or bid evaluations.				
Disbursement	The loan and grant proceeds will be disbursed following ADB's *Loan Disbursement Handbook* (2017, as amended from time to time) and detailed arrangements agreed between the government and ADB.				

ADB = Asian Development Bank, HMU = Hanoi Medical University, ICS = individual consultants selection, LCS = least-cost selection, MOH = Ministry of Health, NA = not applicable, OCB = open competitive bidding, PCU = project coordinating unit, PIU = project implementing unit, QCBS = quality- and cost-based selection, RFQ = request for quotation, UMP = University of Medicine and Pharmacy at Ho Chi Minh City.
Source: Asian Development Bank.

III. DUE DILIGENCE

A. Technical

21. The master plans considered topography, natural characteristics, and climate conditions. Climate change adaptation measures include resilient building designs, proper drainage systems, and adequate elevation of structures. Climate change mitigation features include green building architectural designs; positioning allowing natural lighting and airflow; use of electricity-saving bulbs and equipment; waste management; and solar energy-operated utilities. The grant will provide clinical equipment for LHC facilities that is appropriate to users' capacity and the community's health care needs; and user-friendly interfaces for distance learning CME.

B. Economic and Financial

22. The project's net present value is projected at $2.2 billion over a 35-year period. The economic internal rate of return is forecast at 19.2%, exceeding the threshold for social sector projects.[38] The economic benefits derive from (i) direct labor productivity gains from the entry of additional medical professionals into the labor force, and (ii) indirect labor productivity gains from a reduction in illness and premature death due to an increase in health professionals per capita. Each university will finance the operation and maintenance of their new campuses through revenue generated from tuition, external training, and hospital services. Tuition revenue will increase from 2025 because of higher enrolments and tuition fees.[39] The increase in net operating cash flow of the two universities is projected to cover operation and maintenance.

C. Governance

23. The pre-mitigation financial management risk of the project is *high* because of unclear accounting guidelines specific to this project, and weak internal controls through a fully integrated system within the executing agency. Procurement risks for the loan component are *high*, while the procurement risk for the grant is *moderate*. The MOH has extensive experience of implementing large civil works projects and the engineering capacity required to oversee the detailed engineering design and campus construction funded by the government. HMU and UMP have experience managing and implementing assistance-funded projects, including the Health Human Resources Sector Development Program. HMU and UMP will supplement their technical capacity to execute the teaching program reforms and implement the project's pilot

[38] Economic and Financial Analysis (accessible from the list of linked documents in Appendix 2).
[39] Under the government's policy on university autonomy, HMU and UMP will set their own tuition fees from 2025.

initiatives using international and national consultants. The project will establish a project coordinating unit and three project implementation units and will build their capacity on ADB project administration guidelines and reporting requirements. ADB's Anticorruption Policy (1998, as amended to date) was discussed with the government and MOH.

D. Poverty, Social, and Gender

24. The project will address health inequities that drive socioeconomic imbalances. It will increase the supply of a skilled health workforce responsive to the needs of disadvantaged groups. It will create job opportunities for poor people in the project area during construction. It is categorized *effective gender mainstreaming* and a gender action plan has been prepared.[40] It will address gender inequality by (i) incorporating gender-responsive physical design features in new campuses, (ii) supplying LHC facilities with equipment for health conditions affecting women, (iii) ensuring gender-equitable participation in student placements and CME, and (iv) ensuring at least 10% of CME modules are specific to women's health issues.

E. Safeguards

25. In compliance with ADB's Safeguard Policy Statement (2009), the project's safeguard categories are as follows.[41]

26. **Environment (category B).** The MOH prepared initial environmental examination reports for the HMU and UMP sites, which include environmental management plans.[42] Both sites are outside sensitive areas. The project will avoid or mitigate adverse environmental impacts through measures in the environmental management plans. The MOH conducted public consultations that will continue throughout implementation. ADB disclosed the initial environmental examination reports on its website. A consultant will support HMU and UMP to ensure compliance with environmental safeguards. Environmental reporting to ADB will be semiannual.

27. **Involuntary resettlement (category B).** The project requires land for construction under phase 1 of each campus master plan. HMU's campus has 125 affected households, of which 31 (121 people) are severely affected.[43] UMP's campus has 25 affected households, of which eight are severely affected (33 people).[44] ADB disclosed project information to affected households throughout project preparation and distributed a project information booklet. It prepared resettlement plans for each campus in consultation with local communities and posted them on the ADB website. It will update and disclose the resettlement plans after preparing the detailed engineering design and receiving ADB clearance before awarding of contracts.

28. **Indigenous peoples (category C).** The project will not affect ethnic minorities.

F. Summary of Risk Assessment and Risk Management Plan

29. Significant risks and mitigating measures are summarized in Table 5 and described in

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[40] Gender Action Plan (accessible from the list of linked documents in Appendix 2).
[41] ADB. Safeguard Categories.
[42] Initial Environmental Examination: Hanoi Medical University and Initial Environmental Examination: University of Medicine and Pharmacy at Ho Chi Minh City (accessible from the list of linked documents in Appendix 2).
[43] Severely affected households are those affected by a loss of 10% or more of their total income-generating assets.
[44] Resettlement costs include base costs, allowances, administration, and contingency.

detail in the risk assessment and risk management plan.[45]

Table 5: Summary of Risks and Mitigating Measures

Risks	Mitigation Measures
Weak PFM system (i.e., accounting, budget preparation and execution, cash planning, and performance measurement) and weak fiduciary and internal controls leading to unclear financial accountability.	Build executing agency's financial accountability by supporting preparation of a financial management manual, annual operation plans, and budget; and improving performance monitoring, internal audit procedures, and external audit. ADB will train project staff. National consultants will support financial management.
Weak capacity of the executing agency and implementing agencies to prepare and manage financial information, procurement documents, and related project activities to comply with ADB requirements.	Provide (i) project development, management, and procurement specialists to assist the PCU and PIU in conducting procurement activities; (ii) finance specialists to assist the PCU and PIUs; and (iii) project implementation consultants to support PIUs of HMU and UMP.
Shortage of counterpart funds in approved budgets delays project implementation.	Ensure adequate annual allocation and timely release of counterpart funds through close coordination with MOF, MOH, UMP, and HMU
Elevated risk of collusion and/or noncompliance of signed contracts resulting in poor accountability and substandard quality of work; limited use of IT to enhance competition, transparency, and monitoring.	Seek ADB's prior review of procurement packages; build procurement committee capacity to detect collusion when evaluating bids and proposals; prepare mandatory contract management plans before contract signing; monitor compliance to signed contracts; and ensure quality audits by engaging SAV and accredited external audit firms.

ADB = Asian Development Bank, HMU = Hanoi Medical University, IT = information technology, PCU = project coordinating unit, PFM = public financial management, PIU = project implementing unit, SAV = State Audit of Viet Nam, UMP = University of Medicine and Pharmacy at Ho Chi Minh City.
Source: Asian Development Bank.

IV. ASSURANCES

30. The government, the MOH, HMU, and UMP have assured ADB that implementation of the project shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the PAM and loan documents.

31. The government and the MOH have agreed with ADB on certain covenants for the project, which are set forth in the draft loan and grant agreements.

V. RECOMMENDATION

32. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan of $80,000,000 to the Socialist Republic of Viet Nam for the Second Health Human Resources Development Project, from ADB's ordinary capital resources, in concessional terms, with an interest charge at the rate of 2.0% per year during the grace period and thereafter; for a term of 25 years, including a grace period of 5 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements presented to the Board.

Takehiko Nakao
President

20 November 2018

[45] Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

DESIGN AND MONITORING FRAMEWORK

Impact the Project is aligned with
UHC, including access to essential health care services, achieved (Target 3.7: National Action Plan for the Implementation of the 2030 Sustainable Development Agenda)[a]

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
Outcome Supply of skilled health workforce increased	a. Annual intake of undergraduate programs increased by 1,100 students per year at HMU and 1,100 students per year at UMP by 2027 (baseline 2018: HMU = 1,600; UMP = 1,600) b. 80% of students from targeted degree programs[b] at HMU and UMP that participated in pilot practicums met learning outcomes for CHS practice placements by June 2023 (baseline 2018: HMU = 0%, UMP = 0%) c. 1,020 LHC staff, 60% of whom are women,[c] have received distance CME by June 2023 (baseline 2018: HMU = 0, UMP = 0)	a.–c. HMU and UMP project progress reports and annual reports	Shift in political leadership will weaken support for health human resources development.
Outputs 1. Undergraduate education facilities in the new HMU and UMP campuses operationalized	1a. New HMU and UMP campuses that include specific features to enhance the accessibility, safety, and security of female students and staff constructed by December 2024 (baseline 2018: HMU = 0, UMP = 0) 1b. New HMU and UMP campuses with teaching laboratories are equipped by January 2025 (baseline 2018: HMU = 0, UMP = 0)	1a.–1b. Project progress reports by PCU, HMU, and UMP	Shortage of counterpart funds in approved budgets results in implementation delays.

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
2. Competency of graduates to respond to community health needs strengthened	2a. 35 CHSs equipped to serve as student placement sites and for health conditions affecting women,[d] by December 2021 (baseline 2018: 0) 2b. One health professional education program at HMU and three health professional education programs at UMP have revised curricula[e] that include gender-specific content by January 2022 (baseline 2018: HMU = 0, UMP = 0) 2c. 400 HMU students (at least 50% female) and 300 UMP students (at least 50% female) participated in practice placements in CHS under the revised curriculum by March 2023 (baseline 2018: HMU = 0, UMP = 0) 2d. 240 trainees[f] from HMU and UMP teaching staff (at least 60% female) trained on modern teaching methods by March 2023 (baseline 2018: HMU = 0, UMP = 0) 2e. Community members in 35 disadvantaged rural and urban communes have received health services from HMU or UMP students by January 2022 (baseline 2018: HMU = 0, UMP = 0)	2a.–2e. Project progress reports	
3. Quality of health workforce in disadvantaged communities enhanced	3a. Four district health facilities in remote areas are equipped to pilot test distance CME delivery for LHC staff by Q3 2020 (baseline 2018: 0) 3b. 40 CME e-learning modules for primary health, including 10% of the modules focused on health issues affecting women,[g] developed by HMU and UMP by March 2023 (baseline 2018: HMU = 0, UMP = 0)	3a.–3b. Project progress and capacity building reports	

Key Activities with Milestones

1. Undergraduate education facilities in the new HMU and UMP campuses operationalized

1.1 Mobilize individual consultants to assist the executing agency and implementing agencies during start-up phase by Q3 2019.
1.2 Complete technical design and detailed cost estimates for the new campuses by Q4 2020.
1.3 Tender procurement packages for civil works by Q1 2021.
1.4 Mobilize firm(s) for construction and supervision of the new campuses by Q3 2021.

1.5 Hand over new campuses to HMU and UMP by Q2 2025.

2. Competency of graduates to respond to community health needs strengthened

2.1 Commence community-based diagnostic assessments by Q3 2019.
2.2 Complete implementation arrangements and equipment provision for student placements in rural health facilities by Q1 2020.
2.3 Commence student placements by Q2 2020.
2.4 Complete benchmark review of international curriculum at UMP by Q2 2020.
2.5 Commence IEC campaigns as part of the student placement program by Q3 2020.
2.6 Complete faculty consultation and curriculum design workshops for at least one-degree program at HMU and one-degree program at UMP by Q1 2021.[c]
2.7 Issue revised curriculum for at least one-degree program at HMU and one-degree program at UMP by Q2 2021.
2.8 Complete training workshops for faculty on teaching methods and technologies by Q4 2022.

3. Quality of health workforce in disadvantaged communities enhanced

3.1 Commence CME module development by Q3 2019.
3.2 Supply equipment for distance CME technology to pilot sites by Q3 2020.
3.3 Commence pilot test of CME delivery in remote sites by Q1 2021.
3.4 Evaluate pilot test of distance CME delivery by Q2 2022.
3.5 Commence dialogue with HEPTI on model replication by Q3 2022.

Project Management Activities

Establish project coordinating unit and project implementation units (Q2 2019)
Recruit project implementation firms for Outputs 2 and 3 (Q4 2019)
Establish baselines and monitoring and evaluation schedule (Q3 2019)
Conduct midterm review (Q2 2021)

Inputs

ADB: $80.0 million (concessional loan)
Government: $15.8 million
Japan Fund for Poverty Reduction: $3.0 million (grant)

Assumptions for Partner Financing

Not applicable

ADB = Asian Development Bank, CHS = commune health station, CME = continuing medical education, HMU = Hanoi Medical University, HEPTI = health education and professional training institutions, IEC = information, education, and communication, LHC = local health care, PCU = project coordinating unit, Q = quarter, UHC = universal health coverage, UMP = University of Medicine and Pharmacy at Ho Chi Minh City.

[a] Government of Viet Nam, Office of the Prime Minister. 2017. *National Action Plan for the Implementation of the 2030 Sustainable Development Agenda.* Hanoi.

[b] Target programs for pilot placements are (i) 5th year and 3rd year undergraduate medicine students at HMU and (ii) 4th year public health and 6th year general preventive medicine students at UMP.

[c] Reference points for gender targets: (i) In 2015 69.6% of staff in CHS nationwide are female, and (ii) in 2017 the proportion of students who are female is 57.2% at HMU and 63.7% at UMP (Gender Action Plan. Accessible from the list of linked documents in Appendix 2).

[d] For example, gynecology examination instrument set.

[e] HMU will review the curriculum for the undergraduate medical program. UMP will review the curriculum for the undergraduate public health, traditional medicine, and pharmacy degree programs.

[f] One faculty member may participate in more than one training.

[g] For example, sexual and reproductive health and rights, including maternal health, family planning, sexually transmitted infections and HIV/AIDS, and gender-based violence.

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

http://www.adb.org/Documents/RRPs/?id=40354-017-3

1. Loan Agreement
2. Grant Agreement
3. Project Agreement
4. Sector Assessment (Summary): Health
5. Project Administration Manual
6. Contribution to the ADB Results Framework
7. Development Coordination
8. Economic and Financial Analysis
9. Country Economic Indicators
10. Summary Poverty Reduction and Social Strategy
11. Risk Assessment and Risk Management Plan
12. Japan Fund for Poverty Reduction Grant
13. Gender Action Plan
14. Initial Environmental Examination: Hanoi Medical University
15. Initial Environmental Examination: University of Medicine and Pharmacy at Ho Chi Minh City
16. Resettlement Plan: Hanoi Medical University
17. Resettlement Plan: University of Medicine and Pharmacy at Ho Chi Minh City

Supplementary Document

18. Detailed Economic and Financial Analysis
19. Health Human Resources Development: Policy and Strategy Context