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Ex-Post Evaluation Report on the Two Primary and Secondary Education Projects in Palestine

한국국제협력단

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2012.12





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The Korea International Cooperation Agency (KOICA) performs various types of evaluation in order to secure accountability and achieve better development results by learning.

KOICA conducts evaluations within different phases of projects and programs, such as ex-ante evaluations, interim evaluations, end-of-project evaluations and ex-post evaluations. Moreover, sector evaluations, country program evaluations, thematic evaluations, and modality evaluations are also performed.

In order to ensure the independence of evaluation contents and results, a large amount of evaluation work is carried out by external evaluators. Also, the Evaluation Office directly reports evaluation results to the President of KOICA

KOICA has a feedback system under which planning and project operation departments take evaluation findings into account in programming and implementation. Evaluation reports are widely disseminated to staff and management within KOICA, as well as to stakeholders both in Korea and partner countries. All evaluation reports published by KOICA are posted on the KOICA website.

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This evaluation study was entrusted to GDC Consulting by KOICA for the purpose of independent evaluation research. The views expressed in this report do not necessarily reflect KOICA's position.

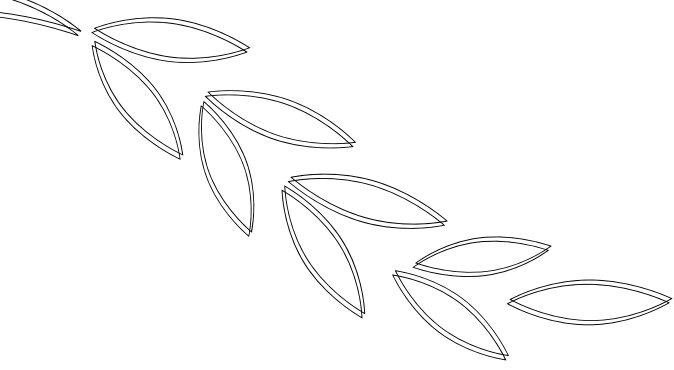




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## **Executive Summary**





## Executive Summary

The project was the ex-post evaluation of two projects: the Palestine Education System Improvement Projects with a budget of USD 2.3 million from 2004 to 2006 and the Establishment of Jenin Industrial Secondary School with a budget of USD 2.5 million from 2007 to 2009.

As a part of the human resources development initiatives that the Palestinian government had put high priorities on, the Jenin Industrial Secondary School establishment project aimed to build facilities for technical education, improve training environments, and increase educational opportunities in order to develop technical manpower that would meet the demands of markets and contribute to the industrial development of Palestine.

The Palestine Education System Improvement Project is aimed at building basic school infrastructure in order to increase educational opportunities and improve the educational environments of students, who comprise over one-third of the total population of Palestine. Specifically, it aimed to improve the quality of education for female students by: building a girls' primary school in Burqin near Jenin City, increasing IT training opportunities by donating computers to 73 schools, and improving health and development and motivate educational desire by providing nutritional supplements to over 330,000 students in Palestine.

The purpose of the evaluation was to determine whether the evaluated project achieved intended objectives in terms of the Development Assistance Committee's (DAC) evaluation criteria. The DAC's five criteria for ex-post evaluation include:

relevance, efficiency, effectiveness, impact, and sustainability. The evaluation matrix and corresponding data collection instruments were developed accordingly. The evaluation began with a preliminary study of the project, followed by an evaluation of the design and plan, data collection, data analysis, and reporting. Given the constraints of time and budgets, this evaluation project mainly employed three types of data collection methods in order to ensure the objectivity of the evaluation results: focus group interviews, in-depth interviews, and surveys with various stakeholders in Palestine.

Overall, both the Jenin Industrial Secondary High School construction project and the education system improvement project were carried out appropriately in terms of goal-setting, planning, implementation process, and effectiveness of the project.

Beneficiary groups were satisfied with the overall project results. In particular, they expressed satisfaction with the new schools and provision of computers, and nutritional supplements.

It was found to be necessary to develop manuals in English for effective utilization and maintenance of technical training equipment in Jenin High School. Education system improvement projects would also benefit if additional measures to ensure sustainability and maximize the effectiveness had been in place, such as providing educational contents via the internet. More importantly, long-term strategies should be developed for creating a more integrated system of technical training institutions and industries.

In order to ensure the effectiveness and efficiency of future projects, it is desirable to take a more systematic approach, which may include a thorough needs assessment, analysis of project context, opportunities and risks assessment, an ex-ante evaluation, and other strategic and systematic design and project

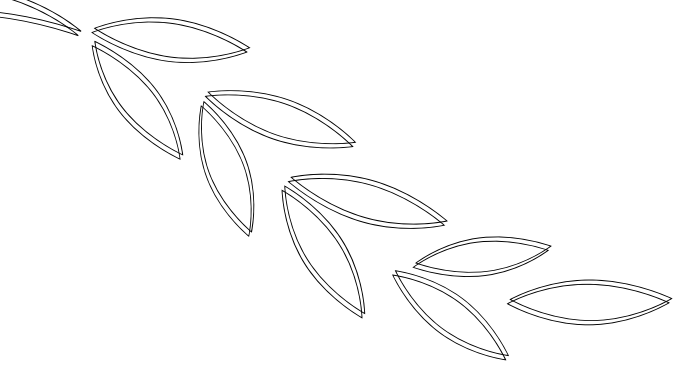
management methods. For example, Jenin High School can offer support for employment (both local and overseas), support for transition, career counseling, and collaborative technical training programs with local industries.

As to the education system improvement project in particular, it would be desirable to seek collaboration with the UNDP and other NGO's in order to maximize effects of ODA projects by utilizing each participating organization's strengths.

Finally, it would be worth pursuing both ODA goals and business opportunities which may help to promote the local economy at the same time. For instance, ICT-based education projects can be coupled with establishing related local businesses such as an electronics retailer and a software company who can provide repair services and further develop software for their own needs. Such an approach may help not only train young people but also expand the local economy and plant seeds for sustainable growth in the future. A very good example was the nutritional supplement provision, which was confirmed to have succeeded in Palestine. At first, a food company was founded to manufacture the needed nutritional supplements. After it completed its initial mission, however, it continued to develop and sell new products.







# **Introduction and Evaluation Methods**





# I

## Introduction and Evaluation Methods



### 1. Introduction

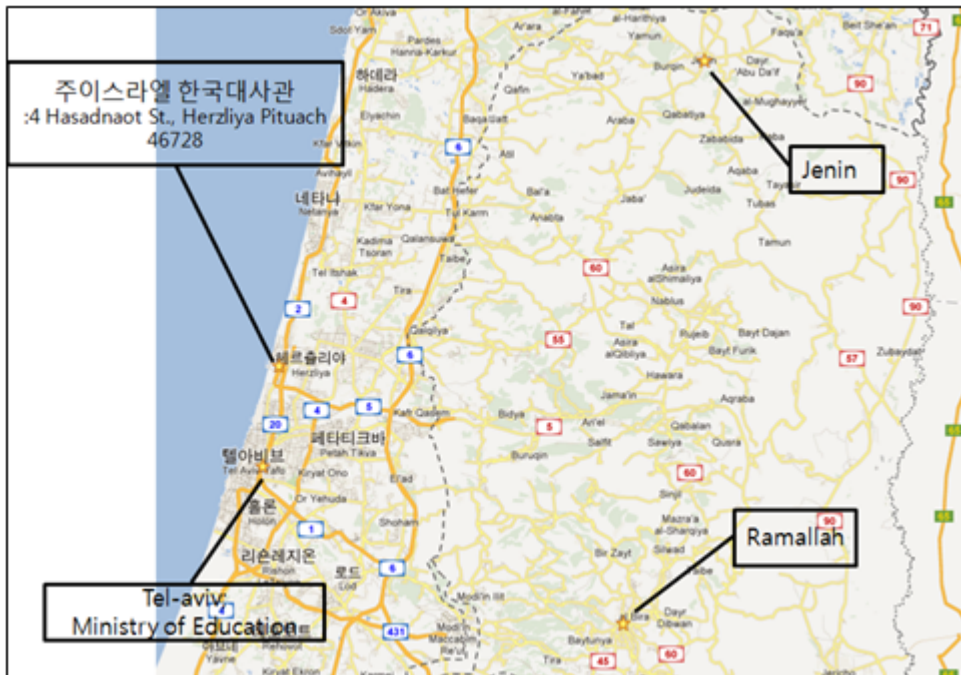
The roles that education plays in official development assistance (ODA) is growing important. In 2011, the Korea International Cooperation Agency (KOICA) allocated 24.5% of its development budget to education, as there is a growing attention being paid to the importance of primary and secondary education.

Education was selected as one of the five development priorities of KOICA under its 10-year advancement plan. However, a mere 20% of the education budget of KOICA was spent on primary and secondary education over a 10-year period from 1991. Furthermore, the target of ex-post evaluations was limited to vocational training. Therefore, a systematic ex-post evaluation on primary and secondary education based on the five criteria of the OECD Development Assistance Committee (DAC) was highly requested.

As a part of the human resources development initiatives that the Palestinian government had put high priorities on, the Jenin Industrial Secondary School establishment project aimed to build facilities for technical education, improve training environments, and increase educational opportunities in order to develop technical manpower that would meet the demands of markets and contribute to the industrial development of the Palestine Occupied Territories (hereinafter referred to as Palestine).

The Palestine Education System Improvement Project is aimed at building basic school infrastructure in order to increase educational opportunities and to improve the educational environment for the students, who comprise over one-third of the total population of Palestine. Specifically, it aimed at improving the quality of education of female students by: building a girls' primary school in Burqin near Jenin City, increasing IT training opportunities by donating computers to 73 schools, and improving health and development and motivate educational desire by providing nutritional supplements to over 330,000 students in Palestine.

<Figure 1-1> Project Sites



The basic information of each project is described in the following tables.

<Table 1-1> Evaluation Projects

Project title	The Establishment of the Jenin Industrial Secondary School
Duration	2007-2009
Goal	Improve access to secondary education and the educational environment
Project outputs	<ul style="list-style-type: none"> <li>• Building a secondary school building</li> <li>• Furnishing schools and classrooms</li> <li>• Providing school supplies and equipments</li> <li>• Expert consulting and training in Palestine (four experts for two months)</li> <li>• Training in Korea (teachers and administrative staff)</li> </ul>
Budget	USD 2.5 million
Region	Jenin, Palestine
Beneficiaries	Students, parents, teachers, and local residents

Project title	Palestine Education System Improvement Project
Duration	2004-2006
Goal	Improve access to primary education and the educational environment
Project outputs	<ul style="list-style-type: none"> <li>• Building a Burqin primary school building (USD 800,000)</li> <li>• Provision of computers to 73 schools (USD 700,000)</li> <li>• Provision of nutritional supplement to 330,000 children (USD 550,000)</li> <li>• Technical consulting (USD 160,000)</li> <li>• Miscellaneous (USD 86,000)</li> </ul>
Budget	USD 2.3 million
Region	West Bank and Gaza in Palestine
Beneficiaries	Students, teachers



## ■ 2. Limitations of the Evaluation Project

(Limits in evaluation timing) In the case of Jenin Industrial Secondary School, the project was just recently completed, with the school now beginning to have graduates. As such, it was difficult to find enough data to evaluate the relevance of the trained students.

(Limits in evaluation timing) In the case of the nutritional supplement provision project, the project was completed long time ago, and there was no way to trace the students who received the supplements. As such, it was difficult to prove the effectiveness and impact of the project.

(Limits caused by special conditions of Palestine) Due to the restriction policy, it was almost impossible to get in and out of Palestine without the assistance of the local office. Since all inspection targets and dates/time were fixed, it was impossible to conduct independent field research when necessary. In fact, access to certain points was not allowed by Israel, and thus the interview schedule were sometimes delayed by over three hours.

(Absence of baseline data) Since there was no baseline data for the enrollment rate, employment rate, and local economy, it was difficult to measure the impact and effectiveness of the project.

(Limits in budget and duration of evaluation) A limited budget and amount of time were allocated for evaluating both the Jenin Industrial Secondary School project and Education System Improvement project, which consisted of three sub-projects. As a result, the on-site visits, interviews, and surveys were tightly scheduled. In the case of the nutritional supplement provision project and the computer provision project, the evaluation target was as large as 330,000 students in 73 schools. As such, there was a limit in effectiveness of the on-site inspections and surveys.



## **Evaluation Frame and Matrix**







## II

# Evaluation Frame and Matrix



### 1. Rationale for the Evaluation Design

Most schools in Palestine operate under unstable conditions caused by the separation wall and restricted access to lands and livelihoods. In addition, the educational facilities are generally in poor condition due to overcrowded classrooms and an unhygienic atmosphere.

Over two-thirds of the poor population are classified "extremely poor", and the vicious cycle of poverty continues. Fundamental causes include a lack of basic service facilities, low achievement in education, and an inactive labor market.

Given that the population aged 15 or under makes up over 50% of the total population, providing education to students in this age group is a requirement for the sustainable development and social growth of Palestine.

KOICA's support for Palestine, a major partner country of KOICA in the Middle East, has concentrated on education and health. Palestine is a particularly important country due to its political significance for KOICA's relations with Arabic countries.

Such conditions and considerations were reflected in developing the evaluation frame and matrix for this project.



## ■ 2. Evaluation Frame and Performance Model

The Palestine project was driven by the recipient country that submitted a Request for Project Aid (RFP) to KOICA on the 13th of June in 2004. The RFP specified expected performance indicators and action plans.

The following are the five goals indicated in the RFP.

- Goal 1: Provide access to education for all
- Goal 2: Improve the quality of education
- Goal 3: Develop formal and non-formal education
- Goal 4: Develop management capacity for planning, administration and finance
- Goal 5: Develop human resources for the educational system

A preliminary survey and feasibility study were conducted based on the requests of the recipient country in the beginning stage of the project. As a result, the Jenin Industrial Secondary School project was expected to meet goals 1, 2, 4, and 5, whereas the Burqin Girls' Primary School project was consistent with goals 1 and 2 and the computers and nutritional supplements provision project fell within goal 2.

Each goal was suggested along with a detailed action plan, and detailed goals were included in the RFP and report of the preliminary survey. Detailed goals are described in the following paragraphs for the respective projects of the Jenin Industrial Secondary School Establishment and the Education System Improvement.

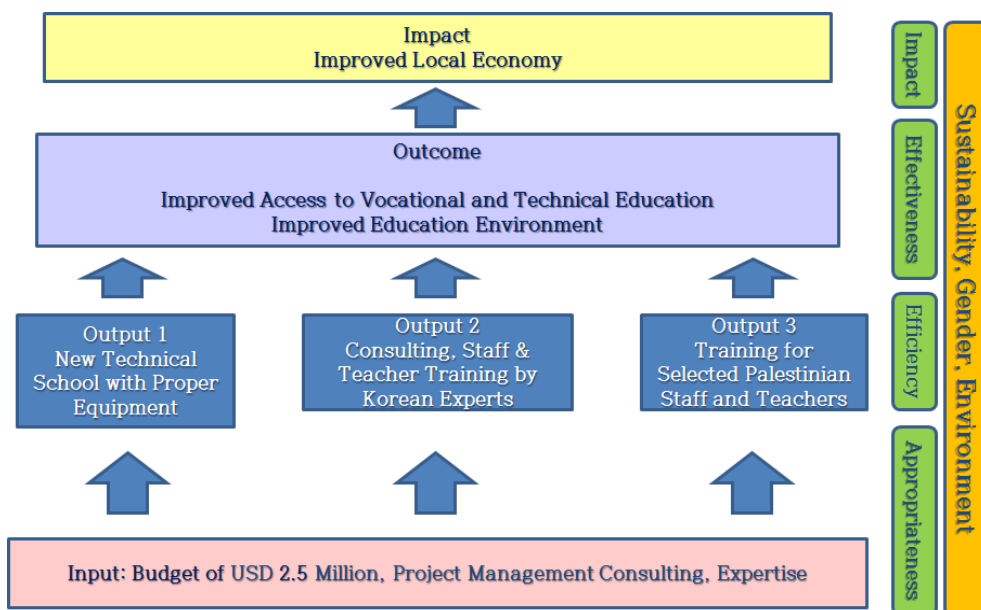
### 1) Performance Model of Jenin Industrial Secondary School Establishment Project

Goal 1 specified the building of additional school as a detailed action plan. Considering the features of industrial secondary schools, goal 2 was also pursued in order to improve the quality of technical training facilities and equipment, as well as goal 5 to develop technical human resources.

In addition, goal 4 was described as developing capacity for teaching and vocational training by inviting teachers to training courses in Korea and dispatching KOICA experts to Palestine.

Therefore, such goals were considered project outcomes, and both the resources used for the project and the results are summarized in the following performance model.

Effectiveness refers to direct or indirect long-term impacts of the project. For instance, increase in employment and income rates or the activation of the local economy are some of the impacts driven by the increase in educational opportunities.



## 2) Performance Model of the Education System Improvement Project

The education system improvement project is divided into the construction of Burqin Girls' Primary School, and the provision of computers and nutritional supplements.

The construction of Burqin Girls' Primary School is considered a representative project that falls squarely into goal 1. It aims to not only address the challenges of overcrowded classrooms and improve access to education, but also promote gender equality in education as girls are often discriminated against in overcrowded classrooms. Since education in primary school leads girls into higher education, employment, or business incubation, the project is expected to promote gender equality in different areas of Palestinian society.

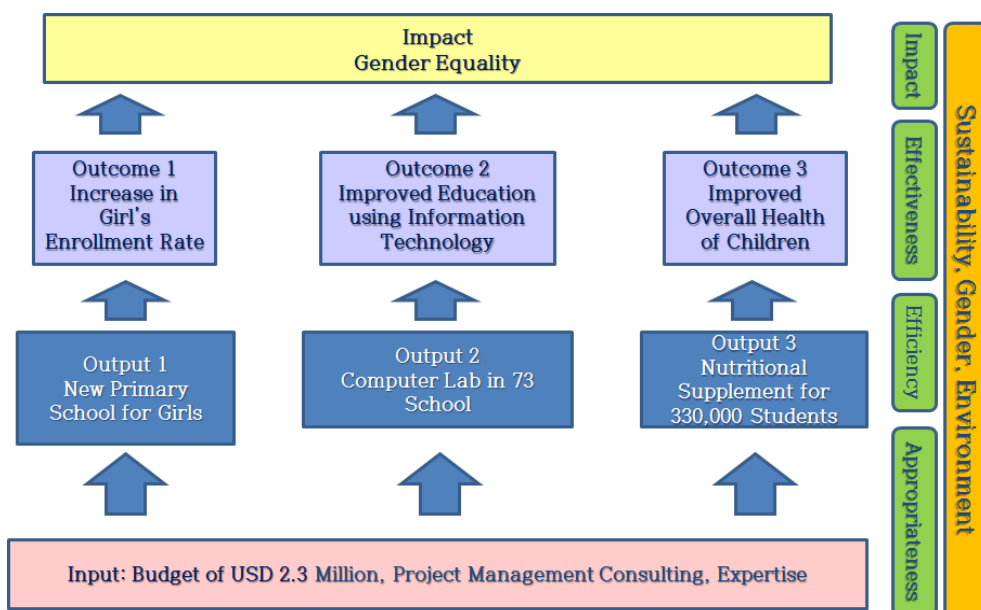
Therefore, the promotion of gender equality is one of the key impacts of the construction of Burqin Girls' Primary School.

Goal 2 includes two key tasks: the provision of educational materials and equipment as well as dietary supplements. The provision of computers and nutritional supplements are considered as plans for detailed goals.

The Palestine project appears segmented but is planned pursuant to such detailed action plans. The performance model was developed accordingly based on the input, outcome, and effect.

In the case of Burqin Girls' Primary School, access to education in terms of gross enrollment rate as well as gender equality in education in terms of enrollment rate of female students and the atmosphere of female schools are considered as key performance indicators.

In the case of provision of computers and nutritional supplements, project goals are described as project impacts in the performance model. Details of the performance model are summarized in the following figure.



### 3. Evaluation Matrix

Based on the performance model, the following evaluation matrix was developed and applied to the evaluation. The evaluation matrix consists of main questions and detailed questions for five evaluation criteria. The main and detailed questions were used for an in-depth interview and survey questionnaire in order to collect and analyze a wide range of data pertaining to the same evaluation indicator.

Under each category of the five evaluation criteria, the following were considered during the development of main and detailed questions.

For relevance, major considerations included the relevance of project goals to local conditions and the relevance of project duration, budget, and target.

For efficiency, the efficiencies of constructing a girls' primary school and the distribution of computers and nutritional supplements were considered.

For effectiveness, results of the construction and provision of equipment were considered for the industrial secondary school project, whereas results of the construction, provision of computers, and nutritional supplements were considered as an education system improvement project.

For impact, spillover effects of the project were considered.

For sustainability, the budget and manpower for operating and maintaining the schools were considered.

## 1) Evaluation Matrix for Jenin Industrial Secondary School Project

<Table 2-1> Evaluation Matrix for Jenin Industrial Secondary School Project

Standard	Main question	Detailed question
Relevance	■ Are the project objectives well-established?	▶ Are the objectives established on the basis of local demand research and needs analysis?
		▶ Are the objectives prioritized according to the local conditions?
	■ Are the project plans organized in a way that helps to achieve the purpose of the project?	▶ Is there a close connection between the project objectives and project plans?
		▶ Is the project duration (2 years) appropriate?
		▶ Is the budget for the project (USD 2.50 million) appropriate?
	■ Is the target area appropriate for the project?	▶ Are the criteria for selecting the target areas (three regions) reasonable?
		▶ Is the decision-making process of selecting the target areas reasonable?
	■ Are the beneficiaries well-chosen?	▶ Are the criteria for selecting the beneficiaries (ten schools) reasonable?
		▶ Is the decision-making process of selecting the beneficiaries (ten schools) reasonable?

<Table 2-1> continued

Standard	Main question	Detailed question
Efficiency	<ul style="list-style-type: none"> <li>■ Is the project output efficient when the total input is considered?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Is the project output efficient when the total input is considered?</li> <li>▶ Were any measures used to raise the efficiency of the resources?</li> </ul>
	<ul style="list-style-type: none"> <li>■ What is the structural reason for the increase/decrease in efficiency?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Were any conventional/structural factors used to make the project more efficient?</li> <li>▶ Were any conventional/structural factors used to make the project less efficient?</li> </ul>
Effectiveness	<ul style="list-style-type: none"> <li>■ <b>【Industrial school】</b> Has the Industrial Secondary School been established well?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Is the school well-established internally and externally?</li> <li>▶ Do the equipment and facilities for training in the school work and run normally?</li> <li>▶ Is the state of supported educational supplies sufficient?</li> <li>▶ Is the state of safety in the school sufficient?</li> <li>▶ Is the state of hygiene in the school sufficient?</li> <li>▶ Is the water service and sewerage of the school sufficient?</li> <li>▶ Is the electricity supply of the school sufficient?</li> <li>▶ Is the lavatory of the school convenient enough for use?</li> <li>▶ Are the lighting facilities of the school established well?</li> </ul>
	<ul style="list-style-type: none"> <li>■ <b>【Dispatch of experts】</b> Have the domestic experts been properly dispatched?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Do you feel that the experts were dispatched on the basis of appropriate criteria?</li> <li>▶ Does the know-how and technology transferred by the experts continue to be utilized?</li> </ul>
	<ul style="list-style-type: none"> <li>■ <b>【Korea invitation Education】</b> Has the Korea Invitation Education Program performed well?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Are the participants of the Korea Invitation Education Program chosen on the basis of appropriate criteria?</li> <li>▶ Is the knowledge acquired through the Korea Invitation Education Program applied effectively to the operation of the industrial secondary school?</li> </ul>
	<ul style="list-style-type: none"> <li>■ <b>【Improvement in the educational environment of technology】</b> How has the state of entrance into the industrial secondary school been affected?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Has competition for entrance into the industrial secondary school increased?</li> <li>▶ Has the drop-out ratio for the industrial secondary school decreased?</li> <li>▶ Has entrance into higher schools (colleges or job training institutes) by students of the industrial secondary school increased?</li> </ul>

<Table 2-1> continued

Standard	Main question	Detailed question
	<ul style="list-style-type: none"> <li>■ <b>【Preparation of technological education system】</b> Has the dispatch of experts and the Korea Invitation Education Program been effective?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Has the rate of acquiring a certificate by students of the industrial secondary school and its graduates increased?</li> <li>▶ Is acquiring a certificate effective for entering into a higher school or getting a job?</li> <li>▶ Has the employment rate of graduates increased after the establishment of the industrial secondary school?</li> <li>▶ Has the income level of employed graduates increased after the establishment of the industrial secondary school?</li> </ul>
	<ul style="list-style-type: none"> <li>■ Are the beneficiaries satisfied with the project outcome?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Are the beneficiaries satisfied with the facilities and service provided through the establishment of the industrial secondary school?</li> <li>▶ Are the beneficiaries satisfied with the experience and knowledge transferred by the dispatched experts?</li> <li>▶ Are the beneficiaries satisfied with the Korea Invitation Education Program?</li> </ul>
Impact	<ul style="list-style-type: none"> <li>■ <b>【Ripple effect】</b> Are there any ripple effects, aside from the project objectives?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Have any conventional changes been obtained, aside from the original objectives?</li> <li>▶ Have any ripple effects been obtained, aside from the original objectives?</li> </ul>
Sustainability	<ul style="list-style-type: none"> <li>■ How viable is the local condition for the continuous implementation of the project?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Is the monetary condition sufficient to operate and maintain the primary schools?</li> <li>▶ Is the labor supply and demand condition sufficient for the continuous operation of the primary schools?</li> </ul>
	<ul style="list-style-type: none"> <li>■ What kind of measures have been taken to ensure the sustainability of the project?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Is there any additional budget allotted for maintaining and managing the project?</li> <li>▶ Has a labor supply and demand plan been established for the maintenance and management of the project?</li> <li>▶ Is there a close connection with the recipient country about the budget and labor?</li> <li>▶ Have available alternatives to make the project sustainable been thoroughly examined?</li> </ul>



## 2) Evaluation Matrix for the Education System Improvement Project

<Table 2-2> Evaluation Matrix for the Education System Improvement Project

Standard	Main question	Detail question
Relevance	■ Are the project objectives well-established?	<ul style="list-style-type: none"> <li>▶ Are objectives established on the basis of local demand research and needs analysis?</li> <li>▶ Are objectives prioritized according to local conditions?</li> </ul>
	■ Are the project plans organized in a way that helps to achieve the purpose of the project?	<ul style="list-style-type: none"> <li>▶ Is there a close connection between the project objectives and project plans?</li> <li>▶ Is the project duration (2 years) appropriate?</li> <li>▶ Is the budget for the project (USD 2.50 million) appropriate?</li> </ul>
	■ Is the target area appropriate for the project?	<ul style="list-style-type: none"> <li>▶ Are criteria for selecting the target areas (three regions) reasonable?</li> <li>▶ Is the decision-making process of selecting the target areas reasonable?</li> </ul>
	■ Are the beneficiaries well-chosen?	<ul style="list-style-type: none"> <li>▶ Are the criteria for selecting the beneficiaries (10 schools) reasonable?</li> <li>▶ Is the decision-making process of selecting the beneficiaries (10 schools) reasonable?</li> </ul>
Efficiency	■ Is the project output efficient when the total input is considered?	<ul style="list-style-type: none"> <li>▶ Is the project output efficient when the total input is considered?</li> <li>▶ Were any measures used to raise the efficiency of the resources?</li> </ul>
	■ What is the structural reason of the increase/decrease of efficiency?	<ul style="list-style-type: none"> <li>▶ Were any conventional/structural factors used to make the project more efficient?</li> <li>▶ Were any conventional/structural factors used to make the project less efficient?</li> </ul>
Effectiveness	■ 【Primary school for girls】 Is the primary school for girls established well?	▶ Is the school well-established internally and externally?
		▶ Is the state of supported educational supplies sufficient?
		▶ Is the state of safety of the school sufficient?
		▶ Is the state of hygiene in the school sufficient?
		▶ Is the water service and sewerage of the school sufficient?
		▶ Is the electricity supply of the school sufficient?
		▶ Is the lavatory of the school convenient enough to be used?
		▶ Are the lighting facilities of the school established well?
▶ What is the state of the supplied desks and chairs?		

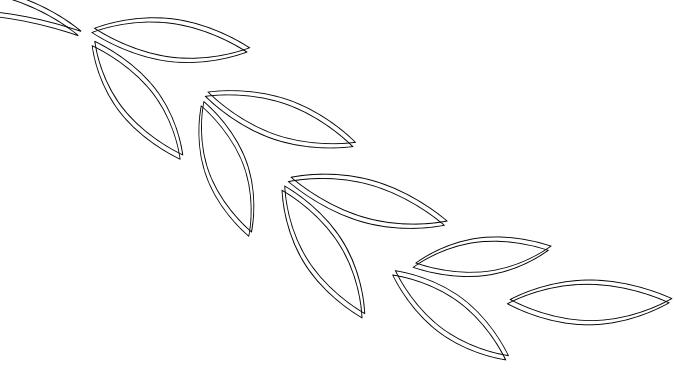
<Table 2-2> continued

Standard	Main question	Detail question
	<ul style="list-style-type: none"> <li>■ <b>【Computer education rooms】</b> Are computer education rooms installed well at 40 schools?</li> </ul>	▶ Is the computer education room wide enough?
		▶ Are enough computers supplied for education?
		▶ Is the performance of computers good enough for education?
		▶ Is enough electricity supplied to the computer education room?
		▶ Is the internet installed well in the computer education room?
		▶ Is the computer education room sufficiently secured?
		▶ Are enough software applications provided for computer education?
		▶ Do the computers supplied work normally?
	<ul style="list-style-type: none"> <li>■ <b>【Nutritional medicines】</b> Are enough nutritional medicines offered to 330,000 people?</li> </ul>	▶ Has the health of children been improved after the supply of nutritional medicines?
		▶ Have enough nutritional medicines been supplied?
		▶ Is the supply period of nutritional medicines appropriate?
	<ul style="list-style-type: none"> <li>■ <b>【Gender equality】</b> Has the percentage of school attendance by girls in the relevant region increased?</li> </ul>	▶ Does the percentage of school attendance by girls increase after the establishment of the primary school?
		▶ Has the number of students per classroom decreased after establishment of the school?
	<ul style="list-style-type: none"> <li>■ <b>【Improvement in IT educational environment】</b> Has the educational environment utilizing IT improved in the relevant region?</li> </ul>	▶ Has the rate of IT utilization by students increased after installation of a computer room?
		▶ Has the rate of IT utilization by local residents increased after installation of a computer room?
	<ul style="list-style-type: none"> <li>■ <b>【Improvement in the health of the youth】</b> Has the health of the youth been improved?</li> </ul>	▶ Has the prevalence of youth illnesses decreased after the supply of nutritional medicines?
		▶ Has the rate of attendance by youth increased after the supply of nutritional medicines?
	<ul style="list-style-type: none"> <li>■ Are the beneficiaries satisfied with the project outcome?</li> </ul>	▶ Are the beneficiaries satisfied with the establishment of the primary school?
		▶ Are the beneficiaries satisfied with the installation of computer rooms?
		▶ Are the beneficiaries satisfied with the supply of nutritional medicines?

<Table 2-2> continued

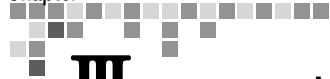
Standard	Main question	Detail question
Impact	<ul style="list-style-type: none"> <li>■ <b>【Ripple effect】</b> Are there any ripple effects aside from the project objectives?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Have any conventional changes been obtained, aside from the original objectives?</li> </ul>
		<ul style="list-style-type: none"> <li>▶ Have any ripple effects been obtained, aside from the original objectives?</li> </ul>
Sustainability	<ul style="list-style-type: none"> <li>■ How viable is the local condition for ensuring the continuous implementation of the project?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Is the monetary condition sufficient for operating and maintaining the primary schools?</li> </ul>
		<ul style="list-style-type: none"> <li>▶ Is the labor supply and demand condition okay for the continuous operation of the primary schools?</li> </ul>
	<ul style="list-style-type: none"> <li>■ What kind of measures have been taken to ensure the sustainability of the project?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Has any additional budget been allotted for maintaining and managing the project?</li> </ul>
		<ul style="list-style-type: none"> <li>▶ Has a labor supply and demand plan been established for the maintenance and management of the project?</li> </ul>
		<ul style="list-style-type: none"> <li>▶ Is there a close connection with the recipient country about the budget and labor?</li> </ul>
		<ul style="list-style-type: none"> <li>▶ Have available alternatives to make the project more sustainable been thoroughly examined?</li> </ul>





## Evaluation Results





# III

## Evaluation Results



### 1. Results on Field Research

#### 1) Site visit

Dates: 15–21 September 2012

Date	Location	Program	
15 Sep.	Incheon	Departure for Tel Aviv at 15:10 on KE 957 Arrival at Tel Aviv at 21:00	
16 Sep.	Tel Aviv	Meeting with KOICA representatives in Palestine Preparation for on-site inspections	
17 Sep.	Ramallah City, Palestine	A.M.	Kick-off meeting with MOEHE and Higher Education of Palestine
		P.M.	Visit to schools equipped with computers in Ramallah City, site inspections, and in-depth interviews
18 Sep.	Jenin City, Palestine	A.M.	Visit to Jenin Industrial Secondary School, site inspections, in-depth interviews, focus group debate, and in-depth interview with local constructor
		P.M.	Visit to Burqin Girls' Primary School, site inspections, and in-depth interview
19 Sep.	Jerusalem	Meetings with representatives of UNDP and PAPP	
20 Sep.	Tel Aviv	Summarization of field research Meeting with the Representative Office of Korea in Palestine Departure to Incheon at 23:00 on KE 958	
21 Sep.	Incheon	Arrival at Incheon	

## 2) In-Depth Interviews

### (1) KOICA

- Dates: 30 July and 2 August, 2012
- Location: KOICA Headquarters
- Interviewees
  - Mr. Taehyun Kim, Dr. Jinho Lim, Mr. Youngsun Jung, and Mr. Jaehong Choi

#### Key Notes of Interview

- The industrial secondary school establishment project was conducted during 2008-2010, and the recipient country is satisfied with the project since it was the first project implemented after the support of USD 20 million was promised and thus additional efforts were made.
- The education levels of most Palestine government employees are high, and many have overseas job experiences.
- The computer rooms and Burqin Girls' Primary School project received good feedback upon completion. The school has also been well maintained since completion of the project, even renting the rooms for external examinations. It is expected to be properly maintained in the future.
- In industrial secondary schools, students usually work after graduation. Hyundai Motor Company is considering recruiting these graduates for employment in their sales and A/S departments.
- Small car centers are concentrated in Jenin, and the quality of the equipment used in the centers is not as good as that in the school.
- It was highly problematic to convey the equipment via Israel.
- Most of the talented students were educated abroad before being employed in local companies.
- ICT influences innovation in education. A new approach should be taken to use ICT not only to improve student achievements but also to improve the education system. ICT can bring about innovation in the culture, leadership, and systems in schools.
- Since teachers cannot provide personalized education programs to every student, educational software should be developed. This software would be used to evaluate the educational level of students and help them study by themselves.
- IT education was previously understood to be the building of a computer laboratory. The concept of "Computer Education as Subject Matter," was then applied, and building computer rooms in schools with no computers was regarded as "system improvement."
- It is important to assess whether students had opportunities to use the computers for school activities. It is also important to provide more opportunities for students to use computers to develop practical skills needed for work in the field.
- The aim of computer education for students is to help them produce their own knowledge in the knowledge-based society. This education should focus on enabling students to make improvements in productivity.
- The provision of nutritional supplements influences the rate of graduation of students.
- Sustainability is the most important criteria of ex-post evaluations. If the education system appears unsustainable, the reasons should be carefully identified.
- The education for children is of particular importance in Palestine since young people make up a relatively high proportion of the total population.



## (2) MOEHE of Palestine

- Dates/Time: 17 September 2012
- Location: MOEHE of Palestine
- Participants
  - Jehad A.A Draidi, Director of MOE
  - Director of Palestine Ministry of Planning and administrative development
  - Sangbaek Lee, Director of KOICA Palestine Office



### Key Notes of Interview

- The schedule and purposes of the ex-post evaluation were explained and the cooperation for on-site inspections was requested.
- KOICA development projects usually better reflect the local needs and demands than those of other countries. The MOE has been satisfied with two prior KOICA projects and has extended their sincere gratitude regarding the aid provided by KOICA.
- The Industrial Secondary School plays a very important role in the technical education and vocational training in the city of Jenin.
- The Industrial Secondary School is very successful in operation. In 2010, the school students topped the graduation examination, and the school was ranked the highest among the industrial secondary schools of Palestine in 2011.
- There were customs issues in conveying equipment to Jenin Industrial Secondary School, and the MOE thought it would have been more efficient if the equipment had been purchased locally.
- For certain topics, there are Palestine experts in other vocational training schools. Therefore, it would have been more effective if KOICA had considered the weakness of local expertise during the course of developing the training program in Korea and dispatching KOICA experts.

### (3) Jenin Industrial Secondary School

- Dates/Time: 18 September 2012
- Location: Jenin Industrial Secondary School
- Participants
  - Watheq Hithnawi, Principal of Jenin Industrial Secondary School
  - Mohammad H. Raji, General Manager of AL-AQSA & AL-SHAMAL Eng Co. (Constructor)
  - Mayor of Jenin City (wasn't involved in interviews)
  - Younju Kim, KOICA Palestine



#### Key Notes of Interview

- The school is pleased and grateful for the aid of KOICA in establishing an excellent industrial secondary school. The project was very special as it established an extremely successful industrial school.
- All facilities and educational equipment were successfully installed and are in successful operation. In particular, the training tools and raw materials were sufficiently provided.
- It was difficult to operate or maintain the equipment, however, since the school did not have program CDs or English versions of the manuals for over 40% of the equipment.
- 70-80% of Jenin School graduates went on to higher education, and thus the employment rate of graduates (rate of the graduate going to jobs directly) was very low.
- 92% of graduates passed the graduation examination, making the Jenin School the top industrial secondary school in Palestine.
- The applicants to Jenin School are increasing annually. Among over 200 applicants, 119 passed the entrance examination in 2012.
- Jenin School desires to work with an industrial secondary school in Korea, in terms of establishing exchanges and cooperation.

#### (4) Target School for Provision of Computers

- Dates/Time: 17 September 2012
- Location: Al Sheikh Mohammad Girls' Secondary School
- Participants
  - Jihad A.A. Draidi, Director General of MOEHE
  - Lubna Samara, Principal of Al Sheikh Mohammad Girls' Secondary School
  - Khulud, Computer Teacher at Al Sheikh Mohammad Girls' Secondary School
  - Renad Daoud, KOICA Palestine



#### Key Notes of Interview

- KOICA donated ten computers and monitors to the school, and they are still in good condition. More recently, more computers were donated by a local society.
- The internet was connected last year, but it was not available this year due to the costs. MOEHE also cannot afford to cover the internet service cost for a number of other schools.
- A teacher teaches Windows, MS Office (for 7th-9th graders), and Visual Basic (for 10-12 graders) via 20 computer classes per week.
- 30 students attend a computer class on average, and 3-4 students share a computer due to the lack of computers.
- MOEHE in Palestine continued to supply computers to schools, but to ensure fairness additional supplies to the same school has not occurred.

#### (5) Burqin Girls' Primary School

- Dates/Time: 18 September 2012 at 14:00
- Location: Burqin Girls' Primary School
- Participants
  - Hanan Al-Abbasi, School Principal
  - Khiagreya Khalor, Math Teacher
  - Khawla Khalaf, Arabic Language Teacher
  - Naime Heeb, Science Teacher
  - Ms. Younju Kim, KOICA Palestine



#### Key Notes of Interview

- The construction of the school was successful and the school extended its thanks to KOICA. The school used other funds to repair parts of the buildings, when necessary.
- After the construction of the school, 300 girls who used to study at another nearby school enrolled at Burqin school to learn in a better educational atmosphere.
- The 25 computers, desks, and chairs donated during the course of construction are in good condition. Though connection to the internet is possible, the budget for internet service fee has not been secured.
- Expenses for operation and maintenance are covered by tuition and government grants.
- The school desires additional aid from KOICA for computers, playground equipment, and gardens.

#### (6) UNDP/PAPP

- Dates/Time: 19 September 2012
- Location: UNDP/PAPP office
- Participants
  - Sufian Mushasha, Senior Advisor of Head of Research and Advisory Team
  - Amjad Al-Sharif, Programme Analyst Civic Education & e-Governance
  - Youngju Kim, KOICA Palestine

#### Key Notes of Interview

- Sufian Mushasha explained the education system improvement projects of KOICA in which he was involved during 2004-2006.
- Upon KOICA's proposal, the project was conducted based on the demands of the Palestinian government and the experiences of the UNDP/PAPP, in close partnership with KOICA.
- All three projects were implemented effectively as planned. As the cost of raw materials went down, the cost of the projects was less than expected. The budget surplus was used to provide nutritional supplements.
- KOICA has successfully implemented a diverse range of projects in Palestine, and UNDP/PAPP is willing to cooperate with KOICA in the future for other projects.
- UNDP/PAPP is good at building project frameworks and understanding local cultures.

### 3) Survey Questionnaire

Please rate the following statements in the scale of 0 to 5.

0	1	2	3	4	5
N/A	Poor	Fair	Good	Very good	Excellent

※ J = Jenin Industrial Secondary School, B = Burqin Primary School

a. The following are the results of the student's survey

<Table 3-1> Survey Questions for Palestinian Students

Items		B	J
Is the school well-established internally and externally?	Was the school fence construction successful?	4.0	
	Was the building wall construction successful?	4.8	
	Was the construction of the interior of the building successful?	3.7	
	Was the roof construction successful?	3.6	
	Was the floor construction successful?	4.1	
	Were the doors well-constructed?	3.2	
	Were the window structures well-constructed?	3.2	
	Is the school well-established internally and externally?		4.3
How about the enrollment?	Has the competition of entrance into the industrial secondary school increased?		4.1
	Has the ratio of the drop-out of the industrial secondary school decreased?		2.4
	Has the rate of acquiring a certificate by students of the industrial secondary school increased?		4.0
	Is acquiring a certificate effective for entering into a higher school or getting a job?		3.8
Is the safety/hygiene state of the school satisfactory?	Is the safety state of the school satisfactory?	3.6	3.8
	Is the hygiene state of the school satisfactory?	2.6	3.5
Are the facilities convenient to use?	Are the beneficiaries satisfied with the facilities and service provided through the establishment of the industrial secondary school?	3.9	3.9

<Table 3-1> continued

Items		B	J
Is the infrastructure well- constructed	Is the water system working?	3.6	3.0
	Is the sewage system working?	3.7	3.0
	Is the electricity supply of the school good enough?	4.3	4.0
	Are the lighting facilities of the school established well?	4.4	4.6
	Do the schools have decent toilet facilities?	3.7	
Is it handy to use educational equipment and desks and chairs in the classrooms?	Is it handy to use desks and chairs in the classrooms?	4.1	2.6
	Is the educational equipment convenient to use?	4.2	3.9
Are they satisfied with the project?	Is the improvement in the external environment of school satisfying?	2.9	4.2
	Is the improvement in the internal environment of school satisfying?	3.7	4.1



#### Summary of Survey Results

- Students of Jenin Industrial Secondary School and Burqin Primary School are largely satisfied (3.9) with the provided facilities and services.
- For Jenin School, however, some questions were negatively answered: the increase in the number of graduates who go into higher education was high (4.1) while the decrease in drop-out rate was insignificant. The result was against the initial goal of the project, which was to develop technical manpower who met the demands of the local market.

b. The following are the results of the parents' survey

Items		B	J
Is the safety/hygienic state of the school satisfactory?	Is the safety state of the school satisfactory?	3.0	4.5
	Is the hygiene state of the school satisfactory?	3.4	4.5
Are they satisfied with the project?	Is the improvement in the external environment of school satisfying?	3.0	3.9
	Is the water service and sewerage of the school satisfactory?		4.2
	Is the electricity supply of the school satisfactory?		4.6
	Is the improvement in the internal environment of school satisfying?	3.4	4.3
Is the hygienic state of the school satisfactory?	Does it help students to have better hygienic conditions?	3.4	4.5
	Does it contribute to the improved local hygiene?	2.6	4.1
Does the percentage of school attendance by girls increase?	Does the percentage of school attendance by girls increase after the establishment of the primary school?	3.9	
	Does the number of students per classroom decrease after the establishment of the school?	3.0	
Does it have any ripple effects aside from the original objectives?	Does it cause any conventional changes aside from the original objectives?		3.5
	Does it have any ripple effects aside from the original objectives?		2.0

#### Summary of Survey Results

- Parents of students a Jenin Industrial Secondary School were very satisfied with building facilities and equipments. However, they were negative (2.0) about the presence of spillover effects of the project.

c. The following are the results of teacher's survey

Items		B	J
Is the school well-established internally and externally?	Is the school well-established internally and externally?	4.0	3.9
Is the safety/hygiene state of the school good enough?	Is the safety state of the school good enough?	2.6	4.6
	Is the hygiene state of the school good enough?	3.7	3.9
Is the infrastructure well-constructed?	Is the water system working?	3.9	3.7
	Is the sewage system working?	3.9	3.7
	Is the electricity supply of the school good enough?	4.5	2.7
	Are the lighting facilities of the school established well?	4.3	3.9
	Is the lavatory of the school convenient enough to be used?	4.0	3.3
Are they satisfied with the project?	Are the desks and chairs of the school convenient enough to be used?	3.9	
Are they satisfied with the project?	Is the improvement in the external environment of school satisfying?		3.7
	Is the improvement in the internal environment of school satisfying?		3.8
	Are the beneficiaries satisfied with the educational tool?		4.1
Has the rate of school enrollment increased after the project?	Has the rate of school enrollment increased after the project?	4.5	3.9
	Has the number of students per one class decreased after the project?	3.6	
	Has the entrance rate for the secondary school increased after the project?	3.8	3.1
	Has the dropout rate decreased after the project?	3.3	3.0
Has the illiteracy rate decreased after the onset of the project?	Has the illiteracy rate decreased after the onset of the project?	3.8	
Is the hygienic state of the school satisfactory?	Does it help students to have better hygienic conditions?	4.2	
	Does it contribute to the improved local hygiene?	4.2	



Items		B	J
Does it have any ripple effects aside from the original objectives?	Does it cause any conventional changes aside from the original objectives?	4.1	1.9
	Does it have any ripple effects aside from the original objectives?	3.1	1.7
Is the knowledge acquired through the dispatched experts and the Korea Invitation Education Program applied effectively to the operation of the industrial secondary school?	Do you judge that experts are dispatched on the basis of appropriate criteria?		3.0
	Does the know-how and technology transferred by experts continue to be utilized?		2.5
	Are the participants of the Korea Invitation Education Program chosen on the basis of appropriate criteria?		2.7
	Is the knowledge acquired through the Korea Invitation Education Program applied effectively to the operation of the industrial secondary school?		2.7
	Are the beneficiaries satisfied with the experience and knowledge transferred by the dispatched experts?		2.5
	Are the beneficiaries satisfied with the Korea Invitation Education Program?		2.3
How about the conditions of entrance into the higher education level	Has the entrance into higher schools (colleges or job training institutes) by students of the industrial secondary school increased?		3.5
	Has the rate of acquiring a certificate by students of the industrial secondary school and its graduates increased?		3.1
	Is acquiring a certificate effective for entering into a higher school or getting a job?		3.0
	Has the employment rate of graduates increased after the establishment of the industrial secondary school?		3.6
	Has the income level of employed graduates increased after the establishment of the industrial secondary school?		3.3

#### Summary of Survey Results

- For Burqin Primary School, teachers responded positively to the increase in number of graduates who pursued into higher education (3.8) and the decrease in the local illiteracy rate (3.8).
- For Jenin Industrial Secondary School, teachers were very negative to the presence of side effects of the project that occurred in addition to the initial goals (1.8)
- In addition, respondents were not satisfied with the dispatched KOICA experts and the training program in Korea (2.6).



## ■ 2. Evaluation Results by the Five DAC Criteria

### 1) Relevance in project goal setting and target selection

#### (1) Jenin Industrial Secondary School Project

Palestinian technical and vocational education in the past did not provide a consistent training curriculum to students. In addition, the lack of association between technical and vocational schools caused challenges in managing the curriculum, teacher training programs, and administrative support. In order to resolve these issues and improve technical and vocational education, a new technical and vocational education (TVET) system was introduced by the government commission and is currently employed across Palestine.

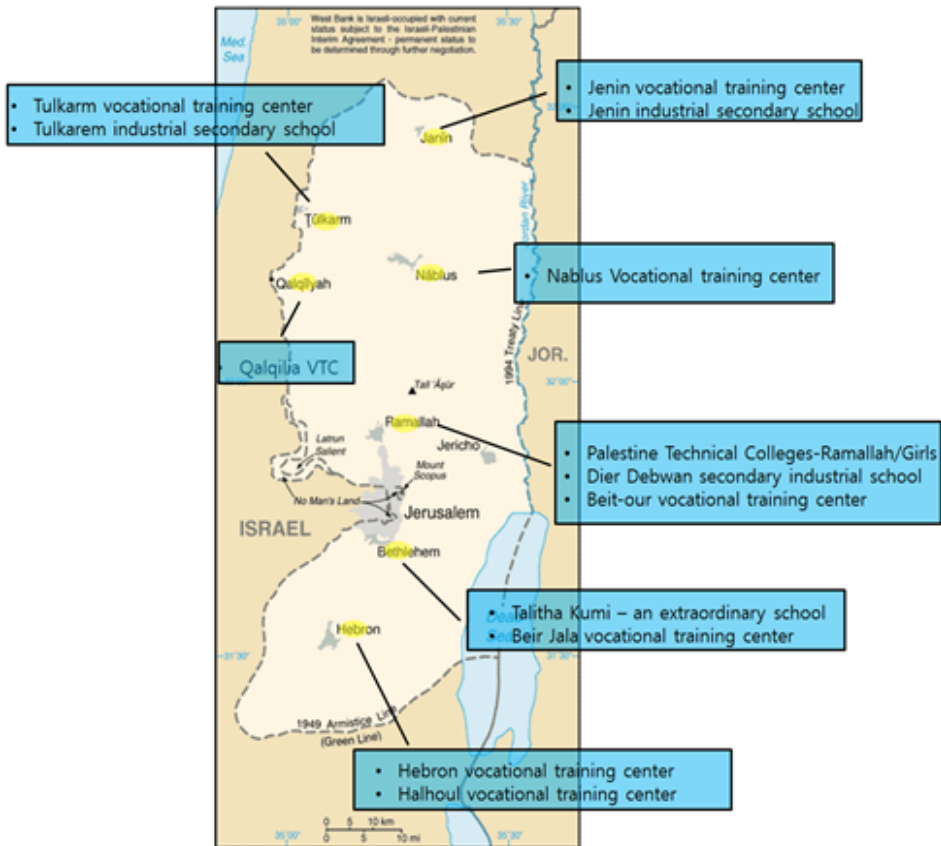
Jenin Industrial Secondary School, which was established upon the request of the Technical Education and Training Department under the MOEHE of Palestine, was a suitable project for meeting the goals of the MOEHE of Palestine and also increased the opportunities for technical education in Palestine. As the northernmost city in Palestine, Jenin City had no technical schools, so it was relevant to select Jenin as the project target.

The Jenin area is home to over 350,000 people, with over 70,000 people residing in Jenin City, the project target. Since there was no industrial secondary school in the Jenin area, students previously had to drive 50 minutes to go to schools in Nablus City.

In general, graduates of industrial secondary schools either go into higher education or find jobs. During their graduation year, students are allowed to select classes relevant to their desired career path, though schools often did not have a systematic and professional curriculum for students.

Based on the local demands, the industrial secondary schools of Palestine opened courses for automobile mechanics, electricity of motor vehicles, plumbing and central heating, and air conditioning and refrigeration.

<Figure 3-1> Distribution of TVET in West Bank, Palestinian Territory



The preliminary feasibility study expected a light industrial complex within 2 km radius to include plate work, welding, motor vehicles, and electricity. However, the complex was not built properly, and the trained students were not closely connected to the industrial field for finding jobs after graduation.

## (2) Education System Improvement Project

The focus of the education system improvement project of Palestine was to promote gender equality in education, the opportunities in ICT education, and the provision of nutritional supplements for children. The goals were developed in consideration of Palestine's priorities for education.

The project results show that 30% of the drop-outs were caused by anemia and malnutrition. Therefore, it was very relevant to provide nutritional supplements to students, especially considering the health and nutritional status of Palestinian students at the time.

In particular, Burqin Girls' Primary School was the only girls' school in the neighboring five villages, and the school needed more facilities and more space to accommodate the increasing number of new applicants. Therefore, it was relevant to select the school as a project target.

### 2) Efficiency in Outputs on Resource Investment

#### (1) Jenin Industrial Secondary School Project

USD 2.5 million was invested for three years for the project, and included the dispatch of KOICA experts and training in Korea. The project was efficiently managed in terms of outputs for resource investment, but the following points need to be considered.

Certain equipment items for the Jenin school project were restricted during customs clearance, and the entire project schedule had to change accordingly. There were communication issues between Hansol CNS and Postech, and people overlooked the fact that approval of the items should be made by the Ministry

of Defense prior to shipment. As a result, the transfer of items was restricted by Israel and the project was delayed by three months. In addition, unexpected costs were incurred for customs clearance, and the dispatched workers were not fully utilized due to delays in project implementation.

<Figure 3-2> Items with Customs Clearance Issues



More considerations and preliminary reviews should have been made pertaining to the political conditions of Palestine. Furthermore, the risk management for unexpected developments was not fully considered.

Given that Palestine has the capacity for basic technology, KOICA should have explored ways to obtain consumable tools and equipment from local markets.

Non-technical items such as large-scale office furniture were shipped from Korea. More considerations should have been taken to purchase quality office furniture from local markets and thereby reduce the costs of shipment and increase project efficiency.

## (2) Education System Improvement Project

The education system improvement project was implemented in collaboration with the UNDP.

For Burqin Girls' Primary School, the end of the project evaluation report showed that KOICA came in under budget for construction and thus was able to spend an additional USD 152,000 on new projects, including school gardening. Thus, the Burqin School project is considered a good practice in terms of project efficiency.

For the provision of computers, the end of project evaluation report shows that KOICA adopted competitive bidding and purchased computers at cheaper prices, saving USD 617,654, which was then used to purchase additional computers. The provision of computers project is also considered a good practice in terms of efficient use of budget.

For the provision of nutritional supplements, budget surpluses were allocated to buy additional nutritional supplements, increasing the total number of recipient students to 338,000 from 300,000. A wide range of measures were carefully considered for the efficient use of the budget, which resulted in the excellent performance of the project.

## 3) Effectiveness in Project Implementation

### (1) Jenin Industrial Secondary School Project

#### ■ School Building and Provision of Equipment

The school building, administrative offices, lecture rooms, and practice rooms were constructed very effectively in terms of budget, duration, and construction status. The buildings were strongly framed, and the practice rooms were spacious.

There were no issues for the effective operation of the school. Donated furniture and practice equipment were in a very good condition, and there were no problems for lectures and practices.

<Figure 3-3> Jenin Industrial Secondary School



The students' rate of satisfaction for the school buildings reached 4.3, while it was 3.9 for the facilities and services. The satisfaction rate of the parents and teachers for improved educational atmosphere stood at 4.1 and 3.9, respectively. Such results indicate that students, parents, and teachers are largely satisfied with the school construction project.

<Figure 3-4> Students in the Practice Room



After the project implementation, Jenin Industrial Secondary School was the only school that showed a steady increase in the number of students enrolled during 2009-2012 among nearby industrial secondary schools (see the following figure). Among four schools, the number of students in Nablus Industrial Secondary School increased in 2009-2011, but began to decrease in 2012, whereas the other two schools showed little change in the number of students in 2009-2012. Entrance to Jenin School was more competitive than the other schools, and thus the number of students per class increased. Specifically, the number of students enrolled in Jenin School increased from 150 in 2009 to 219 in 2012 (39%) and the upward trend in enrollment number was visible as shown in the following chart.

<Figure 3-5> Number of Students in 2009-2012

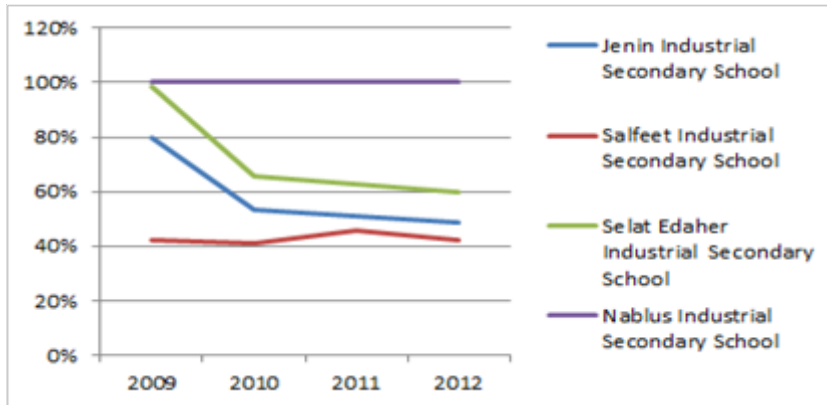


Source: MOEHE in Palestine

The number of Jenin School students with industrial certificates has decreased since 2009. The industrial certificate of Palestine is authorized by the MOEHE of the Palestinian government and is usually used for finding jobs. 80% of students had the certificate in 2009 but the rate decreased to 48% in 2012. The school principal explained that the number decreased since a majority of graduates pursued higher education instead of finding jobs.



<Figure 3-6> Students with Industrial Certificates

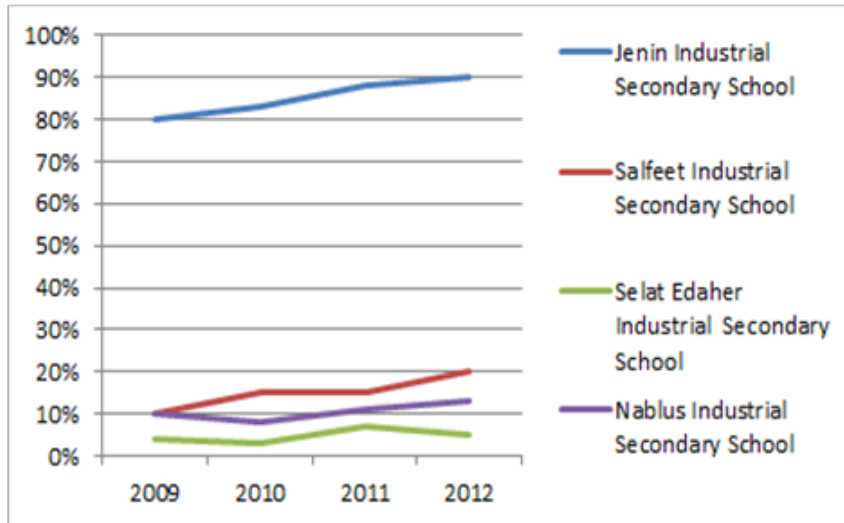


<Figure 3-7> Students in Practice Sessions for Industrial Certificate



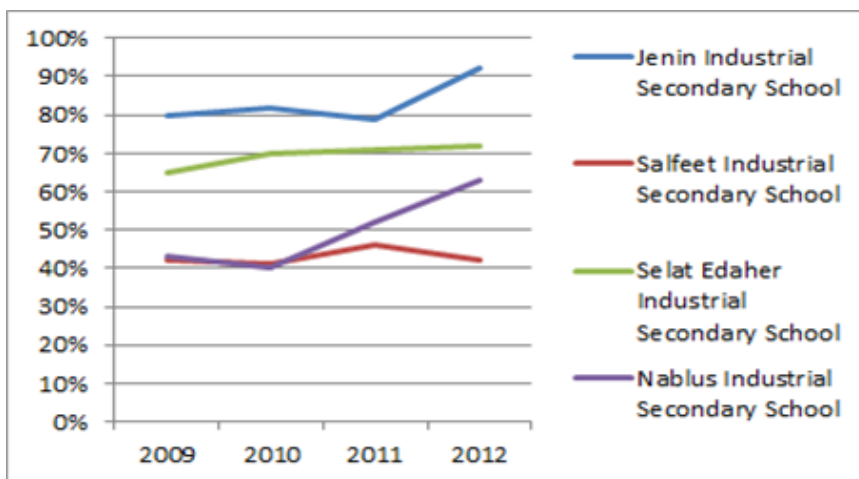
Statistics from 2009-2012 show that the number of Jenin School students who pursued higher education was far greater than the number from other schools. According to these statistics, less than 20% of students in other industrial secondary schools pursued higher education, whereas 80-90% of students from Jenin Industrial Secondary School went on to higher education. This indicates that only a small number of Jenin School graduates are employed in the local market.

<Figure 3-8> Number of Student Pursuing Higher Education



The graduation examination is provided by each school and also provides assistance towards entrance to universities. Jenin Industrial Secondary School has far more students who pass the examination than other schools. Furthermore, a graduate of Jenin school ranked first in the examination in 2010 and the Jenin school was top in 2011 in terms of number of graduates who passed the examination.

<Figure 3-9> Rate of Students Passing Graduation Examination



### ▣ Dispatch of KOICA Experts

It is mandatory to dispatch KOICA experts when considering the scale and technologies of equipment installed in practice rooms. The teachers' satisfaction (2.5) with the knowledge and know-how learned from the dispatched experts appeared low.

It is recommended that the tasks of dispatched experts be carefully developed to include tasks ranging from initial equipment installation to a local two-month user training program.

In particular, more attention should have been paid to develop or supply English versions of manuals or program CDs in order to cope with operational or maintenance issues that may rise after the experts returned home. Local users did not have program CDs or English versions of manuals for 40% of the installed equipment, and as such it was difficult to operate or maintain them.

### ▣ Invitational Training in Korea

In 2009, training in Korea was provided for two weeks for school managers and two months for technical training teachers. The teachers' survey of Jenin School shows that the satisfaction with the training (2.3) was low.

Mr. Wateq Hithnawi, Principal of Jenin Industrial Secondary School, said at the interview that it would have been better to visit the technical high schools of Korea instead of a large-scale industrial complex to learn practical knowledge and experiences in the operation of schools, including operational rules, curriculum, teaching methodologies, and textbooks. In addition, it was stated that the training for plumbing, heating, air conditioning, and refrigeration was not appropriate since Palestinians were already skilled at such technologies.

## (2) Education System Improvement Project

The goals of Burqin Girls' Primary School Project were achieved effectively as the school was safe, sturdy, and equipped with computers and multi-purpose rooms. According to the surveys and interviews, the students were satisfied (3.0) with the facilities and services.

The teachers responded positively to the increase in the number of students who went on to higher education after graduation (3.8) and the decrease in local illiteracy rate (3.8) after completion of the project.

The total students of Burqin Girls' Primary School decreased to over 300 in 2012 from over 400 in 2006. The number decreased because Burqin Basic Mixed School was established near Burqin. The new school was built in 2012 using grants from the local government and has classes for students in first and second grades.

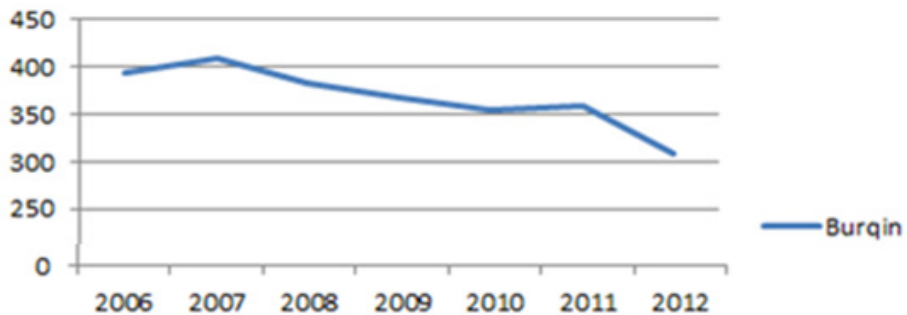
<Figure 3-10> Burqin Girls' Primary School





Burqin Girls' Primary School created safe and pleasant classrooms, addressed issues of overcrowded classes, and helped students to go to school nearby, all of which made positive impacts in improving the educational atmosphere.

<Figure 3-11> Yearly Enrollment of Burqin Primary School (2006-2016)



For the computer provision project, computers have been properly managed and operated. Due to the cost of internet service, however, the use of computers was mainly limited to word processing tasks. As a result, the effectiveness of computers for ICT education was insignificant.

<Figure 3-12> Provision of Computers



The nutritional supplements provision project achieved its goal and improved the nutritional status of students. In addition, the company that produced the nutritional supplement cookies continues to produce the same cookies (named Alibaba) and is selling them at a low price in the spirit of corporate social responsibility.

#### 4) Impact of the Projects

Impacts on the local economy and gender equality were expected, but the impacts did not appear outstanding at the moment of evaluation. Given that the project increased the number of female and male graduates who went on to higher education and improved the academic performance of students, the project is still expected to make a larger long-term impact on the local region.

According to reports of the UNDP and interview results, the provision of nutritional supplements not only achieved its intended goals but also encouraged the supplier of nutritional supplement cookies to continue to produce and sell

the same cookies (named Alibaba) after the project ended. This is a good example of a temporary aid project that provided new business items and business models, in addition to promoting the local economy.

The Sinokrot Food Company ([www.sinokrot.com](http://www.sinokrot.com)), the supplier of the nutritional supplement for this project, has a 30% market share of the food production industry. Besides Ali Baba, they produce more than 60 kinds of nutritional cookies and chocolates that meet the international standards of food and health such as the Kanz Wafer, a fortified wafer with vitamins and iron.

<Figure 3-13> Alibaba, the Nutritional Supplement Cookies



## 5) Project Sustainability

### (1) Jenin Industrial Secondary School Project

Facilities have been properly maintained by the principal and managers. When it comes to the operation of school and the use of equipments for practice, no issues were identified in terms of sustainability.

A sustainable business model between schools and industry, however, needs to be developed in consideration of the geographic and economic conditions of Palestine.

### (2) Education System Improvement Project

Burqin Girls' Primary School was properly operated, and no issues pertaining to sustainability were identified. However, for the computer provision project, the Palestinian educational authority and schools with computers should make efforts to improve sustainability by upgrading the computers and securing a budget for internet service.





## **Conclusions and Recommendations**





# IV

## Conclusions and Recommendations



### 1. Overview of the Evaluation Results

Overall, both the Jenin Industrial Secondary High School construction project and the education system improvement project were carried out appropriately in terms of goal-setting, planning, implementation process, and effectiveness of the project.

Beneficiary groups were satisfied with the overall project results. In particular, they expressed satisfaction with the construction of a high school, expansion of the classroom environment, and provision of computers and nutritional supplements.

It was found to be necessary to develop manuals in English for effective utilization and maintenance of technical training equipment in Jenin High School. The education system improvement projects would also benefit from additional measures to ensure sustainability and maximize the effectiveness had been in place, such as providing educational contents via the internet. More importantly, long-term strategies should be developed for creating a more integrated system of technical training institutions and industries.

In order to ensure the effectiveness and efficiency of future projects, it is desirable to take a more systematic approach, which may include a thorough needs assessment, analysis of project context, opportunities and risks assessment, ex-ante evaluation, and other strategic and systematic design and project management methods. For example, Jenin High School can offer support for employment (both

local and overseas), support for transition, career counseling, and collaborative technical training programs with local industries.

As to the education system improvement project in particular, it would be desirable to seek collaboration with the UNDP and other NGO's in order to maximize effects of ODA projects by utilizing each participating organization's strengths.

Finally, it would be worth pursuing both ODA goals and business opportunities that may help promote the local economy at the same time. For instance, ICT-based education projects can be coupled with establishing related local businesses such as an electronics retailer and a software company who can provide repair services and further develop software for their own needs. Such an approach may help not only train young people but also expand the local economy and plant seeds for sustainable growth in the future. A very good example was the nutritional supplement provision, which confirms that this project succeeded in Palestine. At first, a food company was founded to manufacture the needed nutritional supplements. After it completed its initial mission, however, it continued to develop and sell new products.



## ■ 2. Recommendations

### (1) Analysis on the state of the local economy and industry

Jenin Industrial Secondary School seemed to have good hardware (school facilities, interior and exterior, and other equipment) but more long-term outcomes and impacts may need to be reviewed to determine whether the project is truly achieving its intended goals because it just produced its first class of graduates in 2011.

For students who want to move on to higher education, the curriculum should be modified to address their needs by teaching more math and science subjects instead of requiring all student to receive technical training regardless of their plans.

As shown below, a majority of the graduates moved on to colleges. Many are studying majors such as IT, multimedia production, telecommunication, and other engineering fields. Therefore, it is becoming necessary to consider adding or strengthening math, basic science, and IT education.

Graduates' Admitted Colleges	Graduates' Majors in Colleges
Al Quds University	Engineering, manufacturing, and construction
Arab American University	IT and multimedia, and telecommunications
An Najah University	Engineering, mathematics, and physics
Bethlehem University	Business and administration (project management, public administration, e-management)
Polytechnic University in Hebron	Engineering, manufacturing, and construction

Source: Palestinian National Authority Ministry of Education & Higher Education

More importantly, few graduates of Jenin School were employed in the areas they were trained for: car mechanics, plumbing, heating, air conditioning, and refrigeration. However, there were not many employment opportunities in Palestine that the graduates of Jenin School could directly go to upon graduation. Thus, many students seek employment overseas, where wages are relatively higher than Palestine or move to college to be engineers. Their strong desire to move up the social ladder and zeal for education should also be taken into account when developing national human resource development strategies.

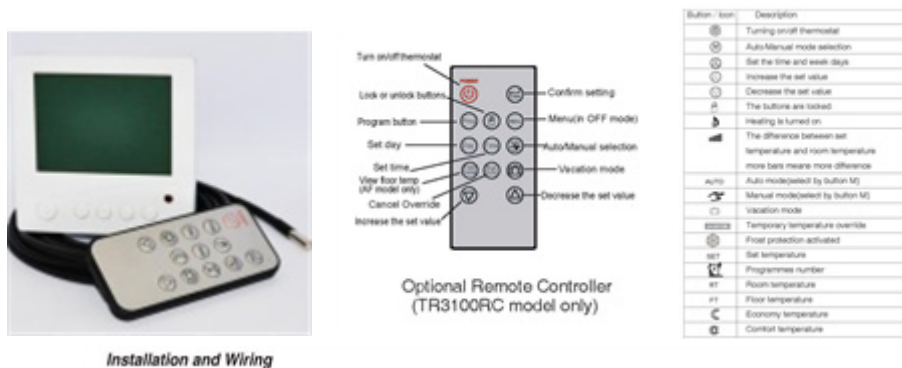
## (2) Development and provision of instructional materials such as manuals

Well-documented processes and instructions would be more effective for

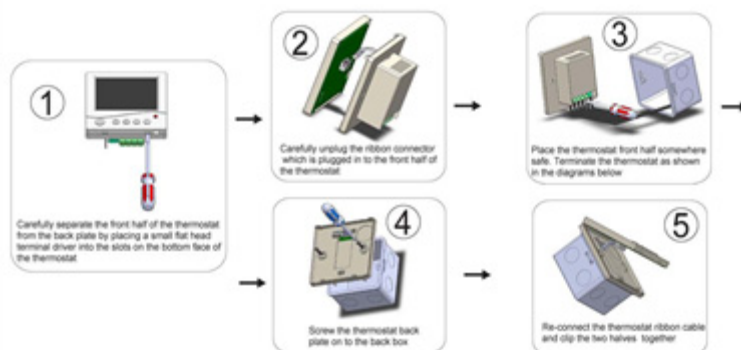
schools. Instructional materials such as manuals for equipment operation should have been an important part of training and curriculum development. Often, experts or teachers who are proficient in operating machines are unavailable or may leave for other employment opportunities, whereas the documents can remain where they are needed. No manuals were found for any of the equipment provided and installed in Jenin School. As a result, simple mistakes could not be fixed, with some machines being virtually not operational.

For future projects, complete task analyses should be performed and manuals and other instructional materials must be developed and ready before any training for teachers and staff begins. Documents should include, for example, manuals for operation and troubleshooting, job-aid, quick reference, and so forth. Below are some samples of instructional materials.

<Figure 4-1> English Manual Sample



Installation and Wiring



Some equipment made in Korea still have labels and important notes such as warning signs only in Korean, which was a source of complaint. Students and teachers were often unable to perform a simple task without direct instruction from a proficient operator.

In addition to documentation, it would be beneficial to develop multimedia resources for instructional and troubleshooting purposes.

### (3) Coordination for timely delivery of equipment to improve efficiency

Given the special circumstances of Palestine, equipment delivery requires an elaborate plan to avoid unnecessary delays or unexpected incidents. For instance, a large shipment of equipment from Korea was held by Israeli customs who mistook some equipment as having military applications. This incident delayed the project by about three months and incurred additional unexpected expenses.

It would be a plausible solution to list all equipment with detailed specifications and provide the partner country with customs information for prior approval. Also, local procurement for as many resources as possible is recommended.

### (4) Improvement in consulting and training programs

The Jenin Industrial Secondary School project included Korean technical and vocational training experts' consulting and training. Also, training for Palestinian teachers and technical school staff in Korea was also offered as a key part of the project. Based on the survey results and interviews with Palestinian education officials and the principal of Jenin High School, however, it was suggested that the training programs were not as effective and efficient as expected.

Expert consulting in Palestine should have transferred technical details pertaining to installation, operation, and troubleshooting of the machines and other equipment. Due to the limited time of the experts' stay in Palestine and the language barriers that both the experts and Palestinian trainees shared, it was concluded that well-written instructional materials with visual components would have been more effective. As mentioned in the overview of this chapter, various instructional materials based on the trainees' needs and a thorough task analysis should be the priority in projects such as Jenin School.

As for the training program for technical teachers and school staff in Korea, it was a challenging task to fully train Palestinian trainees to a functioning level in the limited time frame. Thus, the training program included field trips and industrial site visits in addition to limited classroom sessions in attempts to cover the very basics. Consequently, the trainees reported their dissatisfaction to a certain degree and expressed wishes that visiting similar schools in Korea and learning operational details on how to run technical schools effectively and develop their models would be preferred for future sessions.

The principal of Jenin School said during the interview that he would like to set up several sisterhood relationships with Korean technical schools for programs such as student program exchanges, teacher training, and sharing know-how, in addition to other programs of mutual interest.

#### (5) Development and application of a model that initiates sustainable local businesses

The nutritional supplement project was a typical one-time project and the entity responsible for manufacturing the supplement was not intended to stay in business after the project was over. Unexpectedly, the company is still in business and is doing well.



The project team had to formulate a strategy for the children to take the nutritional supplements because children usually did not like tablets or other forms of medicine. The solution was to provide the supplement in a form of a snack or biscuit. The manufacturer found business opportunities since it was able to establish a distribution network and market for new food products due to its participation in the project.

The success of this company would be a good example of a sustainable model for developing local economy, as this approach can be combined with social enterprises to enhance spill-over effects, as witnessed in this case. Thus, for future projects, it is recommended to do more research and analysis in order to develop customized solutions for regions of interest to ensure the development of a self-supporting sustainable local economy.

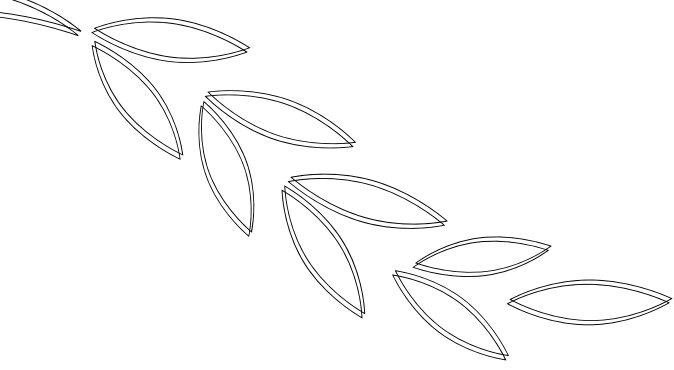
#### (6) Collaboration with international development agencies for synergy

During the interview, UNDP has expressed their willingness to have more collaborative works with KOICA. It is also recommended to establish close working relationships with other international development agencies and NGOs with invaluable local knowledge and know-how when considering developmental projects.

Collaboration with development agency networks and sharing information and know-how may also help avoid mistakes, develop new projects, and implement large-scale projects that KOICA alone would not be able to initiate.

To address security concerns and to ensure completion of projects given special circumstances such as the Israeli-Palestine conflict, it is recommended to work with highly-credited agencies in the international community, such as the UNDP.





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