



# Validation Report

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Reference Number: PVR-493  
Project Number: 33409-013  
Loan Number: 2416  
December 2016

## Indonesia: Vocational Education Strengthening Project

Independent Evaluation Department  
**Asian Development Bank**

## ABBREVIATIONS

ADB	–	Asian Development Bank
DTVE	–	Directorate of Technical and Vocational Education
EA	–	executing agency
EMIS	–	education management information system
GAP	–	gender action plan
IED	–	Independent Evaluation Department
MONE	–	Ministry of National Education
PVR	–	project completion validation report
RRP	–	report and recommendation of the President
SBP	–	school business plan
TA	–	technical assistance

## NOTE

In this report, "\$" refers to US dollars.

### Key Words

adb, asian development bank, indonesia, model school, school based plan, school committee, senior secondary education, skills development, validation, vocational and technical education

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## PROJECT BASIC DATA

<b>Project Number</b>	33409-013	<b>PCR Circulation Date</b>	19 Jan 2016	
<b>Loan Number</b>	2416	<b>PCR Validation Date</b>	Dec 2016	
<b>Project Name</b>	<b>Vocational Education Strengthening Project</b>			
<b>Sector and subsector</b>	Education	Technical and vocational education and training		
<b>Theme and subtheme</b>	Inclusive social development	Human development		
<b>Safeguard categories</b>	Environment		C	
	Involuntary Resettlement		C	
	Indigenous Peoples		C	
<b>Country</b>	Indonesia		<b>Approved</b> (\$ million)	<b>Actual</b> (\$ million)
<b>ADB Financing</b> (\$ million)	<b>ADF: 80.00</b>	<b>Total Project Costs</b>	115.00	109.42
	<b>OCR: 0.00</b>	<b>Loan</b> (SDR equivalent, million)	80.00 (50.58)	75.77 (49.32)
		<b>Borrower</b>	35.00	33.65
		<b>Beneficiaries</b>	0.00	0.00
		<b>Others</b>	0.00	0.00
<b>Cofinancier:</b>		<b>Total Cofinancing</b>	0.00	0.00
<b>Approval Date</b>	31 March 2008	<b>Effectiveness Date</b>	25 Aug 2008	9 Jul 2008
<b>Signing Date</b>	26 May 2008	<b>Closing Date</b>	30 Nov 2013	30 Nov 2014
<b>Project Officers</b>	W. Duncan D. C. Ablett W. Duncan W. Kubitzki R. Budiman	<b>Location</b>	<b>From</b>	<b>To</b>
		ADB headquarters	Mar 2008	Sep 2009
		ADB headquarters	Oct 2008	Dec 2010
		ADB headquarters	Jan 2011	Mar 2011
		ADB headquarters	Jul 2011	Jul 2014
		Indonesia Resident Mission	Jul 2014	Nov 2014
<b>IED Review Director</b>	B. Nguyen, OIC IED 2			
<b>Team members</b>	J. Asquith, Senior Evaluation Specialist, IED1 F. Ahmed, Lead Evaluation Specialist, IED1 M. J. Dimayuga, Senior Evaluation Officer, IED1 B. Prakash, Consultant			

ADB = Asian Development Bank, ADF = Asian Development Fund, IED1 = Independent Evaluation Department, Division 1, OCR = ordinary capital resources, PCR = project completion report, SDR = special drawing rights

## I. PROJECT DESCRIPTION

### A. Rationale

1. The Indonesian Vocational Education Strengthening Project<sup>1</sup> was designed to support Indonesia's economic development, embrace technological change, maintain the relevance of skilled personnel, sustain productivity growth, and reduce poverty. Senior secondary vocational school graduates (grades 10–12) lacked adequate skills to enter industry and business enterprises, and were adding to levels of unemployment throughout the country. Focusing on

<sup>1</sup> ADB. 2008. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Republic of Indonesia for the Vocational Education Strengthening Project*. Manila.

vocational schools and changing the way they conducted their business was considered critical to transform Indonesia's vocational and technical education system. The project would promote entrepreneurship among the younger generation and facilitate self-employment among vocational school graduates. In addition, it would provide a venue for existing workers to upgrade their skills. Greater familiarity with information and communication technology-driven applications in work situations provided a promising way forward. Vocational schools would also develop a formal organizational link with industries and businesses, especially international corporations and multinationals. The project sought to empower schools to adopt a businesslike approach in day-to-day management, including planning and managing their own resources.

## **B. Expected Impacts, Outcomes and Outputs**

2. The expected impact of the project was greater competitiveness and more employment opportunities for vocational school graduates. More vocational school graduates would find skilled employment or start their own businesses, and the Ministry of National Education (MONE) would establish formal arrangements for international skills recognition. These vocational and technical education changes would be delivered through the development of a national network of high-performing vocational senior secondary schools that would act as models for other schools.

3. The project's intended outcomes were higher quality and relevance of technical training, though expanded access to and greater efficiency of vocational schools. This required better school management; better teaching and learning environments (better facilities, equipment, and teaching skills); more relevant and up-to-date teaching and learning methodologies; a stronger focus on entrepreneurship, and more efficient use of resources. To increase efficiency, some vocational schools would be expanded to create larger schools with higher enrollments. Larger schools would offer a wider range of courses, and have the opportunity to develop stronger teaching and mentoring teams. Quality would be enhanced by benchmarking against international standards and by providing vocational schools with the resources needed to achieve these standards.

4. The project had two distinctive features: the cluster approach and the school business plan (SBP). The cluster approach would select 90 vocational schools to be developed as "model" schools. Model schools were expected to network and mentor three or four surrounding "alliance" schools. About 230 alliance schools would benefit from training opportunities and the use of equipment. The second feature envisaged development and implementation of SBPs. About 75% of the total project resources were directed at this component, which would include plans for facility upgrades and equipment. About 84% of project funds would be channeled from imprest accounts directly to schools. Each SBP was expected to prepare a 4-year business development plan and update it annually.

## **C. Provision of Inputs**

5. In 2004, project preparatory technical assistance (PPTA) prepared a project proposal for developing senior secondary schools in both the general and vocational streams. During further processing, however, the project was narrowed to vocational and technical education. The estimated cost of the project at appraisal was about \$115 million. ADB approved a loan for \$80 million from its Special Funds resources, with the balance financed by the Government of Indonesia. At project completion, the total loan amount was \$77.6 million due to the depreciation of the SDR against the US dollar. The bulk of the project's budget financed the school cluster approach (Table 1).

**Table 1: Project Inputs (\$ million)**

<b>Inputs</b>	<b>ADB</b>	<b>Government</b>
Model and alliance vocational school development program	61.6	29.5
Management and in-service training	7.0	
Consulting services	2.2	
M&E surveys	1.8	
MIS and project management	1.7	4.1
Contingencies	3.1	1.4
Interest Charges	2.5	
<b>Total</b>	<b>80.0</b>	<b>35.0</b>

M&E = monitoring and evaluation, MIS = management information system

6. Project implementation was supported by a \$500,000 technical assistance (TA) grant. The main objective of the TA was to help MONE investigate and trial skills upgrading in vocational schools. It was to upgrade the certification programs for workers and develop a coherent policy framework for sustainable upgrading programs in the vocational school system. Although some skills training was undertaken under the TA, it could not be scaled up. Model schools were not yet ready to implement workers' training according to industry standards. Minor logistical issues related to the lack of transport and daily allowances hindered TA implementation. The study tour that the TA was expected to facilitate was also not undertaken because a lack of a consensus on the destination to be visited. The TA completion report assessed the TA *unsuccessful*.

7. There were no major safeguard issues, as the project did not envisage procuring new lands for school premises.

#### **D. Implementation Arrangements**

8. The Directorate General for the Management of Primary and Secondary Education, in the MONE was the designated executing agency (EA) and was responsible for project implementation with the Directorate of Technical and Vocational Education (DTVE) as the implementing agency. The DTVE director was the project director. A project steering committee was established to provide general policy direction, intersectoral coordination, and strategic direction. An advisory panel comprising technical experts from education and industry was to assess the completed SBPs, including their annual performance. The school committee in each of the model schools was responsible for implementing the project.

9. The project included 18 loan covenants. Most of these were complied with, although two were delayed. The implementation of an education management information system (EMIS) took more than 4 years to implement, rather than 12 months as planned in the project's design. Likewise, the establishment of a task force to manage community complaints took 20 months from loan effectiveness rather than 9 months. Allocation of resources was also delayed and sometimes they were transferred late in the financial calendar. The gender action plan (GAP) was prepared and is discussed separately under assessment of effectiveness.

## II. EVALUATION OF PERFORMANCE AND RATINGS

### A. Relevance of Design and Formulation

10. The PCR rated the project *relevant*. The project's objective of increasing labor force competitiveness in Indonesia, as articulated in the Medium Term Development Plans of 2004–2009 and 2010–2014, was in line with the development strategy of the country. It emphasized improvements in productivity and the growing role of the Indonesian economy in the region and the world. The project was also consistent with ADB's corporate strategy, which recognizes the role of education and skills development in alleviating poverty. The education sector analysis underpinning the project showed that vocational education students came from lower-income families and were unlikely to continue in tertiary education. By enhancing the employment opportunities of poor students, the project could potentially contribute to inclusive growth—a common goal for Indonesia and ADB.

11. The project was in line with the country's effort to decentralize service provision, including transferring fiscal responsibility from the center to provincial and district governments. Its design was centered on the capacity of local districts and provinces to support the functioning of 90 model school clusters.<sup>2</sup> Nevertheless, with only \$115 million as funding, and around 230 allied schools to be covered, project resources were thinly spread.

12. The project design supported the theory that decision-making is better when it is made by those closer to the issue to be resolved. Decision-making at school committee level would result in better solutions, ownership, and more sustainable project outcomes. The project would permit school committees to decide the allocation of financial resources (through their own bank accounts) to implement their approved SBPs. These SBPs would be designed to meet the demand for skills training in their mainly urban locality by identifying the resources needed to upgrade facilities and purchase equipment to improve the quality of teaching and learning environments.

13. Given limited project resources, the project assumed that building project clusters would spread project benefits and improve overall efficiency. The project targeted 90 vocational schools across 83 districts in 33 provinces to be upgraded to “model” schools. Each model school was to develop its own network with alliance schools (two or three per model school) to spread the benefits of skills upgrading across each of the country's provinces. Even so, there are no outputs in the DMF that reflected the cluster approach, an important feature of the project. All the outcome indicators on improved quality, relevance, and access refer to the model schools only. This is because the project focused on the capacity of the model school to upgrade its training facilities; it was not focused on the model school's role in clustering or building networks with alliance schools. While the project was relevant to the model schools, it had less relevance to the concept of clustering alliance schools.

14. Finally, while the project's outcomes depended on the capacity of local institutions, especially school principals and committees, to develop school business plans, little support was provided at this level. Moreover, implementation remained centralized while the project's activities were decentralized. Greater attention to the management of the project at its most decentralized level may have strengthened project ownership. Given the degree of innovation involved, it may also have been preferable to first pilot the approach to see what type of vocational school model would work best and under what circumstances. Nevertheless, given

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<sup>2</sup> In Indonesia, senior secondary schools are managed by districts in accordance with the National Education Law (20/2003) with considerable support from province... (RRP, para. 4)

the innovative and decentralized approach adopted, which built on the need to decentralize decision-making authority to school management, the project is assessed *relevant*.

## **B. Effectiveness in Achieving Project Outcomes and Outputs**

15. The PCR rated the project *effective*. The project's outcome was the improved quality, relevance, and efficiency of secondary vocational education. Outcome indicators were: (i) a 20% increase in vocational schools' overall enrollment; (ii) 40 model schools to be in formal arrangements with multinational or international companies or organizations for international skills certification by 2011; (iii) results of the final examination for vocational school students in core subjects to be equivalent to those for general schools; (iv) industry personnel to be involved in course identification and development in all model vocational schools by 2012; and (v) 50% of model vocational schools to be using industry standards and personnel to assist with student competency assessment by 2012.

16. Overall enrollments in the 90 vocational schools increased from 95,311 in 2008 to 128,267 in 2012, exceeding the targeted growth rate, and contributing to greater efficiency in the vocational school system. All 90 model schools involved industry personnel in curriculum development to align with industry standards and in students' competency assessments. The final examination results in core subjects (i.e., math, Indonesian, and English) for students from model schools remained more or less equivalent to those from academic schools, although the trend has not been uniform across different subjects. As the project achieved its overall targets, it is therefore assessed *effective*.

17. Notwithstanding performance against outcome level indicators, the project could have done more to support the concept of school clusters, a key feature of project design.<sup>3</sup> The outcome indicators in the DMF relate to the 90 model schools only and do not include indicators for the alliance schools. Internal project documents suggest that the majority of clusters did not develop systematic and joint plans to organize cluster activities, hence alliance schools did not benefit as much from the project as model schools. In some cases, the project gave up on alliance schools, and their resources were allocated to model schools instead. While enrollment increased across the model schools, the growing age-cohort of the population and near universalization of basic education may also have contributed to this outcome more than the project itself. Gross enrollment for both sexes in secondary education grew from nearly 70% in 2008 to 80% in 2012, so the increase in enrollment cannot be attributed to the project alone.

18. The project was designed to effectively mainstream gender issues and included a gender action plan (GAP). This focused on increasing female participation in subjects such as construction, industry and machinery, and reducing their over-representation in hotel management, hospitality, and tourism. Although not included as a contributing factor to the ratings, the validation noted that the original GAP was revised during implementation as it lacked specific targets and a monitoring mechanism. The major shortcoming was that national and system level gender-disaggregated data were not available for key features including graduating students and their employment, even for the 90 model schools. More importantly, SBPs were supposed to have included a gender plan at the school level, but this was not done. There was no reporting on GAP implementation in alliance schools. Given that bulk of the model schools majored in engineering, and as information on female enrollment is not available, the project may not have been effective in attracting female students to non-traditional courses.

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<sup>3</sup> As stated in the RRP, para. 30.

### C. Efficiency of Resource Use in Achieving Outcomes and Outputs

19. The PCR rated the project *efficient*. The project was able to achieve the outcomes and deliver outputs on time and within the given budget despite its slow start. Despite the fact that the rationale of the project was based on enhancing productivity through skills upgrading, and that the RRP used cost-effectiveness analysis and examined differential wage earnings as a justification for the project, the economic evaluation of the project's costs and benefits was not undertaken at completion.<sup>4</sup>

20. The project experienced start-up problems, and was described as "at risk" in ADB's internal reviews. Consultant engagement was delayed, which disrupted internal coordination of inputs. The project planned to procure school equipment centrally, based on the approved demands of individual schools. During implementation, however, a central procurement method was found to be impractical and resources were transferred directly to schools, permitting them to upgrade buildings and order equipment on their own, which was more efficient than central procurement.

21. Consultant inputs were reduced by around 51% with important implications for project implementation. Consultant performance suffered and was noted as poor in the PCR. For example, appropriate equipment was not available at the time of teacher training (PCR, para. 30). The budget for consultant inputs was reduced from \$2.2 million to \$1.3 million during implementation (a reduction of more than 41%), and actual expenditure was even lower at \$1.09 million. This affected project implementation especially of the education management information system (EMIS). Its preparation and use was delayed by four years. While it became functional in 2013, it has yet to gain currency among schools. Even with these process efficiency issues, the project is regarded as *efficient*.

### D. Preliminary Assessment of Sustainability

22. The PCR rated the project *likely to be sustainable*. This validation notes that, while the cluster approach adopted by the project is appropriate and innovative for expanding the reach of vocational and technical education, the sustainability of the expected outcomes was clearly contingent on further investment in the technical and vocational education subsector.

23. Vocational education and training is a high priority for the government and budget resources have been increasing significantly over the last 5 years. For secondary vocational education, the budget has grown from approximately \$270 million in 2011, to \$450 million in 2013, and \$650 million in 2015, supporting operations and maintenance for school facilities supported by the project. A recent Presidential Instruction (number 9/2016, issued in September 2016) aims to strengthen the quality and relevance of vocational education. The instruction requires 10 ministries, 34 governors, and the Professional Certification Board to work together to ensure that links among schools and industry are strengthened. The government has adopted the model to be replicated country-wide within next 5-year plan. As a result, the project is assessed *likely sustainable*.

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<sup>4</sup> The RRP did not estimate the economic internal rate of return but undertook descriptive economic analysis in terms of likely costs and benefits of the project investments. Calculation of the standard rate of return is not mandatory in certain projects, including those in the education sector, although these are often estimated, especially when the rationale of the project relates to economic growth and productivity.

## E. Impact

24. The PCR rated the project's impact *moderate*. The validation is of the view that while the project managed to improve the physical and non-physical teaching and learning environment of schools, it is too early to assess the impact of these improvements on the competitiveness of vocational school graduates, their employment and earnings. Some schools (12 out of the 90 model schools) managed to do well in terms of their examination and pass scores, but the majority of the institutions have yet to convert project investments into better performance. The PCR noted a high variation in vocational school performance.

25. Beyond model schools, the expected impact of the project was weakened as the alliance schools did not fully participate. The role of alliance school graduates was critical for making the impact of the project more inclusive, and for providing development support to more remote rural districts of Indonesia. The validation assesses the project's impact *less than satisfactory*.<sup>5</sup>

## III. OTHER PERFORMANCE ASSESSMENTS

### A. Performance of the Borrower and Executing Agency

26. The PCR rated the performance of the borrower and DGSE *satisfactory*. The government made counterpart funds available for the project and the Directorate General of Secondary Education was proactive in meeting the agreed deliverables. However, the project management unit was initially weak due to lack of familiarity with ADB procedures. More care could have been taken with consultant engagement, especially for the EMIS. The delay in consultant engagement disrupted the internal coordination of many activities under the project. Implementation of the TA project did not go well. Non-physical aspects of the project, focusing on school–industry linkages as well as self-employment and entrepreneurship, needed more active support from the implementing agency. Despite these shortcomings, the EA made a number of adjustments during implementation to ensure that project outputs were delivered and ensured that the project was closed on time and within budget. The validation assesses the borrower and executing agencies' performance *satisfactory*.

### B. Performance of the Asian Development Bank

27. The PCR rated the performance of ADB *satisfactory*. The EA had faced some difficulties in communicating with ADB headquarters in the first 2 years of project implementation. However, the situation improved after the project was delegated to the resident mission in July 2011. ADB responded well to the EA's needs and took a flexible approach in accommodating its requests for changes in project design during implementation. It undertook a number of review missions, and resident mission staff made a special effort to participate in these, giving appropriate advice and guidance to the project. Nevertheless, given the well understood capacity challenges following Indonesia's rapid decentralization and devolution of government, it was clear that at the decentralized level, the project would have benefited from more implementation support at the beginning. Based on the performance of the resident mission, which helped to ensure the project remained on track, ADB's performance is assessed *satisfactory*.

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<sup>5</sup> Since May 2016, IED has adopted the ratings terminology of the April 2016 Guidelines for the Evaluation of Public Sector Operations on development impacts. In this terminology, a *less than satisfactory* rating coincides with the previous *moderate* rating.

#### IV. OVERALL ASSESSMENT, LESSONS, AND RECOMMENDATIONS

##### A. Overall Assessment and Ratings

28. The project was largely well designed; it promoted skills development in the growing Indonesian economy, especially for youth. The initial design focused both on large, government-supported vocational schools and on small rural vocational schools largely run by the private sector. Implementation was difficult, however, as the engagement of consultants was delayed. This disrupted timing of inputs and technical support for the project, especially in relation to information systems. The cluster model feature of the project and SBPs could not be developed as intended. Although the EA and ADB made efforts to close the project on time and within budget, there were challenges in working in a decentralized environment. The validation therefore rates the project *relevant, effective, efficient, and likely sustainable* with an overall rating of *successful*. This assessment is summarized in the table below.

##### Overall Ratings

Criteria	PCR	IED Review	Reason for Disagreement and/or Comments
Relevance	Relevant	Relevant	
Effectiveness in achieving outcome	Effective	Effective	
Efficiency in achieving outcome and outputs	Efficient	Efficient	
Preliminary assessment of sustainability	Likely to be sustainable	Likely Sustainable	Sustainability is contingent on the availability of finances and the proper investment of resource in the subsector. There is no assurance for this as the project downplayed the broader policy prerequisites that were needed for it to operate sustainably (paras. 22-23).
<b>Overall assessment</b>	<b>Successful</b>	<b>Successful</b>	
Impact	Moderate	Less than satisfactory	
Borrower and executing agency	Satisfactory	Satisfactory	
Performance of ADB	Satisfactory	Satisfactory	ADB's performance improved once the project was transferred to the Indonesia resident mission
Quality of PCR		Satisfactory	Refer to para 32.

ADB = Asian Development Bank, IED = Independent Evaluation Department, PCR = project completion report

Note: This report uses the ratings terminology of the April 2016 Guidelines for the Evaluation of Public Sector Operations.

Source: ADB Independent Evaluation Department

##### B. Lessons

29. The validation identified the following lessons:

(i) The project performance may have been better if outcomes had been closely linked to ADB-supported activities, and if they had reflected gradual improvements in the vocational training system rather than the end of point of improved relevance, efficiency, and effectiveness of the vocational training system.

(ii) The project may have benefited from a more decentralized project management structure. The project supported a process of service decentralization while project management itself was centralized.

(iii) The project needed to provide additional support to those schools that needed it, particularly in more remote areas.

(iv) Vocational schools were not familiar with the new way of operating that the project supported. They needed support to build their knowledge of and information on local labor market conditions, including skills standards and emerging employment opportunities. Projects which focus on the interface between education and employment need to be underpinned by regular implementation supervision as the conditions on the ground can be different across the country.

### **C. Recommendations**

30. The validation agrees with the recommendations in the PCR, particularly that the project performance evaluation report be prepared in 2017 to allow sufficient time to assess the long-term impact on vocational graduates, institutions, and labor market outcomes.

## **V. OTHER CONSIDERATIONS AND FOLLOW-UP**

### **A. Monitoring and Evaluation Design, Implementation, and Utilization**

31. The project's monitoring and evaluation design was weak. There were problems in recruiting EMIS consultants and engagement was delayed. The EMIS system had to be established with the help of an individual consultant, and it took nearly 4 years to put it in place. It is still not functioning at its full potential. Similarly, the project management information system and financial management information system were not prepared in time and this impeded satisfactory project implementation. Data related to employment opportunities and earnings are not available, with the result that the benefits accruing as a result of the project are not captured.

### **B. Comments on Project Completion Report Quality**

32. The quality of the PCR is *satisfactory*. While it was consistent with the PCR guidelines and a generally well presented report, it could have presented more evidence to substantiate the ratings given for the project's effectiveness, efficiency, sustainability, and impact. The validation report was completed after interviews with the Indonesia resident mission and the supply of additional information on project performance.

### **C. Data Sources for Validation**

33. The validation used the following documents in its preparation: PCR, RRP, internal processing documents such as staff review committee and management review meeting minutes, loan review mission reports, and aides-memoires.

### **D. Recommendation for Independent Evaluation Department Follow-Up**

34. This is an important subject in which a number of developing countries are interested in ADB support. A project performance evaluation report should be undertaken to assess the project's performance in detail and identify appropriate lessons.