

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Paraguay office: October, 2011

Country	The Project of Improvement of Educational Equipment for Vocational Education
Paraguay	

I. Project Outline

Project Cost	E/N Grant Limit: 647 million yen	Contract Amount: 638 million yen
E/N Date	September, 2005	
Completion Date	February, 2007	
Implementing Agency	Technical College and Vocational Training Center "Pte. Carlos A. Lopez" (CEV) (Supervision: Ministry of Education and Culture, MEC)	
Related Studies	Basic Design Study: January, 2005 - July, 2005	
Contracted Agencies	Consultant(s)	Joint Venture of INTEM Consulting Inc. and Yokogawa Architects & Engineering Inc.
	Contractor(s)	Iwata Chisaki Construction Corporation
	Supplier(s)	Mitsubishi Corporation
Related Projects (if any)	Japanese cooperations: Technical Cooperation for CEV (1978 - 1983), Dispatch of 38 Senior Volunteers to CEV (1993 - Now) Grant Aid for CEV (1978)	
Background	In Paraguay, since the accession of the Mercosul, export pressures by the neighboring countries, including Brazil, have been growing. Thus, human resource development through enhanced vocational and technical education was an urgent need to enhance the industrial sector. CEV was the largest vocational institute under the Ministry of Education and Culture (MEC) of the country. It had 9 specialized areas with around 400 students and 40 teaching staff. Japan had supported CEV through various ODA schemes, including grant aid, technical cooperation project, and dispatch of senior volunteers. However, the facilities and equipment installed by the Japanese grant aid had been already obsolete. Therefore, the Government of Paraguay requested the Government of Japan to support replacement those obsolete facilities and equipment in order to meet the recent needs for vocational training in the country.	
Project Objectives	Outcome	To improve vocational training environment by replacement of facilities and equipment of CEV.
	Outputs	<p>Japanese Side</p> <ul style="list-style-type: none"> - Construction of facilities: Printing and Computer Building (Approximately 1,100m²) and Pipework Building (Approximately 400m²) - Installation of training equipment for the training courses of printing, carpenter, construction, electricity, electronics, auto-mechanics, machinery, pipework and cold storage and common use <p>Paraguay Side</p> <ul style="list-style-type: none"> - Land preparation / Construction of exteriors / Lead-in work of telephone line

II. Result of the Evaluation

Summary of the Evaluation
<p>CEV is a key vocational training institute in Paraguay, which is specialized in industrial technical training. Although CEV has produced many human resources for the industrial sector, it faced problems including the insufficient number of class rooms and training equipment to accommodate the increasing number of students. The obsolete training contents accompanied by aging training facilities and equipment have been harming a quality of vocational training at CEV. Therefore, it was a key issue for CEV to improve vocational training environment in order to continue a needs-oriented human resource development for the industrial sector of Paraguay. This Project has achieved renewal and improvement of training curriculums, introduction of curriculums for information technology and an increase in practical training hours. As a result, the Project brought about an impact of higher demand for CEV alumni in the labor market. Hence, it is considered that the expected outcomes were realized by the Project. As for sustainability, problem has been observed in terms of financial aspect due to the insufficient budget allocation from the MEC, while the facilities and equipment replaced by the Project have been well-maintained and well-utilized by teaching staff of CEV who had sufficient technical level. For relevance, the project has been highly relevant with Paraguay's development policy, development needs, as well as Japan's ODA policy. For efficiency, the project period slightly exceeded the plan. In the light of above, this project is evaluated to be satisfactory.</p>

1 Relevance
<p>This project has been highly relevant with the Paraguay's development policy to improve reliability of vocational training and public educational institutes, development needs for development of industrial human resource, as well as Japan's ODA policy. In addition, in 2011, enhancement of technical education and vocational training, including improvement of training contents to meet the market needs, has been growing in importance since "the Technical Education and Vocational Training Improvement Plan" was announced in order to realize "the economic growth with employment creation and improvement of income distribution which was one of the strategic goals set in "the Socio-economic Strategic Plan". Therefore its relevance is high.</p>
2 Efficiency
<p>Although the project cost was within the plan (ratio against plan: 99%), the project period slightly exceeded the plan (ratio against plan: 106%). Therefore, efficiency of this project is fair. There were some changes in outputs of the Japanese side: addition of fire protection equipment, cancelation of installation of generators for existing facilities, reduction of number of common equipment due to</p>

fluctuation in exchange rate and financial reasons. However, these changes did not affect the project effect.

3 Effectiveness/Impact

The Project has mostly achieved its objective of improvement of vocational training environment at CEV as expected. Curriculums of the training courses supported by the Project have been updated and improved every year as needed basis. Also, the IT course was newly introduced in 2007. In addition, the portion of actual hours for practical training against required hours increased from 59.5% in 2004 to 70.0% since 2007, which attained 80% of the target value. The ratio of the number of students enrolled against quota for each course also increased to 88.9% in 2007. The decrease in the ratio to 81.3% in 2011 was induced by the decreases in the number of students enrolled in the carpenter course and the pipework course due to the lower needs in the labor market. Thus, CEV offers short-term curriculums for these courses depending on the labor market needs. The environment improvement through the replacement of training facilities and equipment by the Project also enabled teaching staff of CEV to apply new technologies and skills as well as to meet updated needs. As a result, the both of the teaching capacity and the satisfaction level of students at CEV improved. The main factor for those project effects can be attributed to supports of the senior volunteers dispatched by JICA, including adequate assessment of needs for replacement of training equipment at each course. The senior volunteers also contributed to enhancement of teaching capacity at CEV. Besides these effects, the improvement of training environment and contents brought about the increase in employment rate for alumni of CEV to 90% from 51.8% during the period from 1999 to 2003. Currently, most of CEV alumni found a job within 1 year after graduation. In particular, the needs for the alumni of the automobile course have been growing. On the other hand, the employment places of the CEV alumni have become diversified. Since many inquiries from recruitment officers of companies implies the growing needs for the CEV alumni in the labor market, the Project contributed to the technical human resource in Paraguay. Therefore, its effectiveness/impact is high.



Training equipment for auto-mechanics course

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	2004 (Base Year)	2007 (Target Year)		2011 (Ex-post Evaluation)
Indicator 1 : The number of hours for practical training (Actual hours / Hours required)	(Actual) 59.5%	(Plan) 88.5%	(Actual) 70.0%	(Actual) 70.0%
Indicator 2 : Ratio of the number of students enrolled against quota for each course	(Plan) 81%	(Plan) 90%	(Actual) 88.9%	(Actual) 81.3%

(Source: CEV)

4 Sustainability

According to the site visit and interviews with CEV, the facilities and equipment replaced by the Project has been appropriately maintained and effectively utilized for vocational training at CEV. Although there is no specialized maintenance personnel in CEV, no critical problem has been observed since the regular maintenance and minor repair, which are recorded in a maintenance record book, are carried out by the teaching staff. In addition, the sufficient technical level of the teaching staff enables timely repair of training equipment and avoids interruption of practical training sessions. The technical sustainability is backed up by supports of the senior volunteers including trainings for maintenance of the equipment, application of state-of-art technologies, curriculum development to effectively utilize the training equipment provided by the Project. In terms of the financial aspect, the School Support Committee has been coping with the cost to cover the insufficient budget allocated by the MEC, although the MEC should be responsible to allocate necessary budget for operation of CEV. In addition, the maintenance budget has been limited to 50% of the total budget allocated by the Ministry since 2011. On the other hand, CEV has not assessed actual costs for maintenance of the facilities and equipment. CEV needs to improve management of budget and to finance the lack of budget for maintenance. Therefore, sustainability of the project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

In order to develop technical human resources according to the market needs, it is strongly recommended that the Ministry of Education and Culture will allocate CEV necessary budget for maintenance as committed by the Ministry at the time of basic design for the Project. On the other hand, CEV is required to make efforts to request appropriate maintenance plan and budget based on the actual expenditure and to secure financial source for necessary maintenance. In addition, it is expected that CEV will continuously develop updated curriculums based on detail assessment of the labor market needs and innovate new programs to meet with wider needs in the labor market in order to differentiate CEV from other vocational training institutes and to develop technical human resource with higher value.

Lessons learned for JICA:

Strategic coordination between grant aid project and dispatch of long-term expert or senior volunteer is useful to enhance effectiveness and to ensure sustainability of grant aid project through appropriate needs assessment, effective project formation and implementation, useful follow-ups to promote impacts and sustainability.



Printing and Computer Building