1. Project Data

<table>
<thead>
<tr>
<th>Project ID</th>
<th>Project Name</th>
<th>Country</th>
<th>Practice Area(Lead)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>L/C/TF Number(s)</th>
<th>Closing Date (Original)</th>
<th>Total Project Cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TF-B3197</td>
<td>31-Jan-2021</td>
<td>6,076,899.94</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bank Approval Date</th>
<th>Closing Date (Actual)</th>
<th>IBRD/IDA (USD)</th>
<th>Grants (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29-Jul-2020</td>
<td>31-Jan-2021</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IBRD/IDA (USD)</th>
<th>Grants (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Commitment 6,227,824.00</td>
<td>6,227,824.00</td>
</tr>
<tr>
<td>Revised Commitment 6,076,899.94</td>
<td>6,076,899.94</td>
</tr>
<tr>
<td>Actual 6,076,899.94</td>
<td>6,076,899.94</td>
</tr>
</tbody>
</table>

Prepared by Salim J. Habayeb  Reviewed by Judyth L. Twigg  ICR Review Coordinator Eduardo Fernandez Maldonado  Group IEGHC (Unit 2)

2. Project Objectives and Components

a. Objectives

According to the Grant Agreement dated July 27, 2020, p. 5, the project objective was to assist Vietnam to strengthen capacities for detecting and responding to COVID-19.
Note: The Grant was provided by the Pandemic Emergency Financing Facility (PEF Grant Number TF0B3197) and was executed between the Socialist Republic of Vietnam and the World Bank, acting as a Responding Agency of the PEF.

b. Were the project objectives/key associated outcome targets revised during implementation?
No

c. Will a split evaluation be undertaken?
No

d. Components

I. Strengthening surveillance and testing capacities (Appraisal US$4.59 million; Actual US$4.45 million):

1. Strengthening the capacity of laboratory systems at the National Institute of Hygiene and Epidemiology (NIHE). This sub-component aimed to: (i) provide equipment to level 2 and level 3 bio-safety laboratory systems; (ii) develop standard operating procedures (SOPs) for the equipment; and (iii) deliver training to technicians and staff on the procedures.

2. Assessing and strengthening the capacity of laboratory systems nationwide to respond to COVID-19. This sub-component aimed to: (i) carry out assessments on testing capacity, bio-safety conditions, and other aspects of the laboratories involved in COVID-19 surveillance and testing in hospitals and provincial Centers for Disease Control (CDCs) nationwide; and (ii) provide technical support and training on testing techniques, bio-safety, quality assurance, and other aspects for technicians and laboratory staff at the provincial level.

3. Evaluating community immunity with COVID-19 and conducting other studies related to COVID-19 through: (i) development of study proposals for community immunity and other studies on COVID-19 related issues; (ii) collection of samples among people in selected areas; (iii) testing and analysis of available samples; and (iv) developing studies on community immunity and COVID-19 related issues.

II. Strengthening research capacity for COVID-19 vaccines and test kits (Appraisal US$1.29 million; Actual US$1.3 million):

This component aimed at supporting the Center for Production and Research of Vaccines and Biomedicals (POLYVAC) through the provision of equipment for research on COVID-19 vaccines and test kits.

III. Communication, Project Management, Monitoring and Evaluation (Appraisal US$0.68 million; Actual US$0.57 million):
1. **Communication.** This sub-component consisting of the following: (i) facilitating communication activities for strengthening engagement of project stakeholders; (ii) carrying out assessment of COVID-19 risk communication activities; and (iii) producing a documentary film on the COVID-19 response in Vietnam for communication and lessons learned.

2. **Project management, monitoring, and evaluation (M&E).** This sub-component was to provide technical and operational assistance for the overall implementation, supervision, and coordination of the project, including planning and execution, procurement, financial management, environmental and social management, audit, and M&E.

e. **Comments on Project Cost, Financing, Borrower Contribution, and Dates**

**Financing.** This fast-track project was prepared under the PEF Insurance Window (PEF was established in 2017 to provide a new source of financing for countries and qualified agencies to respond to major disease outbreaks). The estimated cost at appraisal was US$6.56 million, consisting of a PEF grant of US$6.23 million delivered as a stand-alone Recipient-Executed Trust Fund; and a Recipient contribution of US$0.33 million. The total actual cost was US$6.3 million. An amount of US$150,924 was unused and returned to the Bank (ICR, p. 8).

**Dates.** The project was approved on July 29, 2020 and became effective on July 30, 2020. It was implemented over a period of six months and closed on January 31, 2021.

3. **Relevance of Objectives**

**Rationale**

With a long border and close trade relationship with China, Vietnam was among the first countries where the spread of COVID-19 disease became visible. Although Vietnam was successful in containing the initial waves of the pandemic (PAD, p. 8 and ICR, p. 5), the ICR (p. 5) reported that the country was in urgent need of strengthening capacities for detecting and responding to COVID-19, as the health system was not adequately prepared for the novel coronavirus and its impact. In particular, laboratory capacities at the national and sub-national levels needed to be enhanced. At the time of appraisal, 124 laboratories could provide SARS-CoV-2 diagnostic tests using Realtime Reserve Transcription Polymerase Chain Reaction (RT-PCR) techniques, and 65 of them could provide confirmed tests. The maximum capacity of laboratories was 27,000 tests and 14,300 confirmed tests per day. Hence, laboratories needed support to improve their capacities, use serological techniques to assess community immunity, and assess the sensitivity of
molecular methods to give a comprehensive picture of the pandemic and the SARS-CoV-2 virus. Assessments could provide useful information for future development of COVID-19 vaccines.

The development objective remained aligned with the Country Partnership Framework (CPF) for the period FY18–FY22, dated May 4, 2017. The CPF (p. 68) states in Focus Area 3: Enhance environmental sustainability and resilience, under CPF Objective 10: Increase climate resilience and strengthen disaster risk management, that the World Bank Group’s engagement in disaster risk management seeks to strengthen resilience to the impacts of natural hazards, climate change, and pandemics.

The international public health emergency is self-evident, and the project reflects the Bank’s global commitment to strengthen pandemic preparedness and to support related national plans (ICR, p. 9). The objective and project investments were relevant to building health system resilience to current and future public health emergencies (PAD, p. 12).

Rating
High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1
Objective
Assist Vietnam to strengthen capacities for detecting and responding to COVID-19

Rationale

Theory of Change

The theory of change was built on the premise that swift detection of an outbreak, assessment of its epidemic potential, and rapid emergency response can reduce avoidable mortality and morbidity and mitigate economic and social impacts (ICR, p. 5, and Figure 1, p. 6; and PAD, p. 15, and Figure 1, p. 15).

To this end, the theory of change, as stated by the ICR (pp. 5-6), consisted of the following: project-financed training, research, equipment, documentaries to strengthen capacities of surveillance and testing capacity,
development of vaccine and test kits, communication, and M&E would plausibly contribute, in the short-term, to:

(a) improved timely detection and response of COVID-19 cases;

(b) reduced/prevented community transmission; and

(c) increased capacity of central and sub-national laboratories for COVID-19 and emergency response.

Outputs

Training provided. The project provided 25 training courses on Enzyme-Linked Immunosorbent Assay (ELISA), sampling, RT-PCR, and outbreak investigation (ICR, p. 9). The number of participants was 644 persons against the original target of 10 courses for 285 trainees. Post-training test scores showed that knowledge and practices of trainees improved from an average score of 6 points on the pre-test to 8.8 after training, with all trainees achieving at least a score of 7 points. The percentage of trainees achieving 9-10 (excellent level) was 40.5% compared with 0-3% before training. A group of "Training of Trainers" was formed for carrying out cascade training. The necessary training material was developed and standardized for national use.

Equipment provided. 167 items/systems of technical equipment were procured under 8 packages (categorized in 71 sub-packages) for two key project beneficiaries: NIHE and POLYVAC. Procurement of all packages was completed on time, and all equipment items were delivered and installed (ICR, p. 10). SOPs were developed, and staff operating the equipment were trained on related procedures. According to the ICR (p. 30), all equipment items were related to virus research, vaccine research and production, test kit production, and bio-safety laboratories.

Research undertaken. Two studies were completed on time:

1. Community Immunity Research focused on Da Nang city in the central region, where the most acute outbreak occurred in July and August 2020. The original plan intended to cover three provinces, representing three geographical regions (ICR, p. 8), before switching to Da Nang. Results generated information for epidemic forecasting (ICR, p. 10).

2. Laboratory Capacity Assessment included 175 laboratories covering 63 provincial CDCs, 72 provincial hospitals, 17 private hospitals, 5 medical universities, 12 health facilities under non-health sectors, and 6 regional veterinary centers. The study informed the development of training packages and strategies for provincial laboratory systems, including investment plans.
Communication documentary developed. One documentary, containing two episodes, was developed to capture and share the experience of Vietnam with other stakeholders, both domestic and foreign. The documentary was broadcast on national television and used in selected workshops (ICR, p. 10).

Intermediate results

The following intermediate results were reported in the results framework (ICR, pp. 20-23):

1. The number of laboratory staff trained on taking samples, bio-safety, and quality management reached 329 staff, exceeding the target of 135 laboratory staff.
2. The number of laboratory staff trained on ELISA techniques reached 193 staff in January 2021, exceeding the target of 150 personnel.
3. The number of equipment items provided to POLYVAC for research and development of COVID-19 test kits reached 48 in January 2021, exceeding the target of 30 equipment items.
4. SOPs developed for project-supported equipment at NIHE reached 50% in January 2021, attaining the target.
5. SOPs developed for project-supported equipment at POLYVAC reached 100%, exceeding the target of 50%.
6. A documentary on COVID-19 management and control in Vietnam was developed and used.

Outcomes

The project used two output indicators to assess PDO achievement, and the ICR (pp. 14-15) explained that these two indicators were selected as outcome indicators in view of the unforeseeable pandemic situation and the short implementation period that could have challenged impact measurement:

1. the number of laboratories assessed for testing capacity and bio-safety assurance reached 175 laboratories in January 2021, exceeding the target of 130 laboratories; and
2. the number of ELISA anti-body tests performed reached 11,928 tests in January 2021, exceeding the target of 6,000 tests.

The ICR (p. 15) stated that the selected PDO indicators themselves did not directly support the PDO, but that the PDO indicators together with the intermediate results indicators could measure the achievement of the PDO. However, the selected outcome indicators and intermediate indicators did not capture the response strengthening element of the PDO. There were gaps between the ICR’s assessment and the theory of change in illustrating the attainment of improved capacities for timely detection and reduced/prevented
transmission. Also, counting only the number of assessments performed was not informative about assessment results that would be expected to reflect desired improvements.

Per Task Team clarifications on September 6, 2021, the Team noted that COVID-19 detection and response can be measured by different outcome indicators, but that it was impossible to have such PDO indicators given the short implementation period. The team stated that indicators were selected to measure key interventions, but not all interventions, and that, although they were not ideal, the indicators were relevant in the context of the pandemic and short project life.

Rating
Substantial

OVERALL EFFICACY

Rationale
The objective to assist Vietnam to strengthen capacities for detecting and responding to COVID-19 (PAD, p. 12) was almost fully achieved. The level of achievement is consistent with a substantial rating for overall efficacy.

Overall Efficacy Rating
Substantial

5. Efficiency
The ICR (p. 29) explained the rationale for investing in pandemic preparedness and response, and provided arguments on allocative efficiency of the project. Eighty-five percent of the grant was invested in equipment and supplies, and the ICR noted that this was the best choice, as it was feasible to implement while concurrently addressing government needs. According to the ICR, project equipment was carefully selected under a set of prioritized items, including an electronic microscope system at NIHE (for US$1.4 million or 23 percent of the grant), in support of its research capacity. The ICR also noted that equipment for level 2 and 3 bio-safety laboratories at NIHE was necessary, given that such laboratories were in dire need of equipment upgrading and modernization. The ICR stated that priorities for investment under the project were in line with the Ministry of Health’s overall plan for pandemic response. Information about the optimal distribution of investments in the overall plan could have further supported the ICR’s argument on allocative efficiency under the project. In terms of technical efficiency of the project, the ICR provided information on productive capacity for testing, and noted
that training and SOPs for new equipment were expected to improve quality management and to ensure appropriate and effective use (ICR, p. 31). The ICR did not offer information on operational costs.

Project implementation proceeded satisfactorily and no shortcomings in the efficiency of implementation were identified. Implementation was completed in six months, and activities were effectively undertaken on time, notably for procurement and training.

Efficiency Rating
Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

<table>
<thead>
<tr>
<th>Rate Available?</th>
<th>Point value (%)</th>
<th>*Coverage/Scope (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ICR Estimate</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Relevance of objectives is rated high, as the development objective was responsive to a national and global public health threat, and because the objective was aligned with CPF FY18–FY22 in seeking to strengthen resilience to the impacts of natural hazards, climate change, and pandemics, and with the Bank’s global commitment to strengthen pandemic preparedness and to assist countries in confronting COVID-19. Efficacy is rated substantial, as the objective was almost fully achieved. Efficiency is rated substantial, as the project was efficiently implemented, but with moderate shortcomings in the assessment of overall efficiency. The overall outcome is rated satisfactory, indicative of essentially minor shortcomings in the project's overall preparation, implementation, and achievement.

a. Outcome Rating
Satisfactory

7. Risk to Development Outcome
There were no identified risks of importance that might indicate that development outcomes would not be maintained. Improved laboratory capacities and human resource skills were sustained and extend beyond the current emergency, as they would be useful for other disease outbreaks in the future. Research capacities for the production of biomedical products and vaccines would also be beneficial in dealing with both COVID-19 and with other communicable diseases.

8. Assessment of Bank Performance

a. Quality-at-Entry

Preparation was collaboratively undertaken with government and partners, such as the World Health Organization and the United States Centers for Disease Control and Prevention. Partners were consulted in confirming needs and avoiding overlaps, as multiple actors were providing financial and technical support for COVID-19-related efforts. Lessons learned were reflected in the project design, including the need to strengthen health system capacities for both short-term and longer-term needs, and for mainstreaming implementation arrangements within government institutions (PAD, p. 16).

The Ministry of Health was in charge of overseeing overall project management and in approving project plans. A Project Management Unit, housed at NIHE, was assigned the responsibility of coordinating implementation and monitoring, as well as complying with fiduciary, environmental, and social aspects (PAD, p. 17). Implementation arrangements were adequately prepared, including institutional readiness, financial management, audits, procurement, environmental and social aspects, and grievance redress services (PAD, pp. 16-23). The Task Team facilitated carrying out market surveys for procurement well in advance, and prepared for fast-track approval processes. Risk assessment and mitigation measures were adequate and covered technical design, institutional capacity, and environmental and social aspects (ICR, p. 17). Although there were some shortcomings in M&E design as discussed in Sections 4 and 9, the consideration of the whole array of preparation and readiness criteria indicates an overall satisfactory level for Quality-at-Entry.

Quality-at-Entry Rating
Satisfactory

b. Quality of supervision

Supervision and implementation support were reportedly proactive and of high quality. There were daily check-ins, as the Task Team Leaders were based in the country. Two formal missions were carried out in October 2020 and January 2021. The mission aide memoires and Implementation Status & Results Reports were filed diligently and accurately explained the progress made. The fact that the Task Team
Leaders had a thorough understanding of the system with fluency in Vietnamese facilitated trust building with government counterparts for an effective working partnership.

Fiduciary compliance was well monitored (ICR, p. 16), and the ICR (p. 17) reported that the Task Team was proactive in addressing issues arising in procurement and in project management arrangements. The Team supported the implementing agency in adapting to changing situations. For instance, the Task Team supported the Ministry of Health in modifying the community immunity research from its original plan to ensure alignment with the pandemic’s evolution in Da Nang city.

The Task Team was also involved in monitoring compliance with the actions outlined in the Environmental and Social Commitment Plan, and in monitoring the implementation of the Stakeholders Engagement Plan.

Under usual project timeframes, M&E design gaps could have been rectified, but such a task would have been difficult to undertake during the very short implementation period. Therefore, as supervision was intensive and proactive, and as no shortcomings directly related to the Task Team’s supervision and implementation support performance were identified, the quality of supervision is considered to be highly satisfactory.

Quality of Supervision Rating
Highly Satisfactory

Overall Bank Performance Rating
Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design
The PDO was clearly stated, but as noted in Section 4 and by the ICR (p. 15), the PDO indicators themselves did not directly support the PDO. The project selected two output indicators as PDO indicators in view of the short project timeframe. The indicators did not fully encompass the PDO statement and the expected results, as established in the theory of change (see Section 4). Indicators were measurable and with defined targets. M&E design and arrangements were well embedded institutionally.
b. M&E Implementation

Planned M&E activities were implemented satisfactorily (ICR, p. 15). Qualified staff at the Project Management Unit, assisted by an M&E consultant and support staff, were in charge of collecting data and reporting. The ICR noted that discussions involving the Project Management Unit and the Bank Task Team were conducted regularly to ensure correct understanding of M&E aspects, good practices, and follow up.

During implementation, the indicator relating to the “Assessment report on risk communication” was dropped, given that the assessment itself was undertaken and financed by another program (ICR, p. 8).

c. M&E Utilization

M&E findings were used for regular monitoring and progress tracking, and to inform the direction of the project.

**M&E Quality Rating**

Substantial

10. Other Issues

a. Safeguards

The project’s Environmental and Social Risk Classification was "Substantial" (PAD, p. 22). Environmental risks were related to the nature of the viral pathogen and to reagents and materials used in laboratories and testing facilities, where medical waste and hazardous by-products are generated. In terms of environmental compliance, the project prepared and disclosed an Environmental and Social Management Plan before implementing project activities. Planned mitigation measures were implemented, ensuring compliance with national environmental standards and bio-safety requirements (ICR, p. 16).

Social risks were related to community health and safety, and to occupational safety associated with the immunity study. The Environmental and Social Commitment Plan that was prepared for the project took into account the need to ensure adequate budget, staffing, and operational arrangements for environmental and social risk management. The project also prepared a Stakeholder Engagement Plan that defined a program for stakeholder engagement, including public information disclosure and consultations throughout the project cycle. The engagement plan outlined ways to communicate with stakeholders. It included a mechanism by which people could raise concerns, provide feedback, or make relevant complaints about any activity related to the project (PAD, pp. 22-23). In terms of social compliance, NIHE and the Project
Management Unit completed the actions committed in the Environmental and Social Commitment Plan as well as measures to mitigate social impacts, as stated in the Environmental and Social Management Plan. No complaints were made under the grievance redress mechanism during project implementation (ICR, p. 16).

b. Fiduciary Compliance
Financial management and reporting were in line with regulations of the Ministry of Finance and requirements specified in the Grant Agreement (ICR, p. 16). Financial management performance was reportedly satisfactory, including in its arrangements, staffing, and fund flows. No issues were identified during project implementation. The terms of reference for the financial audit for the period from project signing to the end of the grace period were accepted by the Bank, and the due date for the external audit report was September 30, 2021.

Procurement performance was satisfactory. Given the short implementation period of the grant, market surveys were carried out well in advance. Fast-track approval processes were applied to ensure that all equipment was procured on time with competitive pricing. NIHE signed all contracts and completed all procurement before the closing date. A procurement post-review was conducted in January 2021, and it did not reveal irregularities.

c. Unintended impacts (Positive or Negative)
None reported.

d. Other
--

11. Ratings

<table>
<thead>
<tr>
<th>Ratings</th>
<th>ICR</th>
<th>IEG</th>
<th>Reason for Disagreements/Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome</td>
<td>Highly Satisfactory</td>
<td>Satisfactory</td>
<td>The ICR rated efficacy as high, and this ICR Review rated efficacy as substantial because some evidence gaps limited the full assessment of the PDO achievement.</td>
</tr>
</tbody>
</table>
The ICR rated Quality-at-Entry as highly satisfactory, and this ICR Review rated Quality-at-Entry as satisfactory in view of some shortcomings in M&E design. Both the ICR and this ICR Review rated the Quality of Supervision as highly satisfactory. The aggregation of both sub-ratings is consistent with a satisfactory rating for overall Bank Performance.

<table>
<thead>
<tr>
<th>Bank Performance</th>
<th>Highly Satisfactory</th>
<th>Satisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of M&amp;E</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
<tr>
<td>Quality of ICR</td>
<td>---</td>
<td>Substantial</td>
</tr>
</tbody>
</table>

### 12. Lessons

The ICR (p. 18) offered lessons and recommendations, including the following lessons, slightly amended by IEG:

**In-time and quality support from the World Bank can make a significant difference in effective implementation.** The Task Team engaged with implementing agencies on a daily basis and facilitated approvals from authorizing agencies. Sustained facilitation efforts helped implementation progress, especially in the context of the pandemic and its disruptions. The locally-based Task Team also proactively engaged with, and sought advice from, experienced Bank staff.

**Commitment of the government and cooperation among key stakeholders are crucial in fast-track operations.** National agencies provided timely support during project preparation and implementation. Their support was meaningful particularly when the country's development aid management changed just before project preparation. Effective implementation of the fast-track mechanism could be attributed to the collective efforts and timely support of relevant stakeholders, working diligently and collaboratively.

**Having well-designed project activities and institutional arrangements facilitates time-constrained implementation.** Institutional arrangements facilitated quick implementation. First, making direct beneficiary institutions serve as implementing agencies accelerated project progress. Second, decentralization of project management helped in advancing implementation. Third, setting up a Project Management Unit within the main implementing institution, and with prior experience in
managing projects financed by development partners, ensured that implementation capacity was in place at the outset.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR was clearly written with an intermediate level of outcome orientation. It presented a general theory of change and focused on laboratory capacities. In the context of a six-month implementation period, the evidence was reasonably sufficient to reach conclusions. The ICR provided adequate information on compliance with the Environmental and Social Management Plan and with fiduciary aspects. It offered specific lessons derived from project experience that are likely to be useful for future fast-track operations. The ICR was internally consistent and concise, and it followed guidelines.

a. Quality of ICR Rating

Substantial