

Policy Recommendations for Korea's Vocational Education and Training (VET) Assistance to Tackle Youth Unemployment in Developing Countries

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Executive summary

There are 1.2 billion youths (population aged between 15 and 24 years old) in the world, constituting 17 percent of the world's population. With the increase in youth unemployment around the world, many countries have turned to Vocational Education and Training (VET) as a possible policy solution, both domestically and as part of their development assistance strategy. Unfortunately, the VET systems in many developing countries have critical problems such as the lack of funding, low quality of the training programs, and lack of coordination between different government ministries.

During the past few decades, the Republic of Korea (henceforth “Korea”) has supported numerous VET projects in developing countries. However, there are several problems with Korea's VET assistance policies. This paper examines four policy options: 1) status-quo, 2) ALMP, 3) Career guidance, and 4) training in informal sector to improve the effectiveness of Korea's VET assistance in addressing youth unemployment.

I. Introduction

According to the UN World Youth Report 2012, youths (population aged between 15 and 24 years old) make up 17 percent of the world's population, totaling 1.2 billion people. Eighty-seven percent of these youths live in developing countries. In many developing countries, the proportion of the youth population is high compared to other age groups, a phenomenon described as the “youth bulge”. With good policies in place, this youth bulge could have a positive impact on the economic development of a country.

However, according to the International Labour Organization (ILO), in 2012, close to 75 million youths were unemployed worldwide, and the youth unemployment rate was 12.6 percent, three times higher than the adult unemployment rate of 4.5 percent. Biavaschi et al. (2012) also claimed that youths often face difficulties and disadvantages in the labor market compared to adults. <Table 1> and <Table 2> show the overall unemployment rate and the youth unemployment rate, respectively. According to these tables, the youth

unemployment rate was higher than the overall unemployment rate for all levels of economies and in all years between 2005 and 2013.

Interestingly, the unemployment rate in low- and middle-income countries is lower than that of high-income countries. This reflects the differences in the economic, social, and institutional environment between developing and developed countries. While developed countries have well-designed social protection systems for the unemployed, developing countries do not. This pushes people in developing countries to take jobs that they are over-qualified for, or jobs in the informal sector which generally provide less income and other benefits to employees (King, 2012). Therefore, in spite of the seemingly low unemployment rate in developing countries, the problem of unemployment in developing countries is more serious than it looks, especially among youths.

The high unemployment rate among youths in developing countries could have negative consequences on their countries' economic development, as well as threaten the social stability (Engel, 2012). For example, the high youth unemployment rate is cited as one of the causes of the Arab Spring and the recruitment of youths into international terrorist networks (Urdal, 2006).

〈Table 2〉 Youth unemployment rate (% of labor force) by country income classification

	2005	2006	2007	2008	2009	2010	2011	2012	2013
World	14	13	12	13	14	14	14	14	14
High income countries	15	15	14	14	18	18	18	18	18
Low & Middle income countries	13	13	12	13	13	13	13	13	13
Low income countries	9	10	9	10	10	9	10	10	10
Least developed countries (UN classification)	10	11	11	11	11	11	11	11	11

Note: Modeled ILO estimate

Source: Created with data from World Development Indicators website

(<http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators>)

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Vocational Education and Training (VET) programs can be very effective in addressing the problem of youth unemployment. Well-designed VET programs can increase the employability of those who are not suited for academic education, giving them a second chance to enter the labor market (Meer, 2007; Hoeckel & Schwartz, 2010). Also, VET plays an important role in producing blue-color workers demanded by the labor markets (Hoeckel, 2008). In addition, VET can contribute to social equity, because it has a higher rate of return for women and the poor, compared to other population groups (OECD, 2004).

The next section of this paper analyzes the VET system in developing countries, as well as the effectiveness of public and private VET programs. The third section explains Korea's VET assistance to developing countries, starting with the history of Korea's VET programs. It also explains the amount, type, organizational structure, objectives, and principles of Korea's VET assistance to developing countries, and points out the problems with the current policies. The fourth section presents three policy alternatives for improving Korea's VET assistance, and the fifth section evaluates these policy options on a set of criteria. The sixth section presents strategies to implement the recommended policy, which is to support Active Labor Market Programs (ALMP).

II. Vocational Education and Training (VET) programs

1. VET in developing countries

While many developed countries have established innovative VET policies to address the problem of youth unemployment (OECD, 2012; OECD, 2014), many developing countries still lack effective VET systems. The effectiveness with which developing countries bring unemployed youths into the labor market through VET programs can have a significant impact on their economic development and social stability (Urdal, 2007; Nilsson, 2010).

There are two commonly-cited problems of public VET systems in developing countries. First, many governments of developing countries do not have enough financial resources to support an effective public VET system. Thus, the budgetary allocation for public VET programs is often less than the amount that had been committed by the government.

Second, the quality of public VET programs is low. The skills taught in public VET programs are often not aligned to labor market demands, due to the inflexible curriculum, low participation of the employers, incompetence of the instructors, and outdated training equipment (Engel, 2012).

In addition, there are problems with the overall coordination of the VET system in developing countries. VET strategies and policies are frequently addressed in various sections of the national development plans. Also, VET programs are implemented by different government bodies, such as the Ministry of Education, the Ministry of Labor, and the Ministry of Youth, without much overall coordination (Engel, 2012). The system is even more fragmented when taking into account the private sector, as there are many vocational training programs provided by the informal sector.

2. Public vs. Private VET

A real strength of VET is that it can help youths acquire skills, and in turn, get a job in the labor market. During the past few decades, there have been ongoing debates on whether public VET programs (conducted in public vocational training schools and institutions) or private VET programs (conducted by firms through on-the-job training) are more effective in doing this.

According to a study by Heckman (1999), public VET programs were found to be less effective and efficient compared to private VET programs. Psacharopoulos (2005) supported this claim, explaining that this was because the private sector was more responsive to the labor market demands, and also because competition in the private sector increased the effectiveness of private VET programs.

On the other hand, Bennell and Segerstrom (1998) contended that the private sector often failed to provide trainings demanded by the labor market, and that public VET programs played an important role in poverty reduction in developing countries. They (1998) also pointed out that public VET programs had played an important role in the industrialization process of Highly-Performing Asian Economics, such as Korea and Taiwan, by effectively training the youth population with skills that were needed in the labor market.

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In Germany, two papers examining the effects of public VET programs produced somewhat contradictory conclusions. Lechner (1999) claimed that despite large public expenditures on public VET programs, there were no positive effects in the first years of the program. Contrarily, Rinne et al. (2007) found that public VET programs had a positive effect on the employment rate and wages of the participants.

Due to the limited research conducted on the effectiveness of public vs. private VET programs, as well as the diversity of both public and private VET programs, it is not possible to conclude whether public or private VET programs are more effective. However, in general, private VET programs are less costly and more responsive to market demands than public VET programs.

III. Korea's VET assistance to developing countries

1. Background of Korea's VET programs

Korea's VET system played an important role in the country's rapid economic development and industrialization. Beginning in the 1960s, the Korean government established detailed economic development plans as well as corresponding VET and general education policies to produce the skills that would be needed by the new industries. The rapid development of Korea's human capital is said to have contributed significantly to the country's remarkable economic development, in spite of the country's lack of natural resources.

During the 1960s and 1970s, Korea's VET programs were centralized and supply-oriented, and the Korean government played a leading role. It was during this period that many important institutional and legal frameworks for Korea's VET system were established. In 1963, the government enacted the "Law for the Promotion of Industrial Education" and established the curriculum for vocational high schools. In 1967, the government began to implement the "Five-year Scientific Technology Education Promotion Plan (1967-1971)" (Chun & Eo, 2012). In 1973, the "National Technical Qualification Law" was enacted to standardize the testing and certification process for technical skills, increase

the efficiency of the VET system, and improve the quality of the technical workforce (Lee, 1989).

In 1973, the government revised the “Industrial Education Promotion Law” which made it mandatory for firms to share the costs of VET programs. According to this amendment, firms had to provide in-company training to their employees, and if the firms did not comply, they had to pay a fine which the government used to fund public VET programs (Lee, 2012). Although the goal of this policy was to increase vocational training in the private sector, many firms opted to pay the fine instead (Bennell & Segerstrom, 1998).

During the 1960s and 1970s, the Korean government also requested international assistance to support VET programs. Aid from Germany, Japan, the United States, the World Bank, the Asian Development Bank, and the International Bank for Reconstruction and Development were used to expand the public VET system (Lee, 2009).

With the increase of vocational training schools and institutions, vocational high schools enrolled one-third of the total number of high school students in Korea at one point (Kuczera et al., 2008). The massive number of graduates from these vocational schools and institutions were easily absorbed by firms, due to the rapid economic development of the country and the high demand for skilled workers in the new industries.

In the 1980s and 1990s, many important VET institutions were also established, including the Korea Vocational Training Research Institute, the Industrial Technology Research Institute of Korea University of Technology and Education, and the Joong-Ang Vocational Training Center which trained VET instructors (Lee, 2012).

It is undeniable that Korea’s VET policies played an important role in the country’s rapid economic development by providing the skills that were demanded by the new industries which emerged according to the government’s national development plans.

2. Amount of Korea’s VET assistance

Korea’s history of implementing successful VET policies is one reason why developing countries are actively requesting Korea’s support for VET programs. As shown in <Table 3>, Korea’s VET assistance reached USD 53 million in 2013, accounting for 15.74 percent of

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Korea's Official Development Assistance for the education sector (or 4.05 percent of Korea's total bilateral Official Development Assistance). The share of Korea's Official Development Assistance for VET assistance is significantly higher than that of other donor countries (Prime Minister's Office, 2011).

〈Table 3〉 Amount of Korea's bilateral Official Development Assistance (ODA) for education and VET projects (USD million)

Year	2006	2007	2008	2009	2010	2011	2012	2013	Ave.
Total bilateral ODA	376.08	490.54	539.21	581.1	900.60	989.52	1,183.17	1,309.58	769.23
ODA for Education (%)	135.15 (35.94)	160.17 (32.65)	112.46 (20.86)	139.02 (23.92)	324.4 (36.02)	199.17 (20.13)	127.53 (10.78)	337.05 (25.74)	191.86 (24.10)
ODA for VET (%)	9.72 (7.19)	25.44 (15.88)	30.66 (27.26)	19.73 (14.19)	39.39 (12.14)	45.32 (22.75)	47.34 (37.12)	53.07 (15.74)	33.83 (17.63)

Note: Net disbursement (in current prices)

Source: Author's calculation using data from OECD Aid Statistics (<http://stats.oecd.org/qwids>)

〈Table 4〉 indicates that the Korea International Cooperation Agency, the largest government agency executing Korea's grant aid for developing countries, spent a total of USD 143,57 million in 31 countries and 1 territory, in terms of project-type interventions, from 2006 to 2013. Annually, the Korea International Cooperation Agency spent an average of USD 17.95 million for 18 VET projects. In addition, the Economic Development Cooperation Fund, the government agency which executes Korea's loan aid for developing countries, spent a total of USD 88,21 million for VET assistance from 2006 to 2013. Annually, the Economic Development Cooperation Fund spent an average of USD 11.03 million on 5 VET projects.

〈Table 4〉 Amount of VET assistance provided by the Korea International Cooperation Agency (KOICA) and the Economic Development Cooperation Fund (EDCF) (USD million)

Year	2006	2007	2008	2009	2010	2011	2012	2013	Average
KOICA (number of projects)	6.44 (15)	17.94 (19)	11.05 (17)	8.68 (7)	15.06 (17)	24.30 (21)	22.57 (22)	37.49 (29)	17.95 (18)
EDCF (number of projects)	1.09 (2)	4.86 (2)	7.31 (2)	4.64 (3)	21.02 (6)	18.37 (8)	19.88 (9)	11.04 (5)	11.03 (5)

Note 1: Net disbursement (in current prices)

Note 2: Only project-type interventions are included. Project-type interventions account for more than 90 percent of the Korea International Cooperation Agency's VET interventions (PMO, 2011). Other types of interventions include Public-Private Partnerships and support to NGOs.

Source: Author's calculations using data from OECD Aid Statistics (<http://stats.oecd.org/qwids>)

3. Type of Korea's VET assistance

Korea's VET assistance in developing countries focuses mostly on strengthening the public VET system by building vocational training schools and institutions. To support these schools and institutions, Korea also gives support for vocational training programs, provides equipment and training materials, dispatches technical advisors, and invites trainees to attend trainings in Korea (Chun & Eo, 2012).

〈Table 5〉 shows that between 2006 and 2013, nearly 90 percent of Korea's VET assistance projects were based in vocational training schools and institutions. (The full list

〈Table 5〉 Korea's VET assistance projects based in schools and institutions

Year	2006	2007	2008	2009	2010	2011	2012	2013	Total
Number of VET projects	17	21	19	10	23	29	31	34	184
Number of school and institution-based VET projects (% of above)	15 (88.24)	20 (95.24)	17 (89.47)	10 (100)	20 (86.96)	26 (89.66)	28 (90.23)	29 (85.29)	165 (89.67)

Note: Projects with unclear information on activities and objectives were not counted (i.e. Colombia-Triangular Cooperation Project, Ethiopia-Project for Vocational Capacity Building, Vietnam National Skill Testing Systems)

Source: Author's calculation using data from OECD Aid Statistics (<http://stats.oecd.org/qwids>)

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of Korea's VET assistance projects from 2006 to 2013 is included in the Appendix.) Korea's focus on this type of VET assistance reflects its own history of implementing successful VET policies in the past, as explained above.

4. Organizational structure of Korea's VET assistance

All of Korea's Official Development Assistance policies are coordinated by the Committee of International Development Cooperation under the Prime Minister's Office. In 2011, this committee established Korea's first mid-term Official Development Assistance policy for 2011 to 2015, which serves as the government's overarching strategy for administering its Official Development Assistance to developing countries (OECD, 2013).

At the ministerial level, both the Ministry of Strategy and Finance and the Ministry of Foreign Affairs are key institutions in Korea's VET assistance policies. These ministries supervise the Economic Development Cooperation Fund and the Korea International Cooperation Agency, respectively, which are the implementing agencies for Korea's VET assistance projects. These projects are usually sub-contracted to governmental and semi-governmental organizations, such as Human resource Development Korea (HDR Korea), the Korean Chamber of Commerce (Korcham), Korea University of Technology and Education, and Korea Polytechnics. The stakeholders involved in Korea's VET assistance are depicted in <Exhibit 1>.

<Exhibit 1> Stakeholders involved in Korea's VET assistance



Source: made by author

5. Objectives and principles of Korea's VET assistance

According to the mid-term Official Development Assistance policy for 2011 to 2015 established by the Prime Minister's Office, the education sector is one of the priority sectors for Korea's development assistance. The goal of Korea's educational assistance is to enhance the productivity and employability of workers in developing countries (Prime Minister's Office, 2010).

In 2011, the Prime Minister's Office reconfirmed VET to be one of its priority sectors in its educational assistance to developing countries, given the competitiveness of Korea's VET sector and Korea's own development experience based on government-led VET interventions (Prime Minister's Office, 2011). The overarching goal of Korea's VET assistance is to increase the human capital of developing countries by establishing training infrastructure, providing quality vocational education and training, and enhancing the capacity of the VET sector (Chun & Eo, 2012).

The Prime Minister's Office also presented two principles for Korea's VET assistance. The first principle is that the recipient countries of Korea's VET assistance should be selected after a careful analysis of the countries' labor market and industries, taking into account their specific VET demands. The second principle is that Korea's VET assistance should follow a program-based approach, covering various areas such as institutional reforms, training infrastructure, and capacity building. This is in contrast to the stand-alone project approach of the past.

6. Problems with Korea's VET assistance

As explained above, Korea's VET assistance mostly focuses on strengthening the recipient country's public VET system by building vocational training schools and institutions. Such an emphasis on strengthening the public VET system reflects Korea's own development experience. However, this strategy may not be effective in developing countries that have a different social and economic context from Korea's past.

In addition, there are several problems with the stated goal of Korea's VET assistance, which is to "increase the human capital of recipient countries." First, developing human

capital through VET programs will not necessarily address the problem of unemployment, which is the real issue that should be tackled in developing countries. Thus, the link between the VET programs and employment should be expressed more clearly in the goals of the VET programs. Second, in terms of increasing human capital, VET programs are less effective than general education. Psacharopoulos (1994) examined the rates of return to education worldwide, and found that the rate of return to vocational education was 10.6 percent, while the rate of return for general education was 15.5 percent. Also, in terms of graduates' income, VET is less cost-effective compared to general education, since vocational education has higher costs due to more expensive equipment, higher maintenance costs, and smaller classes (Psacharopoulos, 2005; IIEP, 2007). Therefore, since VET is neither the most effective nor the most cost-effective way to increase human capital, stating this as the goal of Korea's VET assistance does not make sense. Instead, as stated above, the primary goal of VET programs should be to increase the employment rate among the graduates of the VET programs.

Another problem is that the implementing agencies do not have a clear strategy for their VET assistance. According to the Korea International Cooperation Agency (2013), the goal of its VET assistance is to develop a skilled workforce in recipient countries. However, it does not have a systematic approach for its VET assistance or specific areas for support. In the case of the Economic Development Cooperation Fund, it only has policy-level guidelines for its VET assistance which were largely set by the Committee of International Development Cooperation (Economic Development Cooperation Fund, 2013), and its strategies and specific areas of support are very vague.

Without addressing the issues mentioned above, Korea's VET assistance will not be as effective as it could be.

IV. Policy options to improve Korea's VET assistance

This section will present possible policy options to improve Korea's VET assistance to developing countries. These policies have been proven to be effective in addressing youth unemployment in developing countries.

1. Active Labor Market Programs (ALMP)

Active Labor Market Programs (ALMP) include a broad range of interventions such as job search assistance, in-classroom and on-the-job trainings based on market demand, subsidized employment opportunities, and support for entrepreneurship. Although the effects of ALMPs vary across the programs, well-designed ALMPs can be effective in addressing youth unemployment by equipping youths with marketable skills (Biasvaschi et al., 2012).

Since ALMPs include a wide range of policy options, countries are able to choose the alternative that best fits their needs and situation. For example, job search assistance programs will be effective in countries that are aiming for high impact in the short-term, while in-classroom and on-the-job training will be effective in countries that are aiming for medium and long-term impact (Card et al., 2010).

ALMPs have been proven to be successful in addressing youth unemployment in many developing countries. For example, in Nepal, the Employment Fund¹⁾ was a very successful ALMP that focused on on-the-job training, apprenticeships, and market-oriented short-term training for youths, women, and other marginalized people. From 2008 to 2013, more than 70,000 young people were trained through this program, and more than seventy percent of them remained employed three years after the trainings. In 2013, this program won the second prize in the International Labour Organization's call for good practices on youth employment.

In the Middle East and North Africa, an NGO called Education for Employment²⁾ has also been implementing successful ALMPs. This NGO provides employability trainings, short-term job trainings, and entrepreneurship trainings to help unemployed youths find jobs.

2. Career guidance programs

In developing countries, many youths lack information about the careers that are available to them in the labor market. As a consequence, many do not give careful thought

1) Website: <http://employmentfund.org.np>

2) Website: <http://www.eef.org/>

to their career and education choices, which leads to a higher likelihood for them to be unemployed, compared to those who receive proper career guidance.

According to the Organisation for Economic Cooperation and Development (OECD), career guidance is defined as services and activities intended to assist individuals of any age, at any point in their lives, to make choices regarding their education, training, and occupation, as well as to manage their career (Hansen, 2006). Career guidance programs can help youths identify and pursue available jobs, find relevant training resources, and make informed decisions about their educational path (OECD, 2014). This can prevent some youths from blindly pursuing higher education with the expectation of getting a higher-paying job, only to be unemployed at the end of their studies. This way, career guidance programs can also help reduce the social and cultural misperceptions of VET, especially in countries where VET is regarded as an inferior educational option for students.

3. Informal sector training

In developing countries, informal training (such as apprenticeships) is prevalent, because the size of the informal sector is large. Compared to formal VET, which is often inflexible and lacks the involvement of employers, informal training is very responsive to the demands of the labor market, since it is provided directly by the employers. Also, informal training focuses on work-based learning, consistent with the current trends in VET (OECD, 2014). Some even claim that participants of informal training have higher employability than those who participated in formal VET programs (Biavachi et al., 2012). For these reasons, promoting informal training can be an effective policy for addressing youth unemployment in developing countries.

However, informal training has some critical problems regarding certification and quality assurance. In addition, informal training is weak in increasing general skills which increases workers' flexibility and adaptability in the labor market. Also, in developing countries, informal training increases the possibility of exploiting children and marginalized people, due to the lack of regulations and monitoring. Therefore, proper regulations and guidelines for informal training are necessary to protect the rights of the trainees while ensuring the quality of the trainings.

V. Evaluation of policy options

As mentioned before, VET programs can be very effective in addressing the problem of youth unemployment in developing countries. However, if the VET programs are not carefully designed, youths who participate in the program may not be able to find jobs later, which can increase their frustration, possibly leading to social instability (Urdal, 2007). Thus, it is important for donors to make sure their VET assistance directly addresses the issue of youth unemployment.

In order to make Korea's VET assistance more effective in addressing youth unemployment, the three policy options presented above, as well as the option of maintaining the current policy, will be evaluated on a set of five criteria. This analysis may prove to be useful at the policy level, as well as the implementation level of Korea's VET assistance programs.

The criteria for assessing the policy options are:

- Effectiveness in addressing youth unemployment
- Political feasibility among policy makers in Korea
- Technical practicality
- Local participation
- Financial sustainability in recipient countries

〈Exhibit 2〉 summarizes the results of the evaluation of each policy options using the five criteria.

〈Exhibit 2〉 Matrix of policy options and key criteria

Criteria	Effectiveness	Political feasibility	Technical practicality	Local participation	Financial sustainability
Option #1: Current policy		*	*		
Option #2: ALMP	*	*	*	*	*
Option #3: Career guidance	*			*	*
Option #4: Informal sector training	*			*	*

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1. Policy option #1 – Continue current VET assistance policies (focusing on public VET programs in vocational training schools and institutions)

Continuing the current VET assistance policy is the easiest option in many ways. It meets the criteria of political feasibility, because it fits in well with the Korean government's overarching aid policy of promoting Korean-style development assistance based on Korea's own development experience (OECD, 2013). Also, it meets the criteria of technical practicality, because for more than two decades, the Korea International Cooperation Agency and the Economic Development Cooperation Fund have been implementing this type of VET assistance in developing countries.

However, as mentioned previously, this policy option does not meet the criteria of effectiveness, because public VET programs are often less effective than private or market-oriented training programs. The curriculum is inflexible due to administrative obstacles, and there is limited participation from the employers. Furthermore, this policy option does not meet the criteria of financial sustainability, because it is expensive to maintain high-quality training programs in public VET schools and institutions. Considering that Korea's VET assistance often stops once the training school or institution is constructed, and that the governments of developing countries often lack fiscal resources to support public programs, this policy option is not financially sustainable in the long-run.

2. Policy option #2 – Implement Active Labor Market Programs (ALMP)

As mentioned before, ALMPs include a broad range of interventions, including job search assistance, in-classroom and on-the-job trainings based on the market demand, subsidized employment opportunities, and support for entrepreneurship. Thus, it can be tailored to the needs of each country.

ALMPs are very effective in addressing youth unemployment. In particular, on-the-job trainings provide unemployed youths with valuable experience which can help them prepare for the labor market. Also, job search assistance reduces the unemployment spell among youths by addressing the information asymmetry in the job market.

Although ALMPs are not categorized as Korean-style development programs, most ALMP interventions are commonly implemented in Korea, and the main contractors that are carrying out Korea's VET assistance in developing countries also have experience implementing these programs in Korea. Thus, introducing ALMPs into Korea's VET assistance will be politically as well as technically feasible. (However, subsidizing the public sector employment programs may meet some political opposition, due to the reluctance of the Korean government in providing development assistance in the form of subsidies.)

Another advantage of ALMPs is that it can increase local participation, because ALMPs directly involve employers and the local community in the implementation of on-the-job trainings and job search assistance. In addition, ALMPs are financially sustainable, because it does not require the maintenance of expensive training institutions and equipment. Also, existing public institutions (such as community centers), NGOs, and private training providers can efficiently provide youths with various trainings and job search assistance.

3. Policy option #3 – Provide youths with career guidance

Currently, VET is often provided as remedial support for youths who lack market-relevant skills. By providing youths and their parents with career guidance, there will be less demand for remedial support, because they will be able to make more informed choices beforehand about their career and educational path.

As mentioned above, by giving information to youths about the jobs available in the labor market, youths can make informed decisions about their education and career, and it can also address the misperceptions that VET is an inferior educational option. Thus, it is an effective policy option for addressing youth unemployment in the long run. (However, it may not be effective in the short run, because it will take time to reap the benefits.) In addition, this option is financially sustainable, because it does not require as much resources as maintaining public VET schools and institutions. Also, this policy can increase the involvement of the local community, because career guidance programs will be based on information provided by local firms.

However, this policy option may not be politically feasible, considering the Korean policy makers' preference for supporting Korean-style development assistance. Another drawback

is that career guidance can be biased towards traditional gender roles and limited options for marginalized groups.

4. Policy option #4 – Promote informal sector training

Considering the large informal sector in developing countries, promoting training in the informal sector could be an effective policy option to address youth unemployment. The bigger the informal sector in a country, the bigger the impact of informal sector training will be.

As mentioned above, informal sector training can be effective in providing marketable skills and valuable work experience for youths, and it is also very responsive to the skills demand of the labor market, because it is provided directly by the employers. By definition, it also involves local participation. In addition, it is financially sustainable, since it does not require much financial support other than to standardize the informal training system.

However, the main contractors that are implementing Korea's VET assistance have little experience in supporting informal sector training, so it does not meet the criteria of technical practicality. Also, it will be politically difficult to push for this option, since policy makers in Korea prefer development assistance programs based on Korea's own development experience.

5. Recommended policy option—Active Labor Market Programs (ALMP)

Based on the evaluation above, promoting ALMPs is the best policy option to improve Korea's VET assistance in developing countries. This is the only policy option that meets all five criteria of effectiveness, political feasibility, technical practicality, local participation, and financial sustainability. First, it is effective in addressing youth unemployment, especially when it is designed to be flexible and market-oriented. Second, it is politically feasible, because the Korean government is familiar with ALMPs which are also being implemented in Korea. Third, it meets the criteria of technical practicality, because the implementing agencies of Korea's VET assistance have experience implementing ALMPs domestically. Fourth, it ensures local participation, because ALMPs directly involve

employers and the local community in on-the-job trainings and job search assistance. Lastly, it is financially sustainable, because it does not require the maintenance of expensive training institutions and equipment.

VI. Implementation strategy for recommended policy

For the Korean government to adopt the policy recommendation above, a holistic strategy needs to be taken by the various stakeholders, such as the civil society, research institutes and private consulting firms, relevant government ministries, implementing agencies, and project contractors. This section describes how to involve each stakeholder, ensure their support, and ultimately create a favorable environment for the Korean government to adopt a new VET assistance policy. Although it may be challenging to carry out all the steps mentioned below, it is important to involve as many stakeholders as possible in adopting this new policy.

1. Raise civil society's awareness of the problem

In recent years, as Korea's budget for foreign aid increased, so has the general public's interest in monitoring how the foreign aid is being used. In particular, NGOs involved in development assistance are making efforts to raise the public's awareness of Korea's official development assistance, while also demanding transparency and accountability from the Korean government. For example, ODA Watch³⁾ is one of the most active NGOs in Korea to monitor Korea's official development assistance. The Korean government pays close attention to the demands and criticisms of the civil society, since its official development assistance is financed through tax payers' money.

Therefore, one of the first steps in changing Korea's VET assistance policy would be to gain the support of the civil society. This can be done by making the civil society understand that there are problems with Korea's current VET assistance, and that there are more effective policy options, such as supporting ALMPs.

3) Website: <https://odawatch.wordpress.com>

The civil society will be enthusiastic in supporting this, since they are concerned with increasing the effectiveness of Korea's development assistance. However, one problem is that the civil society often lacks sector-specific expertise, so they may not have the capacity to engage in a policy discourse about the specific problems with Korea's current VET assistance policy and the way forward. Nevertheless, this shortcoming can be overcome through cooperation with research institutes and private consulting firms, as explained below.

2. Utilize expertise of research institutes and private consulting firms

Research institutes and private consulting firms can be helpful in producing rigorous research and evidence on the problems with Korea's current VET assistance policies as well as strategies for improvement.

There are many public research institutes in Korea with expertise in VET and development assistance, including the Korea Research Institute for Vocational Education and Training (KRIVET),⁴⁾ the Korea Labor Institute (KLI),⁵⁾ and the Korea Educational Development Institute (KEDI).⁶⁾ The main responsibility of these public research institutes is to analyze Korea's public policies and suggest policy alternatives. Although most of these public research institutes focus on domestic issues, some of these institutes have experience participating in the VET assistance projects of the Korea International Cooperation Agency and the Economic Development Cooperation Fund, placing them in a good position to provide expertise in this area.

There are also a number of private consulting firms in Korea that focus on Korea's foreign aid policies, including the Re-shaping Development Institute (ReDI),⁷⁾ the Korea Institute for Development Strategy (KDS),⁸⁾ and the Korea Association for

4) Website: <http://eng.krivet.re.kr/eu/index.js>

5) Website: http://www.kli.re.kr/kli_ehome/main/main.jsp

6) Website: <http://eng.kedi.re.kr/khome/eng/webhome/Home.do>

7) Website: <http://redi.re.kr/?lang=en>

8) Website: <http://eng.kds.re.kr/Main/index.html>

International Development Cooperation (KAIDEC).⁹⁾ In 2011, the Development Alliance Korea (DAK) was established as a cooperative network between the government and the private sector, providing a channel for the private sector to participate in the field of development assistance. These private consulting firms can produce rigorous research and evidence on the problems with Korea's current VET assistance policy as well as strategies to improve it.

3. Ensure support from relevant government ministries

Besides the Prime Minister's Office, two ministries exercise significant influence on Korea's development assistance policies. They are the Ministry of Strategy and Finance (which administers loans to developing countries through the Economic Development Cooperation Fund) and the Ministry of Foreign Affairs (which administers grant aid to developing countries through the Korea International Cooperation Agency). Under the leadership of the Prime Minister's Office, these two ministries discuss major policy issues regarding Korea's foreign aid, such as the Country Partnership Strategy for specific countries, the annual aid budget allocation plan, and Korea's mid-term foreign aid policy.

However, these two ministries have a competitive relationship when it comes to the budget, because each ministry is aiming to increase their share of Korea's budget for development assistance. Also, a lack of coordination and communication between these two ministries can pose a barrier to agreeing on an alternative VET assistance policy. Even if the Prime Minister's Office were to unilaterally decide to shift Korea's VET assistance policy, it will not be effective on the ground without the buy-in from these two implementing ministries.

Therefore, in order to effectively change Korea's VET assistance policy, it is necessary to get both the Ministry of Strategy and Finance and the Ministry of Foreign Affairs on board. They should hold regular meetings to discuss the problems regarding Korea's current VET assistance policy, as well as ways to improve it.

9) Website: <http://www.kaidec.org/english/>

4. Start with a pilot project

After the Korean government decides to change its VET assistance at the policy-level, the new policies should be tested through small-scale pilot projects. Even though many of the implementing agencies have experience conducting ALMPs in Korea, the context of each country is different, so the programs will need to be customized to the needs and challenges of each country. Thus, the pilot projects will give the implementing agencies a chance to improve the project design and fix any unforeseen problems before the projects are scaled up.

When designing the pilot projects, the Korea International Cooperation Agency and the Economic Development Cooperation Fund should review the ALMPs that have been successful in developing countries, such as the Employment Fund in Nepal and the NGO Education for Employment's work the Middle East and North Africa. By reviewing these projects, they will be able gain valuable insights into how to effectively implement ALMPs in developing countries, while learning from the mistakes that had already been made. In addition, they should also review the VET assistance projects that they implemented in the past, which will help them understand the challenges and opportunities in each country, as well as their own strengths and weaknesses.

5. Improve capacity of project contractors

Lastly, in order to make the new policy successful, it is very important to improve the project contractors' capacity for implementing ALMPs in developing countries.

Due to Korea's history of focusing on public sector VET programs, governmental and semi-governmental agencies (such as Human Resource Development Korea, the Korean Chamber of Commerce, Korea Polytechnics, and Korea University of Technology and Education) have been the major project contractors to implement Korea's VET assistance projects in developing countries. As government agencies, they have an equal footing with the Korea International Cooperation Agency and the Economic Development Cooperation Fund, so they can also have an influence on the policy-making process. For these reasons, it is very important to get these project contractors on board in order to change the direction of Korea's VET assistance, as well as to develop their capacity for this new type

of assistance.

Although these project contractors have carried out ALMP interventions in Korea to address youth unemployment since the 1990s, they do not have experience implementing similar types of programs in developing countries where the socio-economic environment is very different from Korea's. Therefore, it is very important to improve their capacity in designing and implementing ALMPs that are suitable for developing countries. Inviting them to participate in pilot projects can be a good opportunity for them to develop these capacities and to understand the importance of changing the direction of Korea's VET assistance.

VII. Conclusion

With the increase in youth unemployment around the world, many countries have turned to VET as a possible policy solution, both domestically and as part of their development assistance strategy. Korea is at the forefront of providing VET assistance to developing countries, based on its own experience of establishing an effective public VET system which contributed to the country's rapid economic development. Although continuing the current VET assistance policy would be the easiest option for the Korean government in many ways, it is not the most effective way to tackle the problem of youth unemployment in developing countries.

This paper found that promoting ALMPs would be the best policy option for improving Korea's VET assistance to developing countries. First, ALMPs will be effective in addressing youth unemployment, especially when it is designed to be flexible and market-oriented. Second, it is politically feasible, because the Korean government is familiar with ALMPs which are also being implemented in Korea. Third, it meets the criteria of technical practicality, because the implementing agencies of Korea's VET assistance have experience implementing ALMPs domestically. Fourth, it ensures local participation, because ALMPs directly involve employers and the local community in on-the-job trainings and job search assistance. Lastly, it is financially sustainable, because it does not require the maintenance of expensive training institutions and equipment.

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For the Korean government to adopt this new VET assistance policy, a holistic strategy needs to be taken by the various stakeholders, including the civil society, research institutes and private consulting firms, relevant government ministries, implementing agencies, and project contractors. By following the strategies outlined in this paper, Korea will be able to improve its VET assistance policies so it can better tackle the problem of youth unemployment in developing countries, contributing to their economic development and social stability.

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Appendix: Korea's VET assistance projects (2006 to 2013)

Year	Agency	Country	Project Title	Amount (USD million)	Income group
2006	KEXIM	Cambodia	National Cambodia-Korea Vocational Training School Project	1,04733	LDCs
2006	KEXIM	Uzbekistan	Vocational Education Development Project	0,04964	LMICs
2006	KOICA	Afghanistan	Establishment of Korea - Afghanistan Vocational Training Institute	1,01003	LDCs
2006	KOICA	Algeria	Improvement of the Vocational Training Center in Algeria	0,86915	UMICs
2006	KOICA	Egypt	Improvement of the Auto-Maintenance Vocational Training Center	0,24251	LMICs
2006	KOICA	Egypt	Upgrading Auto-Maintenance Vocational Training Center	1,05013	LMICs
2006	KOICA	Guatemala	Establishment of the Textile High Technical Training Workshop	0,1644	LMICs
2006	KOICA	Honduras	2nd Project to Upgrade Korea-Honduras TTC	0,3413	LMICs
2006	KOICA	Indonesia	Construction of Korea-Indonesia Technical & Cultural Center	0,15387	LMICs
2006	KOICA	Iran	Establishment of Automotive Vocational Training Center in Iran	0,03921	UMICs
2006	KOICA	Iraq	Establishment of the Korea-Iraq Vocational Training Center	0,01112	LMICs
2006	KOICA	Myanmar	The Project for the Establishment of the Vocational Training Center	0,01211	LDCs
2006	KOICA	Pakistan	Reconstruction of Government College of Commerce	1,57286	LMICs
2006	KOICA	Sri Lanka	The Project for Upgrading Jaffna Technical College	0,91013	LMICs
2006	KOICA	Vietnam	Project to Upgrade Korea-Vietnam Industrial Technology School	0,00026	LMICs
2006	KOICA	Vietnam	Upgrading of Korea-Vietnam Industrial Technology School	0,01251	LMICs
2006	KOICA	Vietnam	The 1st Vocational Training Project in Vietnam	0,04747	LMICs

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2007	KOICA	Afghanistan	Workshop on Vocational Education & Training for Afghanistan Officials	0.806411	LDCs
2007	KOICA	Algeria	The Improvement of the Vocational Training Center in Algeria	0.125909	UMICs
2007	KOICA	Bangladesh	Program for the Effective Vocational Training in Bangladesh	1.130107	LDCs
2007	KOICA	Egypt	The Project for Improvement of Luxor Mechanical Industry Secondary School	0.55512	LMICs
2007	KOICA	Egypt	Upgrading Auto-Maintenance Vocational Training Center in Embaba, Guiza	1.110239	LMICs
2007	KOICA	Egypt	The Improvement of the Auto-Maintenance Vocational Training Center	0.260761	LMICs
2007	KEXIM	Sri Lanka	Upgrading National Vocational Training Center at Niyagama	0.090567	LMICs
2007	KEXIM	Tanzania	Vocational Training Centers Establishment Project	4.770771	LDCs
2007	KOICA	Guatemala	The Project for the Establishment of the Automotive Center of the INTECA	0.0247	LMICs
2007	KOICA	Honduras	The 2nd Phase of Upgrading of Korea-Honduras Technical Training Center	0.583221	LMICs
2007	KOICA	Indonesia	Construction of the Korea-Indonesia Technical & Cultural Cooperation Cen	2.311122	LMICs
2007	KOICA	Iran	Establishment of Automotive Vocational Training Center in Iran	4.550788	UMICs
2007	KOICA	Iraq	Establishment of Korea – Iraq Vocational Training Center, Iraq	1.170364	LMICs
2007	KOICA	Jordan	Technical and Institutional Assistance to EETI in Zarqa, Jordan	1.151016	UMICs
2007	KOICA	Libya	The Project for the Establishment of a Construction Vocational Training	0.397349	UMICs
2007	KOICA	Myanmar	The Project for the Establishment of Vocational Training Center in Myanmar	0.416632	LDCs
2007	KOICA	Pakistan	Reconstruction of Government College of Commerce in Mansehra District	0.685971	LMICs
2007	KOICA	Sri Lanka	The Project for Upgrading Jaffna Technical College	1.536571	LMICs
2007	KOICA	Uzbekistan	Development of Vocational Training Capacity in Uzbekistan	0.046656	LMICs
2007	KOICA	Viet Nam	The Project for the Upgrading of the Korea-Vietnam Industrial Technology	1.055002	LMICs

2007	KOICA	West Bank and Gaza Strip	The Project for the Establishment of the Jenin Industrial School in Pale	0.025354	LMICs
2008	KOICA	Afghanistan	Project for Vocational Training in Parwan Province of Afghanistan	0.029454	LDCs
2008	KOICA	Afghanistan	Workshop on Vocational Education & Training for Afghanistan Officials	0.420294	LDCs
2008	KOICA	Bangladesh	The Program to Enhance the Vocational Training Capacity of Bangladesh	2.450923	LDCs
2008	KOICA	Ecuador	The Project for the Establishment of ICT Training Center of the Guayas Province in Ecuador	0.284968	UMICs
2008	KOICA	Egypt	The Improvement of the Auto-Maintenance Vocational Training Center	0.000356	LMICs
2008	KOICA	Egypt	The Project for Improvement of Luxor Mechanical Industry Secondary School	0.319757	LMICs
2008	KOICA	Egypt	The Project for Upgrading Auto-Maintenance Vocational Training Center in Embaba Guiza	0.107474	LMICs
2008	KOICA	Guatemala	The Project for the establishment of Korea-Guatemala ICT Training Center	0.312554	LMICs
2008	KOICA	Guatemala	The Project for the Establishment of the Automobile Center of the INTECAP Training Center in Guatemala	0.547591	LMICs
2008	KEXIM	Sri Lanka	The Upgrading National Vocational Training Center at Niyagama	6.340894	LMICs
2008	KEXIM	Tanzania	Vocational Training Centers Establishment Project	0.973405	LDCs
2008	KOICA	Iran	Establishment of Automotive Vocational Training Center in Iran	0.539749	UMICs
2008	KOICA	Jordan	Institutional and Technical Assistance to the Vocational Training Centre in Zarqa	2.042966	UMICs
2008	KOICA	Libya	The Project for the Establishment of Vocational Training Center in Libya	0.522073	UMICs
2008	KOICA	Myanmar	The project for the Establishment of the Vocational Training	1.142702	LDCs

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2008	KOICA	Nepal	The Project For the Establishment of the KOREA-NEPAL	0.139425	LDCs
2008	KOICA	Uzbekistan	Project for the Development of the Vocational Training Capacity in Uzbekistan	0.1875	LMICs
2008	KOICA	Viet Nam	The Project for the Upgrading of the Korea-Vietnam Industrial Technology School	1,224828	LMICs
2008	KOICA	West Bank and Gaza Strip	The Establishment of the Jenin Industrial Secondary School	0.822292	LMICs
2009	KOICA	Afghanistan	Project for Vocational Training in Parwan Province, Afghanistan	4,842557	LDCs
2009	KOICA	Bangladesh	Program for the Effective Vocational Training in Bangladesh	0.222765	LDCs
2009	KEXIM	Nicaragua	Creation of technical-methodological capabilities in vocational training centers	3,447892	LMICs
2009	KEXIM	Sri Lanka	The Upgrading National Vocational Training Center at Niyagama	0.807649	LMICs
2009	KEXIM	Tanzania	Vocational Training Centers Establishment Project	0.381632	LDCs
2009	KOICA	Jordan	Technical and Institutional Assistance to EETI in Zarqa, Jordan	0.085041	UMICs
2009	KOICA	Myanmar	The Project for the Establishment of Vocational Training Center in Myanmar	0.390137	LDCs
2009	KOICA	Nepal	The Project For the Establishment of the KOREA-NEPAL	0.928792	LDCs
2009	KOICA	Uzbekistan	Development of Vocational Training Capacity in Uzbekistan	0.750995	LMICs
2009	KOICA	West Bank and Gaza Strip	The Project for the Establishment of the Jenin Industrial School in Palestine	1,460497	LMICs
2010	KOICA	Afghanistan	Project for Vocational Training in Parwan Province, Afghanistan	5,642752	LDCs
2010	KOICA	Ghana	The project for the rehabilitation of Accra Technical Training Center in Ghana	0.33117	LMICs
2010	KOICA	Honduras	Establishment of Technical Training Center in SPS, Honduras	0.367967	LMICs

2010	KOICA	Iraq	Project for Vocational Training Center in Sulaimanyah, Iraq	0.980198	LMICs
2010	KOICA	Jordan	The Project for Capacity Building of Vocational Training in Zarqa and Maan	0.052531	UMICs
2010	KOICA	Mongolia	The Project for the Capacity Building of Korea-Mongolia Technical College in Ulaanbaatar	0.180579	LMICs
2010	KOICA	Morocco	The Project for the Establishment of the Training Institute for the Automobile Industry in Casablanca	0.431463	LMICs
2010	KEXIM	Nicaragua	Creation of technical-methodological capabilities in vocational training centers	4.710109	LMICs
2010	KEXIM	Kenya	Technology Development Center Extension Project	0.19634	Other LICs
2010	KEXIM	Cameroon	The Establishment of Advanced Vocational Training Center Project	0.534742	LMICs
2010	KEXIM	Sri Lanka	Upgrading of Niyagama National Vocational Training Center Project	0.820159	LMICs
2010	KEXIM	Uzbekistan	Vocational Education Development Project	8.755899	LMICs
2010	KEXIM	Tanzania	Vocational Training Centers Establishment Project	6.001994	LDCs
2010	KOICA	Myanmar	The Project for the Establishment of Automobile	0.940043	LDCs
2010	KOICA	Nepal	The Project For the Establishment of the KOREA-NEPAL	2.306065	LDCs
2010	KOICA	Pakistan	Cooperation on the Project of Vocational Training for Crisis Affected Persons	0.063066	LMICs
2010	KOICA	Pakistan	The Project For The Establishment of Garment Technology Training Centre in Karachi	0.886233	LMICs
2010	KOICA	Paraguay	The Project for the Establishment of the ICT Training Center in	0.024884	LMICs
2010	KOICA	Rwanda	The Project for the Establishment of Kicukiro Technical Training Centre within the IPRC-Kigali	1.879944	LDCs
2010	KOICA	Uzbekistan	Development of Vocational Training Capacity in Uzbekistan	0.935093	LMICs

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2010	KOICA	Viet Nam	The Project for Establishing the Korea-Vietnam College of Technology in Bac Giang	0.020297	LMICs
2010	KOICA	Viet Nam	The Project for Supporting The Establishment of The National Skill Testing and Certification System	0.007239	LMICs
2010	KOICA	West Bank and Gaza Strip	The Project for Establishment of Secondary Industrial School	0.010092	LMICs
2011	KOICA	Afghanistan	Project for Vocational Training in Parwan Province, Afghanistan	4.213718	LDCs
2011	KOICA	Bangladesh	The Project for Enhancing the Vocational Training Program of TTC, Chittagong	0.430979	LDCs
2011	KOICA	Ghana	The project for the rehabilitation of Accra Technical Training Center in Ghana	0.476049	LMICs
2011	KOICA	Honduras	/Establishment of Technical Training Center in SPS, Honduras	2.100722	LMICs
2011	KOICA	Iraq	Supporting Vocational Training Center in Southern Part of Iraw	0.387963	LMICs
2011	KOICA	Jordan	The Project for Capacity Building of Vocational Training in Zarqa and Maan	0.474627	UMICs
2011	KOICA	Mongolia	The Project for the Capacity Building of Korea-Mongolia Technical College in Ulaanbaatar	0.198961	LMICs
2011	KOICA	Morocco	The Project for the Establishment of the Training Institute for the Automobile Industry	2.259293	LMICs
2011	KOICA	Myanmar	The Project for the Establishment of Automobile	1.501254	LDCs
2011	KOICA	Nepal	The Project For the Establishment of the KOREA-NEPAL	1.722906	LDCs
2011	KOICA	Nepal	The project for the establishment of the technical training center at Kathmandu University	0.273603	LDCs
2011	KEXIM	Kenya	Technology Development Center Extension Project	3.841767	Other LICs
2011	KEXIM	Nicaragua	The Creation of Capabilities in Vocational Training Centers Project	3.938713	LMICs
2011	KEXIM	Cameroon	The Establishment of Advanced Vocational Training Center Project	0.55797	LMICs

2011	KEXIM	Sri Lanka	Upgrading of Nivagama National Vocational Training Center Project	0.105003	LMICs
2011	KEXIM	Uzbekistan	Vocational Education Development Project	3,054124	LMICs
2011	KEXIM	Tanzania	Vocational Training Centers Establishment Project	2,031891	LDCs
2011	KEXIM	Viet Nam	Vocational Training Equipment Supply to Ha Tinh Vocational Intermediate School Project	2,153931	LMICs
2011	KEXIM	Viet Nam	Vocational Training Equipment Supply to Quang Binh Vocational Junior College Project	2,688706	LMICs
2011	KOICA	Pakistan	Cooperation on the Project of Vocational Training for Crisis Affected Persons in Malakand Division	0,450144	LMICs
2011	KOICA	Pakistan	The Project For The Establishment of Garment Technology Training Centre in Karachi	0,274374	LMICs
2011	KOICA	Paraguay	The Project for the Establishment of the ICT Training Center in	0,001633	LMICs
2011	KOICA	Rwanda	The Project for the Establishment of Kicukiro Technical Training Centre within the IPRC-Kigali	0,352445	LDCs
2011	KOICA	Uganda	Establishment of Vocational Training Institute in Uganda	0,278576	LDCs
2011	KOICA	Uzbekistan	Development of Vocational Training Capacity in Uzbekistan	1,598405	LMICs
2011	KOICA	Viet Nam	/Project for Upgrading Secondary Vocational Training School of Quang Tri Province, Vietnam/	2,095527	LMICs
2011	KOICA	Viet Nam	The Project for Establishing the Korea-Vietnam College of Technology in Bac Giang	4,584271	LMICs
2011	KOICA	Viet Nam	The Project for Supporting The Establishment of The National Skill Testing and Certification System	0,411998	LMICs
2011	KOICA	West Bank and Gaza Strip	The Project for Establishment of Secondary Industrial School	0,210435	LMICs
2012	KOICA	Afghanistan	Project for Vocational Training in Parwan Province, Afghanistan	3,220349	LDCs

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2012	KOICA	Bangladesh	The Project for Enhancing the Vocational Training Program of TTC, Chittagong	1,203,811	LDCs
2012	KOICA	Colombia	Triangular Cooperation Project for Technical Capabilities in Latin America	0,131,119	UMICs
2012	KOICA	Ethiopia	Project for Vocational Capacity Building Korean	4,423,595	LDCs
2012	KOICA	Ghana	The project for the rehabilitation of Accra Technical Training Center in Ghana	1,239,542	LMICs
2012	KOICA	Honduras	Establishment of Technical Training Center in SPS, Honduras	1,644,934	LMICs
2012	KOICA	Iraq	Supporting Vocational Training Center in Southern Part of Iraw	1,109,615	LMICs
2012	KOICA	Jordan	The Project for Capacity Building of Vocational Training in Zarqa and Maan	0,869,626	UMICs
2012	KOICA	Mongolia	The Project for the Capacity Building of Korea-Mongolia Technical College in Ulaanbaatar	0,073,29	LMICs
2012	KOICA	Morocco	The Project for the Establishment of the Training Institute for the Automobile Industry in Casablanca	2,806,764	LMICs
2012	KOICA	Myanmar	The Project for the Establishment of Automobile	0,117,693	LDCs
2012	KOICA	Nepal	The Project For the Establishment of the KOREA-NEPAL	0,453,079	LDCs
2012	KOICA	Nepal	The project for the establishment of the technical training center at Kathmandu University	0,550,994	LDCs
2012	KOICA	Pakistan	Upgrading of the Pak-Korea Garment Tech Institute in Karachi	0,216,034	LMICs
2012	KOICA	Paraguay	The Project for the Establishment of the ICT Training Center in	0,537,015	LMICs
2012	KOICA	Philippines	Upgrading and Enhancement Of Korea-Philippines Vocational Center Davao	0,380,605	LMICs
2012	KOICA	Uganda	Establishment of Vocational Training Institute in Uganda	0,102,334	LDCs
2012	KEXIM	Kenya	Technology Development Center Extension Project	3,833,761	Other LICs
2012	KEXIM	Nicaragua	The Creation of Capabilities in Vocational Training Centers Project	0,578,918	LMICs

2012	KEXIM	Cameroon	The Establishment of Advanced Vocational Training Center Project	10,029156	LMICs
2012	KEXIM	Nicaragua	The Vocational Training Centers Project – Phase II	0,398098	LMICs
2012	KEXIM	Uzbekistan	Vocational Education Development Project	0,496141	LMICs
2012	KEXIM	Tanzania	Vocational Training Centers Establishment Project	0,670951	LDCs
2012	KEXIM	Viet Nam	Vocational Training Equipment Supply to Ayunpa Vocational Intermediate School Project	2,692282	LMICs
2012	KEXIM	Viet Nam	Vocational Training Equipment Supply to Ha Tinh Vocational Intermediate School Project	0,883018	LMICs
2012	KEXIM	Viet Nam	Vocational Training Equipment Supply to Quang Binh Vocational Junior College Project	0,293809	LMICs
2012	KOICA	Uzbekistan	Development of Vocational Training Capacity in Uzbekistan	0,293976	LMICs
2012	KOICA	Viet Nam	Project for Upgrading Secondary Vocational Training School of Quang Tri Province, Vietnam	0,055563	LMICs
2012	KOICA	Viet Nam	The Project for Establishing the Korea–Vietnam College of Technology in Bac Giang	0,593767	LMICs
2012	KOICA	Viet Nam	The Project for Supporting The Establishment of The National Skill Testing and Certification System	0,706756	LMICs
2012	KOICA	West Bank and Gaza Strip	The Project for Establishment of Secondary Industrial School	1,83476	LMICs
2013	KOICA	Afghanistan	Project for Vocational Training in Parwan Province, Afghanistan	4,34563	LDCs
2013	KOICA	Bangladesh	The Project for Enhancing the Vocational Training Program	3,453777	LDCs
2013	KOICA	Bangladesh	The Project for Modernization and Strengthening of Training Institute	0,03019	LDCs
2013	KOICA	Cambodia	The Project for the Establishment of HRD Center in Royal University	1,727578	LDCs
2013	KOICA	Cameroon	The Project for the National Institute of Vocational Trainers	0,577618	LMICs

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2013	KOICA	Colombia	Triangular Cooperation Project for Technical Capabilities	0.42089	UMICs
2013	KOICA	Ethiopia	Project for establishment of TVET College in Tigray, Ethiopia	0.709417	LDCs
2013	KOICA	Ethiopia	Project for Vocational Capacity Building Korean	0.015617	LDCs
2013	KOICA	Haiti	Project for the establishment of the garment technology training	1,814994	LDCs
2013	KOICA	Honduras	Establishment of Technical Training Center in SPS, Honduras	0.12006	LMICs
2013	KOICA	Iraq	Supporting Vocational Training Center in Southern Part of iraw	2.85008	LMICs
2013	KOICA	Jordan	The Project for Capacity Building of Vocational Training	2,943297	UMICs
2013	KOICA	Morocco	The Project for the Establishment of the Training Institute	1.179439	LMICs
2013	KOICA	Mozambique	Project for capacity building of Matola Industrial Institute	1,059455	LDCs
2013	KOICA	Nepal	The Project For the Establishment of the KOREA-NEPAL	0.051577	LDCs
2013	KOICA	Nepal	The Project for the establishment of technical training center	1.698509	LDCs
2013	KOICA	Pakistan	Upgrading of the Pak-Korea Garment Tech Institute in Karachi	0.132682	LMICs
2013	KOICA	Paraguay	The Project for the Establishment of the ICT Training Center in	1,748454	LMICs
2013	KOICA	Philippines	The Project for the Establishment of HRD Center in Philippine	1,023285	LMICs
2013	KOICA	Philippines	Upgrading and Enhancement Of Korea-Philippines Vocational Center Davao	0.75392	LMICs
2013	KOICA	Rwanda	The Project for the Establishment of Kicukiro Technical Training	0.838176	LDCs
2013	KOICA	Sri Lanka	Modernization and Upgrading of Automobile Centers in the Colleges	0.415635	LMICs
2013	KOICA	Uganda	Establishment of Vocational Training Institute in Uganda	0.680161	LDCs
2013	KOICA	Uzbekistan	The Project for Capacity Building of Vocational Training Education	0.365082	LMICs

2013	KOICA	Viet Nam	Project for Improving Central Highlands Vocational college	0.571545	LMICs
2013	KOICA	Viet Nam	Project for Upgrading Secondary Vocational Training School	2.32192	LMICs
2013	KOICA	Viet Nam	The Project for Establishing the Korea-Vietnam College of Technology	3.54822	LMICs
2013	KOICA	Viet Nam	The Project for Supporting The Establishment of The National Skill	0.154708	LMICs
2013	KOICA	West Bank and Gaza Strip	The Project for Establishment of Secondary Industrial School	0.942108	LMICs
2013	KEXIM	Kenya	Technology Development Center Extension Project	1.249328	Other LICs
2013	KEXIM	Cameroon	The Establishment of Advanced Vocational Training Center Project	2.937746	LMICs
2013	KEXIM	Nicaragua	The Vocational Training Centers Project – Phase II	6.124538	LMICs
2013	KEXIM	Uzbekistan	Vocational Education Development Project	0.417027	LMICs
2013	KEXIM	Viet Nam	Vocational Training Equipment Supply to Ayunpa Vocational Intermediate School Project	0.307696	LMICs

Source: OECD Aid Statistics (<http://stats.oecd.org/qwids>)

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제II장

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제III장