

Effectiveness of Korea's Development Cooperation to Enhance the Vocational Training Capacity of the BKTTC: Need for Building Absorptive Capacity for Effective Development Cooperation in Bangladesh

Md. Roknuzzaman Siddiky¹

Abstract: *International development cooperation involving transfer of knowledge, skills and technology can be a powerful catalyst to facilitate human and institutional capacity building of the firms or organizations of the developing countries, in particular, the least developed countries (LDCs). However, its effectiveness mostly depends on the recipient firm's level of absorptive capacity. Unfortunately, usually the firms of the LDCs are characterized by very low level of absorptive capacity and thereby affect maximizing the benefits from external resources (e.g., knowledge, skills and tools). The present paper examines the effectiveness of Korea's development cooperation, in particular, KOICA's project-type cooperation in the form of transfer of skills and technology to enhance institutional and vocational training capacity of the Bangladesh-Korea Technical Training Centre (BKTTC) from the viewpoint of the relevant instructors. A total of 30 purposively selected instructors were interviewed by using semi-structured interview schedule supplemented by open-ended questions. The data were measured in terms of 5-point Likert-type scales based on median values. The empirical evidence suggests that the BKTTC has lack of absorptive capacity to utilize the external resources. Hence, building absorptive capacity has broader implications to maximize the effectiveness of development cooperation in Bangladesh. The paper puts forward a theoretical model involving HRD practices, HRM practices, and building organizational capability for building absorptive capacity in order to utilize external resources for effective development cooperation. Finally, the paper suggests some policy recommendations.*

Keywords: international development cooperation, ODA, KOICA's ODA, technical cooperation, external resources, prior-related knowledge, absorptive capacity, institutional capacity building.

Background of the Study

International development cooperation has become an important global agenda soon after the Second World War in consequence of changes in international political and economic order. International development cooperation under the name of foreign aid has received enormous attention in the world since the implementation of European Recovery Program, the Marshal Plan, following the Second World War. As such, Marshal Plan served as a keystone for international development cooperation (Degnbol-Martin and Engberg-Pedersen 2003; Stokke 2009). However, in course of time, there have been changes in the objectives and patterns of international development cooperation. Currently, it is an important area in the overall policy for global development. Today, the main objective of development cooperation is to promote economic and social development of the developing world.

¹ Md. Roknuzzaman Siddiky, PhD, is a "Lecturer in Sociology" at Rajshahi College, Rajshahi, Bangladesh. The present paper was prepared based on his research as part of his doctoral study at the Graduate School of Techno-HRD of the Korea University of Technology and Education (KOREA TECH), Cheonan City, the Republic of Korea.

While development cooperation has long been recognized as a catalyst of development, there has been a growing criticism about the effectiveness of the transfer of knowledge, skills and technology to promote human and institutional capacity building of the developing countries, specifically the LDCs (Arndt, 2000; Denning, 2002; Morgan and Baser, 1993; Morgan, 2002; Fukuda-Parr, Lopez and Malik, 2002; Malik, 2002; Browne, 2002; JICA, 2003; OECD, 2006; Moon, 2011). JICA (2003) pointed out that the effectiveness of technical cooperation has been controversial to fill up the knowledge gap in developing countries and it performed least favourably in institutional capacity building of the developing countries. As such, the effectiveness of the development cooperation in the form of transfer of skills and technology mostly depends on the level of absorptive capacity of recipient firms of the developing countries (Cohen and Levinthal, 1990; Astrid, Cristina and Ruzana, 2008; Omar, Thakim and Nawawi, 2011). That is, to maximize the benefits from external resources (e.g. knowledge, skills & tools), the recipient firms or organizations must have an adequate amount of absorptive capacity. Otherwise, the development cooperation will not be effective on the part of both developed country and its developing partners. Thus, the study was intended to examine the effectiveness of development cooperation in the light of Korea's official development assistance provided through KOICA to Bangladesh. However, the focus was given on the examination of KOICA's project, in particular, technical cooperation in the area of vocational training in Bangladesh.

Defining Development Cooperation

Development cooperation has been defined by the Ministry of Foreign Affairs of Finland (2005) as the practical work that is undertaken with the aim of improving the position of developing countries. According to Regeringskansliet, the Government Offices of Sweden (2008), the overall objective of international development cooperation is to help create conditions that will enable the poor to improve their lives. Thus, international development cooperation or development aid is always targeted to focus on reducing human poverty, mitigating human sufferings, facilitating human development, improving quality of lives, achieving UN MDGs and addressing the challenges of development of the developing countries and the LDCs, and thereby support them to step up their economic and social development ((Degnbol-Martin and Engberg-Pedersen, 2003; Riddel, 2007). Hence, international development cooperation may be understood as official development assistance commonly known as ODA that involves concessional loans, grants and technical cooperation aimed at promoting economic and social development of the developing countries. However, technical cooperation or TC is sometimes known as technical assistance which is commonly referred to as TA.

Framework of Korea's Development Cooperation

The Republic of Korea provides its international development cooperation principally under the name of Korea's official development assistance to the developing countries. Thus, Korea's development cooperation can be understood as Korea's ODA which is mainly aimed to promote economic and social progress and sustainable development of the developing countries and to assist them in order

to achieve Millennium Development Goals (Chang, 2005; KOICA, 2009, 2011; MOFAT, 2011). Korea's ODA consists of three types of aid: a) **bilateral grants**, b) **bilateral loans**, and c) **multilateral assistance** (MOFAT and OECD 2008; KOICA, 2008). **Bilateral grant** aid consists of technical cooperation and various types of transfers (made in cash, goods, or services) with no obligation for repayment. **Bilateral grants** are mainly administered by the Korea International Cooperation Agency, namely KOICA under the auspices of the Ministry of Foreign Affairs and Trade (MOFAT). **Bilateral loans**, however, are provided based on concessional terms under the name of the Economic Development Cooperation Fund (EDCF). Bilateral loans, or soft loans which require repayment, are managed by the Export-Import Bank of Korea under the guidance of the Ministry of Strategy and Finance (MOSF). **Multilateral assistance** is delivered either as financial subscription or contribution to international agencies. With regard to multilateral assistance or multilateral aid, the Ministry of Strategy and Finance is responsible for subscriptions to international development banks such as the International Monetary Fund (IMF), while the Ministry of Foreign Affairs and Trade (MOFAT) is in charge of making contributions to international organizations such as the bodies of the United Nations (KOICA, 2006a, 2006b, 2008; MOFAT and OECD, 2008).

Korea's ODA system can be diagrammed as follows:

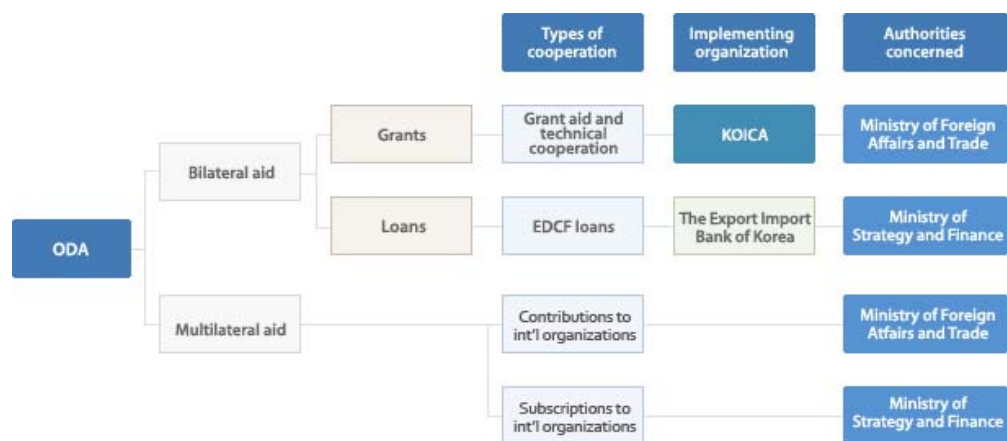


Figure-1: Korea's ODA System

Source: KOICA (2008), p.12; MOFAT and OECD (2008), p. 10.

Thus, the framework of Korea's international development cooperation or the Korean aid architecture is based on two main pillars. The Ministry of Foreign Affairs and Trade (MOFAT) is in charge of Korea's grant aid policy which is implemented by the Korea International Cooperation Agency (KOICA). The Ministry of Strategy and Finance (MOSF) determines concessional loan policy, which is implemented by the Korea Export-import Bank's Economic Development Cooperation Fund (EDCF). On the multilateral side, the Ministry of Foreign Affairs and Trade (MOFAT) and the Ministry of Strategy and Finance (MOSF) are jointly responsible for multilateral assistance. However, as far as Korea's development cooperation is concerned, apart from the MOFAT and the MOSF, a further 30

other ministries, agencies and municipalities are involved in providing small amounts of grant aid, mainly in the form of TC.

KOICA as an Actor of Korea's Development Cooperation

Korea's development cooperation reached a milestone in the early 1990s. In April, 1991, the Korean Government formed the Korea International Cooperation Agency (KOICA) to serve as the official central agency to provide Korea's bilateral ODA to the governments of developing countries for their economic and social development. Korea's bilateral ODA implemented by the KOICA includes: a) **grant aid**, and b) **technical cooperation**. Grant aid encompasses project aid (provision of equipment), aid in kind, disaster relief, and support to NGO while technical cooperation includes training, expertise sharing, Korea Overseas Volunteers (KOVs), and development studies (KOICA, 2001, 2006b). Since its beginning, KOICA has been increasingly taking active part to support the developing countries' efforts with its grant aid and technical cooperation to achieve sustainable economic and social development (KOICA, 2006b, 2009).

KOICA's development assistance focuses on seven core sectors that were selected according to Korea's comparative advantages and developing countries' needs for development. The seven core supporting sectors are: education, health, governance, rural development, ICT, industry & energy, environment & others (KOICA, 2009, 2011). It is noteworthy to mention that KOICA's sectoral support strategy is closely concerned with the achievement of the MDGs (KOICA, 2011). In view of continuously changing trends in development assistance efforts and practices, the KOICA has been striving to adjust to these changes by using its limited financial resources effectively on areas where Korea has comparative advantage. Since Korea has the unique experience of economic transformation from one of the poorest countries in the world to one of the most advanced, this know-how has been at the centre of KOICA's development cooperation efforts to facilitate sustainable socio-economic development of its partner countries (KOICA, 2006b). In 2009, USD 279.26 million was allocated for 112 cooperation partner countries including 56 priority countries and 25 multilateral organizations. By region, Asia, having the world's highest concentration of poor, and Africa where the most LDC are located, received 40% and 19.1 % respectively, or a total 59.1% of the budget (KOICA, 2009, p. 18).

Trends of KOICA's Development Assistance in Bangladesh

Since its inception in 1991, KOICA has been striving to support the endeavours of the Government of Bangladesh to step up the economic and social development of the country through its bilateral development assistance. In consideration of the Country Assistance Strategy (CAS) of Korean Government and in line with its commitment to alleviate the global poverty and contribute to the socio-economic development of the developing countries and assist them to achieve the UN MDGs, the KOICA has provided its development assistance in Bangladesh focusing on a number of areas of development including education, ICT, health, agriculture and rural development, governance,

environment and climate change and so on (KOICA and Worlds Friends Korea, 2011). From 1991 to 2010, KOICA provided its bilateral development assistance totalled approximately USD 41.85 million (KOICA, 2011). KOICA's development assistance to Bangladesh from 1991 to 2008 has been presented in the following table:

Table-1: KOICA's development assistance in Bangladesh (1991-08)

SL #	Year	Amount of Grant Aid (Unit 10,000 USD)
01	1991	19.5
02	1992	22.9
03	1993	26.9
04	1994	33.2
05	1995	109.3
06	1996	130.1
07	1997	87.8
08	1998	54.8
09	1999	51.4
10	2000	59.7
11	2001	79.5
12	2002	123.1
13	2003	139.2
14	2004	139.8
15	2005	134.1
16	2006	335.9
17	2007	688.0
18	2008	810.4
19	2009	325.2
20	2010	814.3
Total Grant Aid		4 1,850,000 (USD 41.85 Million)

Source: KOICA (2011), p. 128

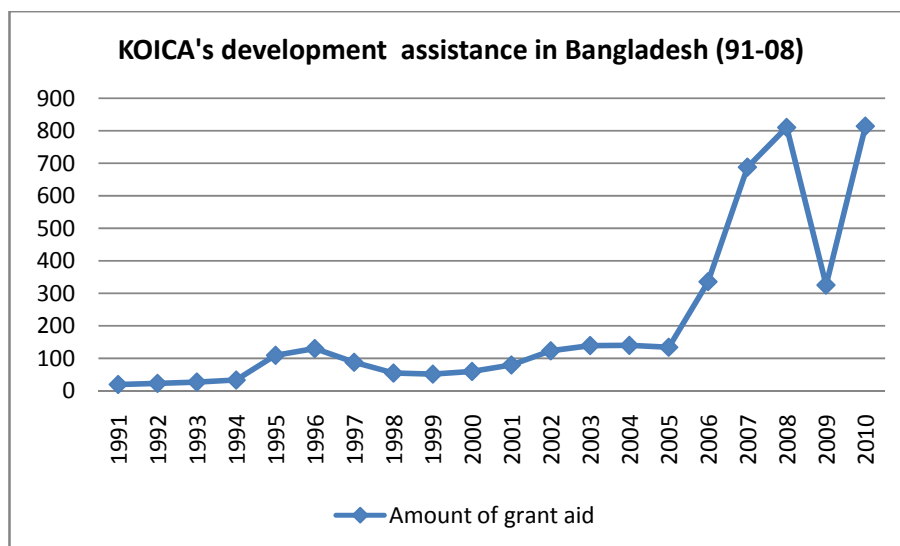


Chart 1: KOICA's development assistance in Bangladesh (1991-08)

The table and graph above show KOICA's development assistance or ODA in Bangladesh from 1991 to 2010 expressed in terms of grant aid while KOICA's technical cooperation is included in its grant aid. From 1991 to 2010, KOICA administered a total of USD 41,850,000 (41.85 million) grant aid in Bangladesh. As can be seen from the table and graph that KOICA's grant aid increased gradually from 19.5 (Unit 10,000 USD) in 1991 to 134.1 (Unit 10,000 USD) in 2005 while with a fluctuation. However, from 2006 to 2008, KOICA's grant aid increased sharply, and it dropped dramatically in 2009 due to recession in Korea's economy. In 2010, KOICA's grant aid rose remarkably amounting to approximately USD 8,14,0000 (USD 8.14 million). Bangladesh was classified by the KOICA as a 'priority country for development' in 2006 causing a dramatic increase of its grant aid to Bangladesh. Since Bangladesh has become a 'priority country for development,' several development projects have been carried out in Bangladesh. Most of its large development projects were concerned with education and ICT sectors where enhancing country's vocational training capacity in order to produce skilled manpower, and developing ICT infrastructure so as to facilitate HRD in ICT were key objectives.

KOICA's Development Assistance in Vocational Training Capacity of Bangladesh

Korea achieved its own economic development through the development of human resources where vocational education played a pivotal role (Lee and Jung, 2005). As such, the KOICA has concentrated its development assistance to the education sector in Bangladesh while special focus has been given on country's vocational education and training (VET). To upgrade VET system in Bangladesh and enhance its national vocational training capacity so as to generate skilled manpower both for local and overseas market, the KOICA undertook a Project entitled "Program to Enhance the Vocational Training Capacity of Bangladesh" in 2007.

The Project¹ was executed at Mirpur Technical Training Centre in Dhaka from 2007 to 2009. The training centre is now known as Bangladesh-Korea Technical Training Centre (BKTTTC). As part of the implementation of the Project, Korea transferred its own technology, that is, about 4000 training equipments for different trades, developed modern course curriculum for vocational training and provided trainings to the instructors, and other necessary institutional and technical supports². The vision of the Project was to reduce the high level of youth unemployment and alleviate poverty in Bangladesh (GOB, 2007). However, the KOICA has recently undertaken another project concerning VET to be implemented at Chittagong in Bangladesh. The project has been titled as “Project for Enhancing the Capacity of Technical Training Centre in Chittagong” for which KOICA has allocated USD 4.8 million (KOICA, 2011). Moreover, a number of Korea Overseas Volunteers (KOVs) have been working at different technical training centres across the country so as to assist vocational instructors to develop their expertise through sharing Korean skills and expertise in the field of VET. Hence, with regard to Korea’s development cooperation in the form of project-type cooperation to enhance the vocational training capacity of Bangladesh, the following important queries arise:

- a) To what extent was Korea’s development cooperation relevant to enhance the vocational training capacity of Bangladesh?
- b) To what extent was it efficient to enhance the institutional capacity of the BKTTTC?
- c) To what extent was it effective to enhance the vocational training capacity of the BKTTTC?
- d) To what extent was it effective to generate skilled manpower & technicians in Bangladesh?
- e) To what extent was it successful to export trained workforce abroad for employment?

Methodology of the Study

The study employed mixed approaches, that is, both qualitative and quantitative techniques in order to investigate its designated research questions. The study employed multiple data sources including interviewing, direct observations and document analysis. To evaluate the effectiveness of Korea’s development cooperation to enhance the vocational training capacity of the BKTTTC, KOICA’s development Project entitled “Program to Enhance the Vocational Training Capacity of Bangladesh” was evaluated³ from the viewpoint of the concerned instructors of the BKTTTC. Out of 68, 30

¹ It is noteworthy that the Project was aimed to enhance national vocational training capacity of Bangladesh while it was implemented at only one technical training centre in Bangladesh. Hence, the study mainly attempts to examine the effectiveness of the Project to enhance the vocational training capacity of the BKTTTC.

² Korea’s such type of development cooperation through KOICA involves its technical cooperation. According to OECD (2008), technical cooperation involves (a) grants to national or aid recipient countries receiving training at home and abroad, (b) payments to consultants, advisers and similar personnel as well as administrators serving in recipient countries (including the cost of associated equipment).

³ The Project was evaluated in terms of five criteria as proposed by the Development Assistance Committee (DAC) of the OECD to evaluate a development intervention. The five evaluation criteria are: relevance, efficiency, effectiveness, impacts and sustainability. However, the paper mainly focused on two criteria which are efficiency and effectiveness. DANIDA (2006) suggests that efficiency is a measure of how economically resources/inputs (funds, expertise, time etc.) are converted into results. OECD (2010) propounds that effectiveness is a measure of the extent to which an aid activity attains its objectives.

instructors from different trades were purposively¹ selected for intensive interview² for which a semi-structured interview schedule supplemented by open-ended questions was employed. Among the total of 30 respondents, 13 were those who received invitational training in Korea and the rest 17 were those who did not receive training in Korea³. To measure the effectiveness of Korea's development cooperation, **5-point Likert-type scales** (from lowest to the highest degree of efficiency or effectiveness) were used⁴. Due to the ordinal nature of the data, median is the suitable measure⁵. Hence, the study deliberately used median rather than mean.

Empirical Findings

Table 2: Relevance of the transfer of Korean technology & expertise in Bangladesh:

SL #	Positive Aspects	Negative Aspects
1	Korean technology is very modern or advanced. Bangladesh will benefit from Korean technology such as CNC machine . Transfer of Korean technology would help to disseminate technology in Bangladesh.	Korean technology is sophisticated requiring much skill and advanced training of the instructors to utilize. Therefore, to maximize the benefits from Korean technology, building absorptive capacity is required.
2	Korean technology is much helpful to enhance the capacity of the instructors, trainees and training centre as well.	In some cases, there is lack of application or implementation in Bangladesh such as automobile.
3	Korean technology & expertise is very helpful to fill up the knowledge gap of the instructors and to enhance their technical skills.	Spare parts are sometimes not available in Bangladesh and thereby affect training.
4	Transfer of Korean technology allows the instructors and trainees to learn or be familiar with modern high technology.	There is lack of relevant industries in Bangladesh where the graduates could be employed after completion of the training.

Table-2 shows the relevance of the transfer of Korean technology & expertise to enhance the vocational training capacity of Bangladesh. It is evident that the transfer of Korean technology &

¹ The researcher applied his personal judgment and intelligence while selecting samples. Hence, the study involves purposive sampling.

² The interviews were held over a long period of time. The researcher held face to face interview with the respondents. However, to have a deeper understanding and investigate the fact, the researcher held frequent telephonic interview with the respondents.

³ The samples were classified into two groups on the basis of their status of receiving training in Korea. The rationale behind this grouping was to look into the effectiveness of Korea's development cooperation in the form of transfer of skills and technology and reduce the biasness. The respondents those who received invitational training in Korea shared their ideas and knowledge about the efficiency and effectiveness of Korea's TC in the form of invitational training. However, both types of respondents put forward their views about the relevance, efficiency and effectiveness of the Korea's development cooperation.

⁴ San Jose State University (2011) carried out a study aiming to examine Student Opinion of Teaching Effectiveness (SOTE) by using 5-point Likert-type scale from lowest to the highest degree of effectiveness where 1= very ineffective, 2= ineffective, 3= somewhat effective, 4= effective, and 5= very effective.

⁵ Nachmias & Nachmias (2008) suggest that median is suitable for use with variables measured at or above the ordinal level.

expertise has both positive and negative aspects. Though Korean technology & expertise is helpful to fill up the knowledge gaps, enhance the capacity of the instructors and facilitate institutional capacity of the training centre, it would require building absorptive capacity to maximize the benefits.

Table 3: Evaluation Results Summary

SL #	Research Questions	Median	SD	Rating
1	To what extent was the transfer of Korean technology & expertise relevant to enhance the vocational training capacity of Bangladesh?	5.00	.686	Very relevant
2	To what extent had the KOICA provided the equipments (technology) for the BKTTC?	4.00	.786	Sufficient
3	To what extent had the KOICA provided invitational training for the instructors of the BKTTC?	3.00	.851	Somewhat sufficient
4	To what extent had invitational training in Korea benefited the instructors of the BKTTC to develop their knowledge and skills?	4.00	.650	Satisfactory
5	To what extent had the training provided by Korean Experts at the BKTTC benefited the instructors to develop their knowledge and skills?	4.00	.862	Satisfactory
6	To what extent were the training equipments (technology) provided by the KOICA efficiently used?	3.00	.761	Somewhat efficient
7	To what extent was Korea's development cooperation efficient to enhance the institutional capacity of the BKTTC?	4.00	.865	Efficient
8	To what extent was Korea's development cooperation effective to enhance the vocational training capacity of the BKTTC?	4.00	.865	Effective
9	To what extent was Korea's development cooperation effective to enhance the vocational training capacity of Bangladesh?	3.00	.759	Somewhat effective
10	To what extent was Korea's development cooperation effective to generate skilled manpower and technicians in Bangladesh?	3.00	.768	Somewhat effective
11	To what extent was the Project successful to export trained workforce abroad for employment?	2.00	.308	Not successful

Interpretation and Discussion

Table-3 shows that the transfer of Korean technology & expertise was very relevant with a median value of 5.00 on a 5-point Likert-type scale to enhance the vocational training capacity of Bangladesh. The study identified four major reasons as to why the transfer of Korean technology & expertise is very relevant in Bangladesh. These were: **first**, to **disseminate technology** in Bangladesh; **second**,

to fill-up the knowledge and technological gaps; **third**, to get familiarity with the modern technology and new technology, and **fourth**, to develop technical skills of the instructors. Nonetheless, the transfer of Korean technology was criticized to some extent by some respondents. Since Korean technology is very modern, the instructors require advanced training in line with the level of technology. Hence, building absorptive capacity is needed. Moreover, there is less application of Korean technology in Bangladesh as in the case of automobile.

The study reveals that Korean government (KOICA) provided adequate volume of equipment with a median value of 4.00 to implement the Project. The study found that equipments are modern and their technical level was better as a whole. However, the volume of invitational training provided by the KOICA was somewhat adequate with a median value of 3.00. The study identified the two key reasons. These reasons were: **first**, training period was short compared to the needs of the trainees; and **second**, only 16 instructors received invitational training in Korea out of about 68 instructors in the face of intense needs. Thus, the volume of invitational training did not meet the needs of the Training Centre optimally.

They study reveals that the instructors satisfactorily benefited from invitational training to develop their skills and knowledge corresponding to their jobs with a median value of 4.00 on a 5-Point Likert-type scale. Nevertheless, invitational training was not fully efficient to develop instructors' knowledge and skills. In this regard, the study identified four key reasons. These were: **first**, invitational training in Korea as part of the Project has enabled the instructors to gather new knowledge and learn about new technology. However, the training period was short in comparison with the needs and expectations of the instructors; **second**, not so much emphasis on core courses; **third**, less emphasis on practical orientation; and **fourth**, not having proper alignment or matching or lack of consistency with the syllabus or course curriculum of vocational training.

The study found that the extent to which the instructors benefited from the training provided by the Korean Experts at the BKTTC to develop their knowledge and skills has a median value of 4.00 which suggests that the training was satisfactory while not fully efficient. The study identified two key reasons. These were: **first**, while the Korean Experts were very dedicated, devoted and capable of quality instruction, the training was short and not comprehensive; and **second**, not all instructors received training from the Korean Experts about machine tools operations and other such related matters at the Training Centre.

Table-3 reveals that the median of the extent of utilization of the equipments provided by the KOICA is 3.00. Hence, the Korean equipments were somewhat efficiently used. In this connection, the study attempted to find out the reasons as to why the equipments provided by the KOICA were somewhat efficiently used. The study indentified four key reasons. These were: **first**, not all equipments have

been in use due to insufficient number of students; **second**, lack of technical skills of the instructors to use the sophisticated equipments provided by the KOICA; **third**, lack of advanced training in line with the level of the equipments; **fourth**, not all equipments were in use due to contraction of the duration of the course. Hence, the BKTTC has **lack of absorptive capacity**.

Table-3 shows that Korea's development cooperation involving transfer of skills and technology was efficient to enhance the institutional capacity of the BKTTC with a median value of 4.00. Nevertheless, Korea's development cooperation was not very efficient to enhance the institutional capacity of the BKTTC on a 5-point Likert-type scale. The study identified four key reasons as to why Korea's development cooperation was not so efficient to enhance the institutional capacity of the BKTTC. These were: **first**, not all instructors are academically qualified enough to instruct the course as designed by Korean Experts; **second**, lack of knowledge or skills of the instructors how to handle the equipment; **third**, lack of advanced and continuous training for the instructors in line with the level of equipment; and **fourth**, lack of proper management and supervision.

It is evident from **Table-3** that the median value signifying the extent of effectiveness of Korea's development cooperation to enhance the vocational training capacity of the BKTTC is 4.00. Hence, Korea's development cooperation involving transfer of knowledge and skills was effective. However, Korea's development cooperation was not very effective to enhance the vocational training capacity of the BKTTC on a Likert-type scale. In this regard, Mr. Tariqul Islam, one of the respondents, stated *"The Project provided the BKTTC with modern and sophisticated machines. But, we don't know how to operate some machines as we were not given any instructional training by the Korean Experts how to handle it. We need advance training so that we could instruct"*. Moreover, another respondent stated *"We don't know how to operate some equipment. We don't have any advanced training in line with the level of equipments."* Mr. Hasan, one the respondents, said *"Even though the KOICA transferred advanced equipments and introduced modern curriculum for vocational training, we have insufficient trainees and not all instructors have sufficient academic level to handle the equipment and instruct the modern vocational training course"*.

The study identified five key reasons as to why Korea's development cooperation was not very effective to enhance the vocational training capacity of the BKTTC in spite of having sophisticated training equipment and Korean modern course curriculum. These key reasons were: **first**, not all instructors are academically qualified enough to instruct modern course-curriculum; **second**, lack of sufficient knowledge, skills and expertise (or **prior-related knowledge**) of a significant number of instructors of the BKTTC to utilize Korean advanced equipments and skills. Hence, the BKTTC has **lack of absorptive capacity** to utilize external recourses in the form of knowledge, skills and tools to enhance its vocational training capacity optimally; **third**, lack of advanced and continuous training for the instructors in line with the level of equipment. Thus, not all equipments have been used to

generate maximum benefits; **fourth**, insufficient number of trainees since the vocational training could not meet their needs optimally; and **fifth**, some of trades of the BKTTC such as Automobile trade have lack of sufficient raw materials for the trainees that affect or interrupt organizing vocational training fruitfully.

The study revealed that Korea's development cooperation (project-type cooperation) was moderately or somewhat effective with a median value of 3.00 to enhance the vocational training capacity of Bangladesh. As such, the vocational training capacity of the BKTTC has not enhanced optimally or largely. In this regard, the study identified that the Project was executed at only one technical training centre (TTC) in Bangladesh rather than focusing on other technical training centres. Hence, the improvement of the vocational training capacity of only one training centre does not necessarily lead to the enhancement the entire vocational training capacity of Bangladesh. The whole system of VET in Bangladesh is poor and not so consistent with global standard. It requires government's appropriate policy focusing on both upgrading instructors' quality and institutional capability of all technical training centres.

The study found that Korea's development cooperation was somewhat effective to generate skilled workforce and technicians in Bangladesh with a median value of 3.00. In this connection, the study identified three key reasons as to why Korea's development cooperation was not very effective to generate skilled workforce in Bangladesh. These were: **first**, difficulty of students to get through the advanced course without having prior background or insufficient prior knowledge (often known as **prior-related knowledge**) on vocational education; **second**, less emphasis on practical class due to contraction of duration of the training course. Therefore, there is less scope to use technology to develop skills; **third**, not all instructors are qualified enough to instruct the modern course curriculum and utilize the modern technology transferred from Korea. Hence, lack of sufficient instructional capacity or necessary skills of a significant number of instructors served as a stumbling block to generate skilled workforce and technicians in Bangladesh out of the Project.

Generating overseas employment was one of the major or core objectives of the Project. However, the median value (2.00) points out that the Project was not successful to export trained workforce abroad including Korea. In this case, the study identified that there is no quota or direct channel for overseas employment for the trainees of the BKTTC. The concerned authorities of both governments- Korea and Bangladesh have not undertaken any measure for overseas employment of the trainees in Korea as part of the vocational training under KOICA's Project.

The Notion of Absorptive Capacity

The notion of absorptive capacity is being largely focused in the arena of organizational learning and innovation as well as international development cooperation in the form of transfer of skills and

technology to the developing countries. The notion of absorptive capacity was first used by Cohen and Levinthal (1990) to refer to the ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends. Simply, absorptive capacity has been defined as the firm's ability to deal with or utilize external knowledge (Schmidt, 2005; Astrid, Cristina and Ruzana, 2008). Omar, Takim and Nawawi (2011) suggest that absorptive capacity is the ability of a firm to assimilate external technology, that is, the imported technology (e.g. knowledge, skills and tools). Thus, absorptive capacity can be understood as the ability of a firm or an organization to assimilate and utilize external resources including knowledge, skills and technology or tools (Cohen and Levinthal, 1990; Vinding, 2000; Knudsen, Dalum and Villumsen, 2001; Astrid, Cristina and Ruzana, 2008; Omar, Thakim and Nawawi, 2011). Hence, absorptive capacity is pivotal to maximize the benefits from the external resources such as knowledge, skills, and tools.

Building Absorptive Capacity for Effective Development Cooperation in Bangladesh

Usually, the firms, institutions and organizations in the least developed countries (LDCs) are characterized by very low levels of absorptive capacity (Astrid, Cristina and Ruzana, 2008). Being a least developed country, Bangladesh is not an exception to this. Low level of absorptive capacity is a difficulty to capitalize on development cooperation, in particular, project type cooperation in the form of transfer of skills and technology. Thus, development cooperation to be effective, building absorptive capacity has broader implications in the context of Bangladesh. However, the BKTTC, the recipient organization, has failed to build on absorptive capacity to take advantage of the transfer of Korean technology and skills. The ability of an organization to utilize the external resources is principally based on its level of prior-related knowledge which is greatly related to the level of knowledge and skills of the employees of the organizations.

The **prior-related knowledge** involves basic skills, a shared language, positive attitudes toward learning, relevant prior experience as well as knowledge of the most recent scientific or technological developments in a given field (Cohen and Levinthal, 1990; Omar, Thakim and Nawawi, 2011). Apart from prior-related knowledge, necessary educational level and technical skills of the employees as well as managerial skills of an organization are crucial to assimilate and utilize external resources (Schmidt, 2005; Gray, 2006). Cohen and Levinthal (1990) held that the firm's investment on research & development (R&D) and advanced technical training can be catalyst for building absorptive capacity. As Schmidt (2005) puts forward that the level of education, experience and training of the employees has a positive influence on the firm's level of absorptive capacity. Moreover, firm's HRM practices have a positive association with employees' performance and innovation as it could motivate an employee for better performance (Vinding, 2000; Omar, Thakim and Nawawi, 2011). As such, employees' necessary education and training, and motivation as well are critical to develop absorptive capacity and thereby harness the maximum benefits out of external resources (e.g. knowledge, skills and tools). Hence, the study puts forward the following model for building absorptive

capacity within an organizational structure to maximize the effectiveness of development cooperation in Bangladesh:

Table 4: Building Absorptive Capacity for Effective Development Cooperation

Means	Process	Outcomes (Achievement)
<p>1. Enhancing Employees' Ability: (HRD Practices)</p> <ul style="list-style-type: none"> • Need assessment (need analysis) • Employee training & development; • Training evaluation & feedback • Providing updated information on technology and so on. 	<p>Absorptive Capacity</p> <p>The ability of an organization to assimilate and utilize new technology and external resources.</p>	<ul style="list-style-type: none"> • Maximizing the benefits from external resources such as knowledge, skills and tools (development cooperation); • Enhancement of technological capability; • Enhancement of institutional capacity; • Achieving organizational goals.
<p>2. Raising Employees' Motivation and Job Satisfaction: (HRM Practices)</p> <ul style="list-style-type: none"> • Better compensation; • Merit-based promotion; • Job security; • Incentives for better performance and skills and so on. 		
<p>3. Building Organizational Capability:</p> <ul style="list-style-type: none"> • Organizational development; • Management development; • Supervision and monitoring; • Advanced and continuous technical training in line with technological development; • Research & Development (R&D); 		

The Table 4 represents a theoretical model that shows how an organization through building absorptive capacity within an organizational structure, could utilize external resources involving transfer of knowledge, skills and tools and thereby maximize the benefits from development cooperation. The means¹ for building absorptive capacity are: a) enhancing employees' ability (**HRD practices**) which involves identifying organizational needs to determine whether training is necessary

¹ The means are the key factors that contribute to building absorptive capacity within an organizational structure. The factors are classified into three areas such as HRD practices, HRM practices and organizational capacity development.

for the associated personnel dealing with external resources, providing training in line with needs, training evaluation and feedback, and so on; b) raising employees' motivation and job satisfaction (**HRM practices**) which involves better compensation, merit-based promotion opportunity corresponding to service, incentives for better performance and skills, and so on; and finally c) developing or building organizational capacity (**organizational capacity development**) which involves organizational development, management development, sound supervision & monitoring, research & development, advanced and continuous technical training in line with technological development, knowledge sharing and so on. In this way, an organization can develop absorptive capacity¹ and thereby maximize the effectiveness of development cooperation. The resulting absorptive capacity of the recipient organization may lead to the enhancement of technological capability and institutional capacity, and realization of organizational goals and so on alongside maximizing the effectiveness of development cooperation.

Policy Recommendations

To enhance the vocational training capacity of the BKTTC, it is very necessary to ensure the quality of the instructors. However, as far as the research findings are concerned, a significant number of instructors of the BKTTC are not well-educated and trained enough to instruct the modern course curriculum and deal with the sophisticated equipments or technology. Hence, the Bureau of Manpower, Employment and Training (BMET) should undertake proper measures in building absorptive capacity of the BKTTC and thereby make best use of development cooperation in the form of transfer of knowledge, skills and tools;

While the KOICA provided adequate technology to enhance the institutional and vocational training capacity of the BKTTC, due to lack of absorptive capacity, its institutional and vocational training capacity has not enhanced optimally. Therefore, this is recommended that the Government should focus on advanced and continuous skill development trainings for vocational instructors in line with technological development and global standard so as to develop absorptive capacity.

One of the important objectives of the BKTTC is to produce highly skilled manpower. However, until and unless the BKTTC could ensure quality instructors through organizing advanced and continuous skill development training, it would be very difficult on the part of the BKTTC or the BMET to produce highly skilled manpower in Bangladesh. In this connection, the Government of Bangladesh should establish training academy or training institutions across the country especially for the capacity building of the vocational training instructors.

¹ Building absorptive capacity has been treated as the process which paves the way for maximizing international development cooperation in the form of transfer of knowledge, skills and technology, and organizational effectiveness.

Recruiting very smart and well-educated instructors can be a building block to enhance the vocational training capacity of Bangladesh. The study shows that due to lack of instructors' absorptive capacity or necessary skills, the benefits from development cooperation were not maximized. Thus, it is very necessary for the BMET to recruit very smart and well-educated vocational instructors for its technical training centres (TTCs). Hence, it is recommended that recruitment rules stating a better qualification for the instructors (e.g., at least a 2nd class university bachelor degree in engineering or technology) should be framed or modified. Accordingly, a large number of smart and well-educated or skilled instructors should be employed in various TTCs across the country to meet the demand for smart and well-educated instructors.

Before undertaking any development project or transferring skills and technology in Bangladesh corresponding to VET, the KOICA should provide sufficient technical trainings to the vocational instructors not only in Korea but also in Bangladesh focusing on the operation and maintenance of training equipments and instruction of course-curriculum in a comprehensive manner. Moreover, the KOICA has to ensure whether or not right persons are getting overseas training based on merits and dedications throughout the service.

Apart from HRD practices, it is very necessary to enhance the morale and satisfaction of the vocational instructors corresponding to their job. Hence, sound HRM practices are necessary including providing incentives for quality instructors. The level of absorptive capacity of the BKTTC can be enhanced through developing organizational capability of the BKTTC focusing on management development, sound supervision & monitoring, research and development (R&D), knowledge sharing, and so on.

Finally, to enhance the vocational training capacity of Bangladesh, all the technical training centres and vocational training institutes should be upgraded through employing skilled and smart instructors, providing sufficient equipment and training materials to the training centres, formulating standard course curriculum as well as building institutional capacities. To develop institutional capacities may require building absorptive capacities of the vocational training centres. All the vocational trainings should be connected with country's National Technical and Vocational Qualification Framework (NTVQF) so that the trainees' skills and standard can be recognized nationally and internationally. This may lead to a significant increase of the trainees' participation at the TTCs and VTIS of Bangladesh.

Conclusion

The main objective of international development cooperation involving transfer of knowledge, skills and technology is to facilitate human and institutional capacity building of the firms and governmental organizations of the developing partner countries and thereby support them to spur their economic

and social development. However, as suggested by the empirical evidence that, all instructors of the BKTTC are not identical in terms of skills and academic qualification, nor all instructors have overseas training or advanced training in line with the level of advanced technology. As such, the BKTTC could not get optimum efficacy out of Korean technology & expertise to enhance its institutional and vocational training capacity. Hence, there is an urgent need for building absorptive capacity at the organizational structure of the BKTTC through applying the aforesaid model. Building absorptive capacity is very necessary on the part of any organization in order to benefit from external resources. Until and unless the recipient organization ensures its level of absorptive capacity sufficiently, it would not maximize the effectiveness out of development cooperation. Hence, it is the responsibility of both the partners, developed and developing, to make development cooperation effective on the basis of prioritizing developing country's needs, building absorptive capacity, stressing shared responsibility and mutual accountability, and so on.

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