

Country Name	<b>Project for Supporting Senior High School (SHS) Program in Technical Vocational High Schools</b>											
Republic of the Philippines												
<b>I. Project Outline</b>												
Background	<p>While the literacy rate in the Philippines was high (95.4%, as of 2011) among the Southeast Asian countries, the enrollment rates of primary and secondary education were 85.01% and 62.38%, respectively (2009) and the indicator for the secondary education needed further improvement, in particular. In addition, low quality of education was pointed out and both achievement level of the nationwide academic aptitude test (especially science and mathematics) and the “Trends in International Mathematics and Science Study” showed low figures. In response to such educational circumstances, Japanese companies entering the market suggested the necessity to raise the educational level of manufacturing workers who completed secondary education due to the fact that labor power suited to the needs of the industry was not supplied. It was one of the impediments to investment from overseas.</p>											
Objectives of the Project	<p>Through collaborating with Japanese industries/firms expanding into the Philippines market, the project aimed at developing a mechanism for Technical and Vocational High Schools (TVHSs) activities to ensure its effective implementation, thereby contributing to sharing activities, strategies and promising practices implemented in the Senior High School (SHS) modeling to other TVHSs.</p>											
	<ol style="list-style-type: none"> <li>Overall Goal: Activities, strategies and promising practices implemented in the Senior High School (SHS) modeling will be shared to other TVHSs including K to 12<sup>1</sup> modeling TVHS nationwide as a resource reference to develop/enhance their School Improvement Plans (SIP) (280 schools in total).</li> <li>Project Purpose: A mechanism is developed for TVHS activities to ensure its effective implementation through collaboration with industries/firms including those from Japan (Targeting at all fourteen (14) TVHSs which participate in SHS modeling program<sup>2</sup>).</li> </ol>											
Activities of the Project	<ol style="list-style-type: none"> <li>Project site: 14 target schools (4 pilot schools and 10 modeling schools)* in the Philippines</li> <li>Main activities: (i) Identifying mismatches/gaps between capacities/competencies of graduates and industry needs at the pilot TVHSs and addressed in their School Improvement Plans (SIP), (ii) Promoting collaboration between pilot schools and industry/firms to improve school activities and to fill the identified gaps; and (iii) Sharing the information on piloted activities/best practices for possible replication/adaptation with SHS modeling TVHSs, other than the four (4) pilot schools.</li> </ol>											
	<p>*14 target schools</p> <ul style="list-style-type: none"> <li><b>Pilot schools:</b> (1) Don Alejandro Roces Sr. Science and Technology High School (DARSSTHS), (2) Rizal Experimental Station and Pilot School of Cottage Industries (RESPSI), (3) San Pedro Relocation Center National High school (SPRCNHS), (4) Subangdaku Technical Vocational School (STVS).</li> <li><b>Modelling schools:</b> (1) Bukig National Agricultural &amp; Technical School (BNATS), (2) Angeles City National Trade School, (3) Balagtas National Agricultural High School, (4) Bataan School of Fisheries, (5) Dona Montserrat Lopez Memorial School, (6) Merida Vocational School, (7) Opol National Secondary Technical School (ONSTS), (8) Iligan City National School of Fisheries (ICNSF), (9) Rogongon Agricultural High School (RAHS), (10) Tagum National Trade School (TNTS).</li> <li>The Philippine government selected 14 out of 280 TVHSs as modeling schools for SHS modeling program. On the other hand, in this project, 4 out of 14 TVHSs that carried out pilot activities were called pilot schools, and the remaining 10 TVHSs were called modeling schools.</li> </ul> <ol style="list-style-type: none"> <li>Inputs (to carry out above activities) <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Japanese Side</td> <td style="width: 50%;">Philippines Side</td> </tr> <tr> <td>1) Experts: 4 persons</td> <td>1) Staff allocated: 44 persons</td> </tr> <tr> <td>2) Trainees received: 39 persons</td> <td>2) Facilities and land: Project office and facilities</td> </tr> <tr> <td>3) Equipment: Materials and equipment for vocation training</td> <td>3) Local operation cost: salaries, electricity and water supply cost, stationary for modeling and pilot schools, workshop cost, etc.</td> </tr> <tr> <td>4) Local cost: Competitive grant</td> <td></td> </tr> </table> </li> </ol>			Japanese Side	Philippines Side	1) Experts: 4 persons	1) Staff allocated: 44 persons	2) Trainees received: 39 persons	2) Facilities and land: Project office and facilities	3) Equipment: Materials and equipment for vocation training	3) Local operation cost: salaries, electricity and water supply cost, stationary for modeling and pilot schools, workshop cost, etc.	4) Local cost: Competitive grant
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Project Period	(ex-ante) February 2014 – May 2017 (actual) June 2014 – May 2017	Project Cost	(ex-ante) 237 million yen (actual) 226 million yen									
Implementing Agency	Department of Education (DepEd)											
Cooperation Agency in Japan	KRI International Corp.											

**II. Result of the Evaluation**

&lt;Constraints on Evaluation&gt;

<sup>1</sup> “K to 12” is an extended basic education period reformed in line with “Education For All” and educational goals of the Millennium Development Goals, which is from 10 years education system (6 years of primary education, 4 years of secondary education) to 12 years education system (6 years of primary education, 4 years of secondary education in the first-term, 2 years of secondary education in the second-term).

<sup>2</sup> From March 2012 to March 2016, the Philippine government conducted an SHS modeling program in order to consider how to implement upper secondary education when extending basic education institutions from 10 years to 12 years (K to 12 reform). In implementation of this program, 16 schools from ordinary schools (total 7,466 schools) and 14 schools from TVHSs (total 280 schools) were selected as modeling schools.

- Due to COVID-19 quarantine restrictions, face-to-face interviews and field visits could not be conducted. To address these limitations, questionnaire surveys, telephone interviews and online meetings with 14 target schools of this project were carried out.
- As the ex-ante evaluation sheet was not prepared for this project, it took time to verify the project information at the planning stage such as planned project cost.

## 1 Relevance

<Consistency with the Development Policy of the Philippines at the Time of Ex-Ante Evaluation >

The project was consistent with the national development policies of the Philippines such as the “Philippine Development Plan” (2011-2016) aiming at extending basic education period, which was called as “K to 12 reform”, from 10 years (6 years of primary education, 4 years of secondary education) to 12 years (6 years of primary education, 4 years of secondary education in the first-term, 2 years of secondary education in the second-term).

<Consistency with the Development Needs of the Philippines at the Time of Ex-Ante Evaluation >

The project was consistent with development needs of the Philippines such as to improve the worker graduates of secondary education through basic mathematics and basic skills training by introduction of selective vocational training courses in the second-term education.

<Consistency with Japan’s ODA Policy at the Time of Ex-Ante Evaluation>

The project was consistent with the Japan’s Country Assistance Program for the Republic of the Philippines (2012) addressing “Sustainable economic growth through promotion of investment” as one of priority areas.

<Evaluation Result>

In light of the above, the relevance of the project is high.

## 2 Effectiveness/Impact

<Status of Achievement of the Project Purpose at the Time of Project Completion>

The Project Purpose was achieved by the time of project completion. At least 1 document (Guideline, Manual, MoA) related to tech-voc education (e.g., coordination mechanism with the Technical Education and Skills Development Authority (TESDA), the Commission on Higher Education (CHED) requested letters to industry associations, OJT guideline, and career education guide for elementary school) is developed (Indicator 1). The handbook for school-industry partnership developed by the project was evolved into “Guidelines for Building Partnerships for the K to 12 Basic Education Program”. And finalized and published as “DepEd Order No. 40, 2015” on 28th August 2015. These Guidelines direct the SHSs to analyze the school situation qualitatively and quantitatively and plan through causal analysis of issues based on the voices of students and stakeholders. It includes the definitions of related words, coverage of partnership, method of monitoring, related laws and regulations, assessment tool by partner and sample of Memorandum of Agreement (MOA). The Guidelines supported for the clearer goal setting and monitoring method and to draw SIP which was useful to fit the actual situation.

<Continuation Status of Project Effects at the Time of Ex-Post Evaluation>

The project effects have been continued at the time of ex-post evaluation. The guidelines have been regularly used by all the 14 target schools for building partnerships with various stakeholders and implementing the immersion program for SHS-TVL (Technical-Vocational Livelihood) track<sup>3</sup> students. Specifically, the guidelines were used as guide in designing and finalizing formal agreements between the schools and industry partners, planning and managing the work immersion program, monitoring and assessment of the work immersion program including tracking of SHS graduates.

These partners include industries, local governments, national government agencies, cooperatives, other schools, among others. Most of the 14 target schools increased in number of partners from industry firms, industry associations, NGOs, and Local Government Units (LGUs) after the project completion, and they strengthen the employment opportunities with partner industries. Opol National Secondary Technical School (ONSTS) and Iligan City National School of Fisheries (ICNSF) became a TESDA-accredited Training Assessment Center serving its province or its city and nearby municipalities.

<Status of Achievement of the Overall Goal at the Time of Ex-Post Evaluation>

The Overall Goal was achieved at the time of Ex-post evaluation. Although a specific target was not set, the actual values for Indicator 1 and Indicator 2 have contributed sufficiently to realize the Overall Goal, therefore, its achievement status was judged as “achieved”. Total 64 schools among 280 TVHSs have been informed of outcome of the SHS modeling program (Indicator 1). The outcome of the SHS modeling program have been shared with other schools by orientation of visitors about the teaching methodologies, demonstration of students’ skills and outputs, sharing experiences in industry immersion and building partnerships, and tour of school facilities and equipment. Also, total 163 schools benchmarked the pilot schools (Indicator 2). They benchmarked the following methodologies, programs and activities practiced in the pilot schools such as partnership building, SHS curriculum, learning methodology and tracing of graduates. students’ skills acquired, classes and school facilities and equipment, and so on. As a result, total 75 schools (5 schools in Region X, 20 schools in Region II, 50 schools in Region IV-A) out of 280 TVHSs introduced a mechanism of partnership between schools and industries/firms except project target 14 schools.

<Other Impacts at the Time of Ex-Post Evaluation>

The partnership between the target 14 schools and stakeholders such as industry firms, industry associations, NGOs, and LGUs established through the implementation of this project brought about some positive impacts in the form of support from partners to schools. For example, San Pedro Relocation Center National High school (SPRCNHS) received donations from partners for upgrading tools and equipment and improvement of school facilities. In Angeles City National Trade School, the partnership with LGUs resulted in college scholarships for deserving students and donations of tablet computers for every student used in distance learning during pandemic of COVID 19. Due to the pandemic, the pilot/modelling schools with guidance from DepEd were able to adapt to alternative ways of delivering SHS-TVL education using distance learning platforms. No negative impact on natural environment was observed.

<Evaluation Result>

Therefore, the effectiveness/impact is high.

### Achievement of Project Purpose and Overall Goal

Aim	Indicators	Results	Source
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<sup>3</sup> SHS-TVL (Technical-Vocational-Livelihood) track consists of vocational and livelihood course specializations designed for senior high school students to learn job-ready skills for employment after graduation. TVL track provides preparation for occupation of future work in abroad, and the experience and skills to earn Certificates of Competency and National Certifications which they will need to seek future employment.

<p>(Project Purpose) A mechanism is developed for TVHS activities to ensure its effective implementation through collaboration with industries/firms including those from Japan.</p>	<p>Indicator 1 At least 1 document (Guideline, Manual, MoA) related to tech-voc education (e.g., coordination mechanism with TESDA, CHED request letters to industry associations, OJT guideline, and career education guide for elementary school) is developed.</p>	<p><u>Status of the Achievement (Status of the Continuation): achieved (continued)</u> (Project Completion)</p> <ul style="list-style-type: none"> <li>The handbook for school-industry partnership “School Industry Linkage Officer’s Handbook on Industry Immersion and Partnership”, of which Project team has been involved in the formulation and improvement since November 2014, was evolved into “Guidelines for Building Partnerships for the K to 12 Basic Education Program”. It was finalized and published as “DepEd Order No. 40, 2015” on 28th August 2015.</li> <li>These Guidelines direct the SHSs to analyze the school situation qualitatively and quantitatively and plan through causal analysis of issues based on the voices of students and stakeholders. It includes the definitions of related words, coverage of partnership, method of monitoring, related laws and regulations, assessment tool by partner and sample of Memorandum of Agreement (MOA). The Guidelines supported for the clearer goal setting and monitoring method and to draw SIP which was useful to fit the actual situation.</li> </ul> <p>(Ex-Post Evaluation)</p> <ul style="list-style-type: none"> <li>DepEd Order 40 Series of 2015 (Guidelines for Building Partnership for the K-12 Basic Education Program) has been used regularly by all the 14 target schools for building partnerships with various stakeholders and implementing the immersion program for SHS-TVL students. These partners include industries, local governments, national government agencies, cooperatives, other schools, among others.</li> <li>Most of the 14 target schools increased in number of partners from industry firms, industry associations, NGOs, and LGUs after the project completion, and strengthen the employment opportunities with partner industries.</li> <li>Opol National Secondary Technical School (ONSTS) and Iligan City National School of Fisheries (ICNSF) became a TESDA-accredited Training Assessment Center serving its province or its city and nearby municipalities.</li> </ul>	<p>(Project Completion) Terminal Evaluation Report</p> <p>(Ex-Post Evaluation) Interviews with school heads, Industrial Linkage Coordinators (ILCs) and immersion teachers from pilot/modelling schools; interviews with SHS supervisors from DepEd Regional and Division Office; results of questionnaire survey</p>
<p>(Overall Goal) Activities, strategies and promising practices implemented in the Senior High School (SHS) modeling will be shared to other Technical and Vocational High Schools (TVHSs) including K to 12 modeling TVHS nationwide as a resource reference to develop/enhance their School Improvement Plans (SIP) (280 schools in total).</p>	<p>Indicator 1 Number of TVHSs that are informed of outcome of the SHS modeling program.</p>	<p><u>Status of the Achievement: achieved</u> (Ex-Post Evaluation)</p> <ul style="list-style-type: none"> <li>Total 64 schools</li> <li>The outcome of the SHS modeling program were shared with other schools by orientation of visitors about the teaching methodologies, demonstration of students’ skills and outputs, sharing experiences in industry immersion and building partnerships, and tour of school facilities and equipment.</li> </ul>	<p>Interviews with school heads, ILCs and immersion teachers from pilot/modelling schools; interviews with SHS supervisors from DepEd Regional and Division Office; results of questionnaire survey</p>
<p>Indicator 2 Number of schools which benchmarked the pilot schools.</p>	<p><u>Status of the Achievement: achieved</u> (Ex-Post Evaluation)</p> <ul style="list-style-type: none"> <li>Total 163 schools.</li> <li>The 163 schools benchmarked the following: programs, strategies and activities practiced in the pilot schools such as partnership building, SHS curriculum, learning methodology and tracing of graduates. students’ skills acquired, classes and school facilities and equipment, etc.</li> </ul>		
<p>3 Efficiency</p>			
<p>Both project cost and period were within the plan (ratio against the plan: 95% and 90% respectively). The outputs were produced as planned. Therefore, efficiency of the project is high.</p>			
<p>4 Sustainability</p>			
<p>&lt;Policy Aspect&gt; The government policies such as “Philippine Development Plan” (2017-2022) remained supportive of the need to improve the quality of SHS particularly on the development of the SHS-TVL track. DepEd continues promotion/dissemination of the system/model introduced by the project such as the building partnerships between SHS and relevant stakeholders by issuance of ministerial ordinances on provision of related guidelines.</p> <p>&lt;Institutional/Organizational Aspect&gt; The organizational structure required to sustain the activities and positive effects arising from the project has been maintained at the national, regional, division and school level. The Regional Office and the School Division Office of DepEd have been responsible for promotion of SHS good practices and model activities initiated by the project through the Regional/Divisional Coordinators for SHS and TVL Focal Persons in coordination with Partnership Focal Person (PFP) of the School Governance Operation Division. The pilot and modelling schools retained the position of Industrial Linkage Coordinator (ILC) or PFP. Majority of the schools assigned work immersion teachers to facilitate industry immersion activities of students and assist the ILC/PFP in coordinating with industry partners.</p> <p>According to the DepEd regional and school division offices, their manpower has been sufficient for promoting/ disseminating the good</p>			

practices introduced by the project. Also, all the target schools reported to have sufficient number of staff to provide employment support activities to their students and to promote the good practices to other schools during benchmarking activities. On the other hand, regarding monitoring or tracing the graduates in previous years (e.g., 2 to 3 years after graduation), majority of the schools faced difficulty as this activity requires more time and resources on the part of the school and its staff. The reason for this is that ILC and PFP are concurrently appointed by teachers who have full-time classes and therefore cannot devote sufficient time for the above-mentioned surveys. For this reason, some ILC or PFP have suggested that their teaching load be reduced so that they can have more time spent for building new and strengthening existing partnerships with relevant stakeholders.

<Technical Aspect>

TVL teachers including ILC/PFC and work immersion teachers have been able to enhance their skills through in-service seminars and skills trainings provided by Division Offices, actual exposure to the industry while supervising the immersion work of students, and on-the-job sharing of experiences among TVL teachers through DepEd's Learning Action Cells (LAC)<sup>4</sup>. In the context of the pandemic of COVID 19, the target schools expressed the need for more trainings for TVL teachers to develop and enhance their competencies on distance/online teaching methodology using ICT-based tools and platforms. Also, the majority of the target schools emphasized the need for upgrading TVL teachers' skills and learning facilities, tools and equipment in order to cope up with fast-changing technology and increasing level of technical competency demanded by TESDA accreditation and the industry. According to DepEd Central Office, the issues relating to limited capacity of TVL teachers and inadequacy of TVL learning equipment are currently being addressed by DepEd Order No. 35 series 2020 which provides the guidelines on the Implementation of the Joint Delivery Voucher Program for SHS-TVL Specializations. This Order will specifically benefit small TVL schools including the modelling schools as they will be given the opportunity to send their students to accredited schools for specialized training to facilitate acquisition of National Certificate (NC) by these students prior to graduation.

<Financial Aspect>

Financial resources to support partnership building with industries and work immersion activities by student activities have continuously been provided by DepEd to all pilot and modelling schools although at a very limited scale. In addition, some LGUs have donated facilities and equipment for in-school learning. While DepEd was not able to sustain the competitive grants, it was able to provide training materials and equipment to the target schools although at a much smaller scale than what the project has provided.

<Evaluation Result>

In light of the above, some problems have been observed in terms of the financial aspect of the implementing agency. Therefore, the sustainability of the project effects is fair.

5 Summary of the Evaluation

The project achieved the Project Purpose which aimed to develop a mechanism for TVHS activities to ensure its effective implementation through collaboration with industries/firms including those from Japan targeting at all fourteen TVHSs which participate in SHS modeling program. The Overall Goal which aimed at sharing activities, strategies and promising practices implemented in SHS modeling to other TVHSs nationwide as a resource reference to develop/enhance their SIP has also been achieved. As for sustainability, some problems have been observed in terms of the financial aspect of the implementing agency. However, the pilot and modelling schools have maintained employment support activities in partnerships with industries, NGOs, and LGUs and the DepEd has been active in promoting/disseminating the good practices introduced by the project.

Considering all the above points, this project is evaluated to be highly satisfactory.

### III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

- Regarding the issue on limited budgetary allocation of the government for work immersion programs, the schools should consider creating a mechanism to mobilize resources from partners including industries, local governments, parent-teachers associations. Also, DepEd is suggested to make sure to carry out the Joint Delivery Voucher Program for SHS-TVL track through partnerships with private institutions which are equipped with necessary resources such as teachers, workshops, tools and equipment.
- In order to confirm the effects of School Improvement Plans (SIP) implemented by this project and to continuously strengthen the educational program and activities for collaboration with industry/firms, it is important to conduct a monitoring or tracing of the graduates of TVHSs to know how many students are able to land a job, which companies they are hired, what kind of specialties are in demand in the current labor market, what specialties are useful and are able to apply to their current job, etc., as well as to create a database of this information for use. However, schools have found it difficult to conduct a monitoring or tracing of the graduates two to three years after graduation due to a lack of manpower. The reason for this is that ILC and PFP are concurrently appointed by teachers who have full-time classes and therefore cannot devote sufficient time for the above-mentioned surveys. To address this issue, it is necessary for each school to employ a full-time ILC and PFP specialized in their activities.

Lessons Learned for JICA:

- Based on the handbook, developed in the project, DepEd issued the "Guidelines for Building Partnerships for the K to 12 Basic Education Program" through "DepEd Order No. 40" in August 2015. These Guidelines direct the SHSs to analyze the school situation qualitatively and quantitatively and plan through causal analysis of issues based on the voices of students and stakeholders. It includes the definitions of related words, coverage of partnership, method of monitoring, related laws and regulations, assessment tool by partner and sample of Memorandum of Agreement (MOA). The Guidelines supported for the clearer goal setting and monitoring method and to draw SIP which was useful to fit the actual situation. These guidelines and subsequent ministerial ordinances by DepEd facilitated the adoption and dissemination of the good practices in building school- industry partnership to other TVHSs nationwide. In this regard it is effective to develop a handbook for school-industry partnership based on the good practices generated from the piloting and modelling activities in target schools.

<sup>4</sup> A Learning Action Cell (LAC) is a group of teachers who engage in collaborative learning sessions to solve shared challenges encountered in the school facilitated by the school head or a designated LAC Leader.



Students from San Pedro Relocation Center National High School utilizing JICA donated Desktop Computer to enhance their ICT skills.



A female student from Subangdaku Technical Vocational High School showcasing her Shielded Metal Arc Welding (SMAW) skills during the school-based job immersion.