4. Issues in and Recommendations for TVET Assistance in Africa

4-1 TVET Assistance Needed in Africa

As this paper has discussed up to now, poverty reduction and vocational human resource development are closely related in Africa. The expansion of basic education is necessary for enhancing future workers’ trainability, but that alone will not lead to employment seeing as more than half of all workers in the informal and SME level have entered the workforce after completing apprenticeships or TVET programs at public or private institutions following schooling. However, these jobs are not stable in nature. In any given year 20-30% of enterprises are newly established and a majority will fold from business sometime within their first 3 years – as circumstances are now, only 1% will ever grow to the size of businesses with 10 or more employees. Nurturing the growth of currently unstable SME, while securing human resources at supporting industries capable of attracting foreign capital would be an important measure in providing the multitude of persons unable to escape from poverty with the means to a stable livelihood and thereby additionally extend economic growth. However, the governments of African nations tend to be caught in thinking that TVET is a way to catch up to developed nations by increasing resources allocation to cutting-edge science and engineering programs at tertiary institutions and polytechnic schools. Considering the structure of African workforces and industry and their macro-economic performance, one should say that such policy lacks realism and the course of its progress has not been strategically ascertained with any clarity. First of all, each country should analyze data on which industries are to be enhanced so as to open the way to economic growth, and then base all decisions specifically on unique domestic characteristics; subsequently, by seeing that human resource strategy is developed to achieve this enhancement of industry, it would be possible to absorb insufficiently-utilized workforces of youth who have completed basic education into the industrial sector in addition to strengthening small and medium enterprises.

On the other hand, Sector-Wide Approach (SWAp), which acts as a framework for strategies in poverty reduction and education sector planning, cannot be ignored, particularly in regard to assisting Highly Indebted Poor Countries that are aid-dependent in today’s Sub-Saharan Africa. The primary issue of priority in the education sectors of countries that apply SWAp is the achievement of 2 goals for educational development as included in the MDGs: those are, full expansion of primary education by 2015, and eliminating gender disparities in primary and secondary education. In particular, the influence of the first goal has been quite pervasive and at least half of the education budgets in Sub-Saharan countries are apportioned to primary schools. Also, as aid coordination is being called for, more and more parties are wishing to see that aid be carried out in the form of programs aligned to the national policies of their respective governments based on policy dialogues and mutual linkages established between donor organizations. In such an environment, though the demand for TVET may be high, implementing what an individual government has long requested soon as an independent
project would potentially invite the offense of other parties within the assistance community. TVET is not an issue for the education sector alone; it is a field in which success can only be achieved through the prerequisite use of close collaboration between the industrial and labor sectors. Accordingly, TVET implementation essentially requires that parties related to the policy framework cooperate and actively discuss matters with each other, and involvement in policy-making and systems design has become a prerequisite when looking to support concrete education and training activities, particularly within the current assistance environment. The World Bank and other donors are beginning to make reference to the great need for TVET as a measure for reducing poverty since basic education alone, without linking graduates to the world of work, does not lead to achieving this aim. Therefore, terms for realizing truly effective TVET assistance, in short, include being able to offer convincing recommendations that press not only related parties in Japan but also other donors to understand the significance of TVET, and also coming up with an allocation of resources that governments and donors supporting the field of basic education in particular can deem appropriate and agree to, while considering balanced development of the whole of the education sector. As such, before anything else, the government must clarify its own role in TVET, based on fundamental information regarding the degree to which trainings are held through various modes such as public and private TVET institutions, enterprise-based trainings, and apprenticeship systems, the kinds and levels of skills demanded in the labor market, and the degree to which human resources could be absorbed therein. TVET, unlike basic education, involves numerous links to the private sector to begin with and is not a field that any government could tackle entirely on its own. In addition, even if resources that could be allocated from the education budget to TVET were to increase, surely the amount would not be much greater. In order to effectively carry out vocational human resource development while recognizing the above fact, the role of the government should be kept limited and the private sector should be encouraged to actively take part in training and education. For that to happen, it will become necessary to provide general incentives to private sectors as well as support for improving trainer quality, among other things. Within the global economy, changes in demands for individual skills have become increasingly fast-paced. At the same time, public education and training institutions tend to operate in a rigid, top-down fashion, meaning that despite the fact that a lot of funding is placed in infrastructural investment, they are often unable to meet the changing demands of the labor market. In addition to this, the current aid environment is narrowing the degree to which project assistance may be implemented without involving policy discussion and system design, which requires careful consideration before any serious commitment to assisting independent TVET projects is made. However, there are ways to continue both existing and new technical cooperation projects in coordination with comprehensive support for policy formation, TVET system design, and the formation of certification systems and private sector cooperation. Naturally, no matter how pressing the construction of a system framework may be, the significance of putting projects modeled on that framework into practice does not change. However, whereas TVET's image in the past was of a high technologies education geared for formal sector employment, this report has asserted the point that, to the contrary, the demand for developing trades workers as well as SME is high in Africa. The authors
would like to point out that it is a direction appropriate not only for African governments but also in light of Japan’s aid philosophy. In other words, in view of Japan’s aid philosophy and its own experience of development, placing the focus on assistance for people visible at the nexus of development and poverty reduction (Figure 2-5), i.e. “economic agents making independent efforts for self-reliance”\textsuperscript{131} and the development of trades workers fits within this framework. Also, the approach of training trades workers for the formation of supporting industries aligns well with JICA’s assistance strategy for small and medium sized enterprises, namely, “giving active support to small and medium sized enterprises and groups that have potential for growth, for the sake of enhancing productivity of the economy as a whole and developing industries with international competitiveness”\textsuperscript{132}. 

Secondly, we would also like to point out the importance of organic collaborations among various actors. If Japan can involve other donors and play a leading role in donor harmonization, then JICA’s technical cooperation projects applying its experiences in supporting TVET may be effectively situated in sub-sectoral development plans over the course of policy consultations. Furthermore, mutual linkages among Japanese aid agencies – JICA, Japan Bank for International Cooperation (JBIC) and Japanese embassies – should be strengthened so that TVET assistance can be carried out from an ‘All-Japan’ base. TVET assistance would include activities such as budget support for training funds, expert technical cooperation in policy-making and systems design, model project implementation, and the broad replication of successful model project activities – as well as the provision of facilities and equipment therein, which would all require sizable amount of investment. Consequently, this is a field where efficacy is expected to be extended on the whole by matching and blending different assistance schemes – grant aid, loans, technical cooperation and the dispatch of experts and volunteers. Also, while the merging of JICA and JBIC in 2008 will expand the possibility for utilizing different assistance schemes within the same organization, it is also desirable to consider the complementality of Japanese aid via bilateral and multilateral channels. Japanese trust funds established in various multilateral organizations (eg. the UN and development banks) would potentially contribute to improvements in the effectiveness of Japanese assistance as a whole. Furthermore, as has been mentioned in this paper, industrial human resource development is cross-sectoral in nature. Among Japan’s cooperative projects in Africa, those which are classified as TVET are ones implemented exclusively at formal educational institutions, while those conducted with communities and industry, even though they also aimed at skills development, were categorized in areas of community development, rural development, agricultural development, or local industrial development. And even when operating in the same country, they were planned, operated and evaluated independently of each other. However, in order to provide effective support, the current range of issues ought to be re-visualized while bringing schemes together, so as to embody one comprehensive approach to TVET that spans the social services sector, economic infrastructure sector and direct manufacturing sector.

\textsuperscript{131} JICA (2005b) p.64.
It is hoped that the formulation of local taskforces to coordinate Japanese aid agencies on the ground and the JICA-JBIC merger both prove to be effective for this type of collaboration. One representative model of a single country with multiple aid agencies supporting TVET through the linkage of its parts is Germany. Thus, in Case Study 3 we will introduce Germany’s vocational human resource development program (PEVOT) in Uganda (see also, 3-2-2).

Case Study 3: German Aid Agencies’ Collaborative Assistance for Vocational Human Resource Development in Uganda

PEVOT (Programme for Employment Oriented Vocational and Technical Training) is the congregate body of activities run with a common aim based on the mutual consent between German aid-related agencies and the Ugandan government. GTZ assists the Ministry of Education in capacity building by advising on policy and strategy formation, system reform, ensuring funding stability, and coordination of human resource policy with policies pertaining to economic development and employment. KfW provided private education and training institutions with equipment, while also executing technology upgrades and personnel management training for educators. Other than this, KfW also offers general budget support to exchequer. Human Resources Cooperation trained Education Ministry staff and managers at the local level. It also provided trainings at private education and training institutions through the Uganda Association of Private Vocational Institutions. PEVOT has also cooperated with the GTZ-assisted projects Promotion of Children and Youth (PCY) and Basic Education in Urban Poverty Areas (BEUPA), and has begun testing synergies between vocational training and youth promotion schemes.

PEVOT has been trying three levels of assistance — macro, meso, and micro; while the macro level serves an advisory role for program reform, the meso level contributes to capacity building at the Uganda Vocational Qualifications Framework (UVQF) office and the Uganda Association of Private Vocational Institutions. Furthermore, at the micro-level, they have been fortifying private education and training institutions through material provisions and staff training, as well as developing training programs for a broad-range of living skills in rural areas.

In this way, German assistance in the TVET sector has combined technical cooperation, budget support, and human resources assistance while bringing in both private and public education and training institutions in order to fulfill a pioneering role towards achieving sector development shared by the African Development Bank, Japan, EU, United Nations World Food Programme (WFP), United Nations High Commissioner for Refugees (UNHCR), other donors, and the government — all through the Advisory Board for Business, Technical, and Vocational Education and Training (BTWET).

Source: Castañer and Grunwald (2006).
4-2  Japan’s Role in TVET Assistance in Africa

4-2-1  From the Perspective of Industrial Human Resource Development

There is no doubt that the demand for industrial human resource development in Africa is high, but from the perspective of trade relations, even if Japanese enterprises are importing resources from Sub-Sahara Africa, with the exception of only South Africa and a few countries, there is hardly any extensive industrial involvement wherein masses of local technical workers could be employed, which is one point notably different from Japan’s involvement in human resource development in Asia. When looking at Asian examples, Japan’s assistance to industrial human resource development through ODA has often acted as a bridge to the private sector, and while Japan clearly aims to contribute to human resource development strategy in each country, its activities such as dispatching Japanese experts, accepting overseas trainees into Japan, providing materials to education and training institutes and supplying technical assistance, have also matched the human resource demands posed by the local bases of Japanese private enterprises. The governments of ASEAN and other Asian countries also saw attracting Japanese enterprises as one goal in building an industrial base. However, a commonality of interest held by both Japanese business and African governments is not so readily visible. In Africa, where the demand for human resources by Japanese enterprises is low, a prudent analysis of demand is necessary, even if just to provide machinery and technical assistance to pre-employment education and training institutions. The reason for this is because machinery used and technical skills desired by Japanese enterprises can be quite different from those sought by African employers, and as a result there is a possibility that training prior to employment utilizing Japanese techniques and machinery may not serve as useful thereafter.

In the theory advanced by Takahiro Fujimoto, The Architecture of Manufacturing (2006), every manufacturing product requires different ways of labor division and skills according to the fundamental ideas underlying its design. For example, Japanese enterprises possess a strong aptitude for ‘Integral Architecture’; that is, they have the organizational characteristic of working effectively in teams integrating a variety of elements, adjusting details with each other within product designs and then refining the products as a whole. On the other hand, American enterprises excel in strategic planning oriented toward cost reduction, and belong to ‘Modular Architecture’, wherein the design of parts are standardized so that the assembly of products can be done by gathering pre-designed parts without any complicated process of adjustment. According to Fujimoto, compatibility between country and industry exists, for example, while American enterprises find it easier to forge into China with its masses of low-cost single-skill workers, Japanese enterprises are more likely to enter into ASEAN countries where fine technical integration can be fostered based on close and long-term relations with local multi-skilled workers. It is common to have enterprises from a multitude of countries advancing into a single country, and even though this Architecture Theory may be stating matters too simply, it is necessary to know the kind of skills that employers desire when considering human resource
development in relation to foreign direct investment. For example, if in a certain African country it seems possible to attract capital from Europe, South Africa, China, and India, then the skills required thereby would depend on the particular needs of those enterprises. To overly focus on the special needs of enterprises would be problematic for pre-employment TVET programs, but, a careful preliminary survey is more necessary than was the case in Asia, which proceeded with the advancement of Japanese enterprises as a precondition. However, some aspects of Japanese manufacturing, such as know-how in quality control, are outstanding and worth passing on in technical cooperation regardless of the architecture of manufacturing.

Also, it is undeniable that Japan has had many years of experience contributing to the economic development of various countries by means of industrial human resource development and it should be able to apply its numerous experiences in Africa. Below, the authors would like to suggest unique ways in which Japan may apply its strengths. Many parties involved in executing program activities voiced a wish for a more concrete proposal covering the forms of projects that would be effective and the combinations of schemes that would allow for better progress, among other details. The need for such a proposal is also recognized by the authors, but in this paper the main focus has been on organizing issues and needs relating to TVET in Africa and, as such, the authors shall let a general proposal suffice. Individual and concrete recommendations concerning JICA activities will be handled as a matter for the future.

(1) South-South Cooperation to Learn from the Experiences of Successful Industrial Human Resource Development Strategy in Non-African Regions

Japan could stimulate awareness among African policymakers by producing educational resources that compile the experiences of countries, ASEAN countries in particular, that gained results by skillfully utilizing Japanese and other international aid while strategically implementing human resource development as a part of industrial policy. This could be made into simple booklets (one volume per country compiled in sets) or into visual training materials to be conveyed through JICA Net, the TV conference system. Also, since ASEAN’s experiences between the 1970s and 1990s cannot fit the conditions of modern-day Africa, it may be advantageous to also include concrete proposals for practical applications – such as what needs to be considered, what parts of the Asian experience are at the core of their success, and what project elements could be postponed when faced with budget limitations. The reason for the necessity of this proposal is because when the experiences of other countries are applied, policy-makers tend to focus on only high technology and the most shining examples, and such selectivity invites the repetition of past failures by government TVET to meet labor demand. Also, when speaking of South-South cooperation, the exchange of people, in addition to knowledge, is a highly important element. Currently JICA is carrying out South-South cooperation in the form of sending former Malaysian administrative officials to Zambia to give advice to the Zambian government. There is a possibility for this kind of cooperation to be specialized for human resource
development and carried out more systematically.

(2) Technical Assistance for the Collection and Analysis of Industrial Data in the African Region as well as for Strategizing Industrial Human Resource Development

In many Sub-Saharan countries, the collection and analysis of data on industry and employment is managed separately from data on education. Technical assistance for cross-sectoral analysis has been neglected since assistance given by aid agencies is actually divided along sectoral lines, and, at the same time, owing to the recent trends towards focusing on basic education, necessary fundamental analysis for enhancing TVET in the education sector has been weak. While governments still wish to enhance TVET with insufficient data analysis, aid agencies have often dismissed these wishes by reason of their ‘lack of realism’, thus creating a chicken-and-the-egg relationship; seen another way, the expertise and resources for collection and analysis of such data fail to materialize because aid agencies have not paid much attention. Regardless, should Japan assist in TVET, the provision of technical assistance for collecting and analyzing underlying data and strategizing based on that information is crucial as a basis for getting the host country and other donors further involved. One way of doing it would be to dispatch experts in labor economy analysis and policy to the target country who would improve the capacity of the counterpart agencies through participation in policy-making. These experts, as they work on technical assistance, are also expected to act as bridges, or harmonizers, between the government and aid organizations in discussions while promoting smooth policy formation. In parallel to this, it would also be possible to offer trainings on data analysis and policy formation as a region-wide initiative geared towards policymakers in various African countries. If training modules and materials relating to African TVET policy are developed, they could not only be utilized for various forms of training but also serve as an opportunity for countries to learn from each other as they work on enhancing their own industrial human resource development.

(3) Implementation of Model Projects for Trades Worker Cultivation

As this paper has stated, the cultivation of trades workers is one of the more important fields in consideration of industrial development and the reduction of poverty in African countries. To date most of Japanese assistance in industrial human resource development has been at relatively high levels, such as polytechnics, yet it would be worthwhile to look into the possibility of contributing to trades worker cultivation through assisting public and private education and training institutions. In order to carry out trades worker cultivation, flexible curricula and time-schedules capable of meeting specific needs would be required, and it would be highly effective to provide technical assistance and advice on high-level policy formation and systems design by way of (1) and (2) on the one hand, while executing solid education and training projects that embody these policies. Also, in the case that a model project turned successful, it may be possible to utilize the loan scheme to practically apply this project to other
(4) Understanding Situations of Asian Enterprises That Have Advanced into Africa and Exploring the Possibility of Collaboration with Them for Industrial Human Resource Development

The number of Asian enterprises moving into Africa is growing, with China and India at the core. Consequently, there exists the possibility of supporting industrial human resource development from the angle of linking Asian business, not limited to Japan, to Africa’s labor market. In addition, there may even be fields available for directly transferring Japanese technology when looking at the course of Africa’s industrial development with exports to Asia in mind. Including these possibilities, future developments in Africa and Asia’s economic relationship is largely unknown; as such, one idea would be to explore the possibilities of collaborating with Asian enterprises in human resource development, based on the surveys into the circumstances and needs of Asian enterprises that possess trade relations with Africa.

4-2-2 TVET from the Perspective of Human Security: Skills Development for Survival

To date, Japan has viewed TVET as divided into ‘pre-service training’ and ‘in-service training’. However, as was made clear in Chapter 3, a large part of the population in Africa cannot be reached by the trainings of these categories alone. There are school-aged youth unable to enter schools and ultimately unable to find employment, or people moving from job to job with no stable occupation or income. President Museveni of Uganda calls these people the ‘forgotten majority’. Also, as was referred to in Chapter 2, the World Bank, UNESCO, GTZ and other organizations have already taken up ‘school-to-work transition’ for these people as a sizable policy concern against the expansion of poverty in Africa. Whereas, JICA now raises ‘encouragement of micro-enterprises and the informal sector’ as one of its focus areas of assistance to Africa, which demands that more concrete activities be undertaken.

Also, the approach taken towards this ‘forgotten majority’ shares a common base with the people-centered concept of ensuring human security – a base designed in order to protect all people from varying forms of threats against human survival, livelihood, and dignity so that they may pursue their abundant latent potential. In addition to its commitment to ensuring human security, JICA is implementing TVET assistance to facilitate the reintegration of demobilized soldiers into society in post-conflict countries such as Rwanda and Eritrea, which is a potentially significant intervention from the perspective of ensuring human security as well. The body of this paper has been written mostly from the perspectives of industrial human resource development and education, but there would also be

\[^{133}\text{JICA (2003b) pp.45-48.}\]
the necessity of further research on skills development for human security, since the authors’ observations on such must remain limited in this paper.

Furthermore, even though this was not necessarily categorized as assistance to TVET, Japan has implemented African Institute for Capacity Development project (AICAD) in East Africa. This project is centered in Kenya’s Jomo Kenyatta University of Agriculture and Technology – run with over 20 years of Japan’s cooperation. By researching and actively disseminating information, the project aims to broadly expand the public’s regional access to technology that is both versatile and capable of contributing to social and economic growth, and as such it serves as a means to enhance the function of tertiary institutions to contribute to society. As economic growth and poverty reduction through the strengthening of the agricultural sector have been set forth in many African countries, AICAD is also expected to play a role in realizing such national strategies. Therefore, in other areas of assistance including skills development geared towards the poor, it would be necessary to look for collaboration with projects, such as AICAD, that support tertiary institutions to enhance their function as social contributors.