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Skill Development in Africa: Scope for India-Japan Cooperation in Asia Africa Growth Corridor

Manmohan Agarwal

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Key Recommendations

- Africa's economic growth has been impaired by lack of skill and emigration of skilled work force to other regions of the world. There is a dire need for skill development across the African continent.
- India and Japan cooperation for skill development and capacity building in Africa may include apprenticeship programmes by Indian and Japanese firms operating in Africa, skill upgradation of women and disadvantaged sections by NGOs and reviving formal education system through universities in Africa.
- Public-Private Partnerships need to be carefully designed to provide relevant skills. 'Voucher scheme' that offers vouchers by the Government to young people which can be used to enroll in any training facility whether public or private sector is a successful initiative in this regard.
- Industrial policy can play a key role in making skill training more effective and efficient. By having clusters of similar skills using industries where if a company losses a worker to another firm, it is likely to gain a worker with similar expertise.
- Both India and Japan should focus on building capacity in food processing and textile industries which are the main industries in East Africa.

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Manmohan Agarwal*

Abstract: Africa has witnessed significant economic growth in recent years but its growth process is impaired by lack of skills and emigration of skilled workforce to other regions of the world. Almost half of Africa's population is below the age of 25 years and the skill gap could change this demographic dividend into a demographic drag. As India and other Asian countries are also facing similar challenges, there is a scope for sharing experiences particularly between India and African countries with respect to human resource development. Very often, the programs run by governments in Africa to address skill gaps are plagued by slow implementation and related issues. Among Asian countries, India and Japan have considerable experience in skill development and capacity building. In the last two decades, the Indian private sector has been also engaged in skill building. Under the Asia Africa Growth Corridor, India and Japan could share their expertise in human resources in different industrial sectors with their African counterparts to develop a local skilled workforce for industrial development in Africa. Skill development programmes may include apprenticeship programs by Indian and Japanese firms operating in Africa, skill upgradation of women and disadvantaged sections by NGOs and reviving formal education system through universities in Africa, among others

Keywords: AAGC, skill development, capacity building, industry collaboration

Introduction

Recent improvement in the economic growth of Africa has been substantial over the one achieved during 1980s and 1990s. During most of that period, manufacturing sector grew slowly, partly hampered by lack of skills in the labour force, leading to inadequate

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job creation. Consequently, unemployment was high, resulting in considerable emigration, particularly of the skilled personnel; and thereby accentuating further skill shortage. Sub-Saharan Africa showed the highest emigration rate globally, 1.5 per cent, against a global average of around 1 per cent, according to the UN population statistics.

Governments in Africa, aware of the need to reduce the skill development gap, so that the people passing out of schools and training institutions are employed, have started training programmes. There are, however, a number of problems with the implementation of the programmes. Japan is a leader in capacity building within the country and has successfully raised skills in other countries also. And India is a recipient and supplier of training initiatives. There are complementarities, which can be used to supplement efforts of African countries to improve effectiveness of training programmes in Africa.

Recent Economic Performance

The period 2001-07, before the onset of the financial crisis, was a golden period for growth in developing countries and also in Sub-Saharan Africa (SSA) in comparison with the 1980s and 1990s. Annual growth in per capita income in SSA averaged 3.7 per cent during 2001-07 as compared to the near decline in the earlier two decades. In 2008, the year of the financial crisis, per capita growth was 1.5 per cent; still substantially higher than in regions, other than Asia. The share of manufacturing in GDP declined in Africa as it has in other regions but not as precipitously as in Latin America and in the Middle East. Furthermore, the rate of growth of the manufacturing sector has picked up in the last 5 to 6 years, and also its share in GDP has increased.

Despite the growth slowdown, rates of gross capital formation, which increased during the boom period, continued even after the crisis, though they remained at lower rates than their peak in the 1970s and 1980s. The savings when channelized properly would raise

growth rates and job creation. Proper skill training would raise labour productivity and help to speedily raise standards of living with the same savings. The SSA countries continued to maintain a high export to GDP ratio though there was some decline after the crisis as was true for other developing country regions. The region, however, remained predominantly a primary exporter as the share of manufacturing in total merchandise exports was only a fifth.

Employment Situation

Africa needs to emphasise more job creation, as according to the ILO (2016), the incidence of unemployment is very high in the continent. Furthermore, the SSA has the highest rate of vulnerable employment[1] in the world (77.4 per cent in 2014, ILO Global Employment trends, 2014)[2]. Moreover, youth unemployment in the SSA has remained stubbornly high; declining from 13.4 per cent in 1991-2000 to only 12.3 per cent during 2001-2012 despite noticeable growth (ILO, 2013). Overall, the proportion of the working-age population in paid employment in the region is low, only 13.7 per cent. Further, the informal economy in the region contributes 50-80 per cent of the GDP; 60-80 per cent of employment; and 90 per cent of new jobs. What is more, 90% of the estimated workers in both rural and urban areas hold only informal jobs. Because of this employment situation, SSA has the highest emigration rate globally, 1.5 per cent, against a global average of around 1 per cent, according to the UN population statistics (ILO, World Employment Social Outlook Trends, 2016).

Demographic Dividend and Skills Gaps

Half of the region's population is under 25 years of age. The challenge is to transform this youth bulge into an opportunity. The skill gap in Africa in general is glaring and there is a real danger of the huge but untrained workforce becoming a demographic drag. Since India is also grappling with a similar situation, there are lessons that can be shared.[3] To benefit from its demographic dividend, Africa would need a strong policy for bridging skills gaps. Actions to bridge the gap have to be sector specific and industry oriented. The training should enable

workers to become fit for jobs in manufacturing. This is necessary to ensure that the skilled are absorbed within the economy rather than migrating from the region. Skill development is necessary as low wages may not be sufficient to attract adequate investments. If productive manufacturing has to grow, an enhanced skill base would be required.

Skill training to be provided has to take into account the likely pace of robotizaton of manufacturing industries. The focus should be to develop sectors having the least threat of automation at least the short to medium term; such sectors provide the greatest scope for employment generation, e.g. garment, agro and food processing and leather— all sectors of great relevance to Africa, often being the largest manufacturing sectors.

The role of the service sector in job creation needs highlighting. It is the easiest route to provide employment to low skilled and semi skilled people (With an investment of INR one million, 78 jobs can be created in service sectors while in manufacturing there can only be 45. To reap the harvest from the prospective demographic dividend, the young need better skills. By better skills, it does not mean paper qualifications, which seemingly indicate that the person has skills but he/she may in reality does not possess skills and so may not be employed in a commensurate job. In addition, improvements in the quality of education, nutrition, and basic health care would be necessary.

Skill Formation Systems

Usually skill formation can be divided into two stages, one the formal general development; it can be at the school level or at a higher level. The second is the specific job level skills, usually learnt on the job. Sometimes there is a third level that may interface between the two–a level that provides more broad skills adaptable to a wide variety of industries without providing skills appropriate to a particular industry

or sector. This could be through vocational training in general schools, vocational training in special institutions or an apprentice system; though the last is more likely to be industry- specific and even perhaps company- specific.

Technical and Vocational Education and Training (TVET) is a challenge in all African countries; in most, enrolment rate in the formal TVET at the secondary level is 5 per cent or less.[4] Traditionally, in Africa, as in most parts of the world, technical and vocational trainings (TVTs) are associated with the formal schooling system. There has been a rapid expansion of enrolments in primary education. But literacy among the youth of age 5-14 is only 70 per cent, indicating one of the major problems with the educational system. Enrolments in the secondary school have increased only to 42 per cent, much lower than the level reached in East Asia, for instance (World Development Indicators).

Slow increase in secondary enrolments implies slow growth in vocational education. Bottlenecks in the growth of vocational training are due to a perception that it is inferior to general education because of its limited employment opportunities and small increments in pay after training. This is because the formal technical and vocational education and training system is based more on getting a qualification rather than on acquiring skills and competencies for successful integration into the world of work. The non-formal and informal skills training sectors (including traditional apprenticeship) are poorly equipped, only marginally linked to the formal sector (if at all), and lack channels for upward mobility and professional development. The large informal sector provides limited opportunities for people from vocational training institutes. Further, lack of proper government support makes it more difficult to popularize vocational training and its acceptance in the job market.[5]

Many countries have programmes to encourage training and /or employment. Over half of African youth do not have access

to secondary education, and technical and vocational training opportunities are even scarcer. Governments and international institutions are paying increasing attention to TVET (it is one of the eight priority areas in the African Union's Second Decade of Education, 2006-2015). But despite an increase in the number of African students in TVET, only a few Governments in Africa are able to finance TVET at a level needed for supporting quality training. The demand is enormous. Three out of five unemployed in sub-Saharan Africa are young people, mostly surviving in the informal economy.[6]

There were attempts to make formal, public VET providers more responsive to preparation for (self) employment in the informal sector. At the most extreme (for instance, in the case of the Malawi Entrepreneurship Development Institute), technical colleges were transformed into entrepreneurship development institutes. However, it was far more common for additions to be made to college programmes. In some projects, this took the form of additional inputs after the conventional college programme. In others, it was the addition of elements to the existing curricula such as the requirement to write a business plan as an extra examination subject.

The result has been a model of VET that reflects historical accretion of institutions far better than a clear vision of what VET is and what its mandate(s) should be. The core function of the VET in promoting employment chances remains evident across the region, and has resulted in a growing focus on the needs for radical curricular overhaul and better relationships with the world of work. The role of the informal economy, however, is not well-addressed in most countries. While the informal economy, including unorgnised MSMEs across manufacturing and service sectors, may account for a significant share of GDP in Africa it is a low productivity sector. The Indian experience shows that productivity of registered manufacturing is relatively high. But an unorganized sector with a low skill- base may adversely affect manufacturing.

For enhancing employability or moving up the value chain skill development is key. The need is to evolve a National Skills Qualification Framework (NSQF) across all institutions of learning in such a way that it promotes transferability of skills and allows a learner to grow from academics to skills into jobs. Further, skill education can be made compulsory at schools and colleges. Improving employability is possible only if the Industry–Academia gap is bridged as industry is the biggest stakeholder in the Skills Ecosystem. In some countries, skill development is completely driven by industry. In addition, creating mechanisms for preferential hiring of skilled workers for large scale infra projects can be thought of as well. The demand for unskilled workers is declining in the overseas employment market and the future belongs to skilled workers, preferably with multiple skills. It is, therefore, important for Africa to upgrade skills of its young work force to meet the future needs in the overseas employment market. It is imperative to build capability of women workers with industry-specific skills and accredited certification.

This does not mean that skilling workers in the informal sector should be at the expense of equipping workers for the formal- sector jobs. Labour productivity is considerably higher in the formal sector than in the informal sector. But providing skills needed in the formal sector without the availability of such jobs, which is unfortunately the reality, would only lead to more skilled emigration. How AAGC would bring in a new change? Raising skills in the informal sector would raise incomes there and may lead to increased demand, including for the formal- sector goods.

Japanese and Indian Experience for Skill Formation

Japan has considerable experience in skill formation within Japan as well as in capacity- building in other countries. While skill formation in Japan is predominantly enterprise-based and mostly imparted through on-the-job training, the role of large private training providers outside the enterprise is increasing. Furthermore, the results of the National Skill Tests are being used extensively.

The provision of public vocational training in Japan depends on whether a worker is employed or unemployed. Graduates from school are offered mainly long-term training, lasting for one to two years, while unemployed workers mostly receive training of six months or less, and employed workers primarily receive short-term training of only a few days. Vocational training is offered free of charge to those changing occupations (and currently unemployed) and are physically disabled, and the cost of texts and other materials is borne by trainees. Some training courses for those changing occupations (and currently unemployed) are entrusted to private sector education and training institutions. Training subjects taught at the public human resource development facilities are mostly vocational and technical subjects for industries, such as manufacturing and construction, but among the trainings commissioned to the private sector, courses are on various subjects like computers and social welfare. Short-term vocational training for the employed is also given based on the needs of employers or employers' associations of the region. The Polytechnic University, a public vocational capacity development university, provides training and education to educate public vocational training instructors and for developing textbooks for that purpose.

Career development promotion grants assist employers with a part of the wages and costs incurred when providing education, training, and other services to workers so that career enhancement within the companies is encouraged. Skill training systems were transferred successfully as shown in a study on the automobile sector in Thailand**.** The Korean and Taiwanese experience again underscores efficacy of Japanese capacity-building. The two countries had much higher educational enrolments when the Japanese governed these territories than in the case of any other country. Furthermore, because economic development in East Asia was very often tied to outsourcing by Japanese companies, these companies often provided training facilities for their workers.

India also has considerable experience as a recipient and as provider of skill transfers. India received considerable help from a number of governments for setting up the Indian Institutes of Technologies. India participated in the Colombo Plan, both as a recipient and as a provider of technical assistance. The Indian private sector has also built-up capacities. For instance, Tatas with considerable help from the Singapore government trained twice as many people as Tata required for its precision engineering plant so that a pipeline of skills was built up for a whole industry rather than meeting the needs of a single company (Ansu and Tan, 2008).

Japan and India could combine their different expertises with the efforts of African governments to step up training efforts in Africa.

Lessons from Africa: Scope for Cross Learning

We now briefly describe a few skill development programmes in African countries to assess weaknesses and strengths of the present African efforts. Public-funded institutions in South Africa teach vocational skills to young people. The South African Government also provides subsidy to employers thereby transferring part of the cost of worker's wages from employers to the government. Such individuals usually stay at their jobs long after their subsidies end. The *National Rural Youth Service Corps* hire young people for rural community projects after training them. The skill of the participants increased but still not sufficiently. However, institutions are often geographically inaccessible, and do not teach skills demanded by the private sector and students, and also do not provide strong placement services.[7]

Kenya implemented *Jua Kali Voucher Program*, which subsidized 90 per cent of job-training expenses at specialized training centres for eligible, unemployed individuals; many of them youth. The programme allowed for competition for attracting trainees, and so seemed to have been responsive to student demands and more attuned for job opportunities. Uganda's training programmes were considered

inadequate because they were not sufficiently geared to the trainee skill needs; often treating school graduates and college graduates equally. In brief, programmes often ran into problems because of inadequate selection criterion. Vouchers could offset this problem. Also often, little attention was paid to the quality of jobs. The need for skilled workers in the face of inadequate public facilities resulted in the expansion of non-formal TVET. Non-formal TVET predominates in most countries. But is often highly fragmented and operates in a non-coherent way. Different non-governmental organizations have taken up the job of providing training to the youth, to make them fit for employment in the informal job market (Rioust de Largentaye, 2009).

In Africa, some public-private partnerships are underway to introduce job-related trainings designed to meet short-term needs of employers. The Ghana Industrial Skills Development Center (GISDC) was launched in 2005 to provide training in mechanical, electrical and process engineering. Mozambique has set up an ICT technicians' training programme, which features a tripartite arrangement involving the government, an existing public training centre and industry representatives on the institution's decision-making body. In Nigeria, the government has started to process certification and accreditation of private providers if they meet certain criteria (including a governance structure that included industry representation) to qualify as Vocational Enterprise Institutions.

Public-Private Partnerships can be helpful in providing relevant skills. As mentioned above, voucher schemes have been successful. Youth are provided by the government with vouchers. They can use them to enrol in any training facility, whether public or private sector. Obviously, these training institutes must provide relevant training to attract participants.

The experience of Indian NGOs may provide some pointers to action in Africa (See Box).

Grassroot Interventions Bring Wonders to Local Communities

In addition to government and industry initiatives for skill development, grassroot level interventions by NGOs and development agencies have demonstrated a huge potential in creating capacities and expanding livelihood choices of local people. Instead of module-based training packages, the interventions are aimed at imparting specific technical, managerial, financial and marketing skills to local men and women to lift them out of poverty and explore productive employment opportunities. Notably, three student-led initiatives proved highly effective in meeting the specific skills of women self-help groups (SHGs) in Uttar Pradesh. A group of management students from the Institute of Management Technology, Ghaziabad, India, helped 15 women of a self-help group of village Galand in Uttar Pradesh to bring value- addition to their product and nurture their knowledge of local market and credit facilities. By exposing the women to related or new skill sets, the group was able to make new products like paper plates, paper bags and cotton wicks along with the core product, diyas (candles). This small low-cost initiative resulted in getting the poor women a sustainable source of livelihood by empowering them to be self-reliant in a patriarchal set-up. Likewise, another two groups of students from the Institute of Management Technology, Ghaziabad, brought dramatic changes in the lives of the village of Nandpur in Uttar Pradesh and in Bhatti Mines slum in South Delhi. The team helped identify a product, petticoat, for the women of Nandpur who did not have any other occupation for livelihood except working as agricultural labourers. The nature of assistance offered by the student team was in the form of understanding the types of products demanded in the local market, the necessary skills to make those products, establishing market linkages and the overall appetite

for nurturing the business idea. With this small intervention, the student team not only influenced them to engage in productive self-employment activities but also in promoting entrepreneurship among them. The story of the women of Bhatti Mines in Sanjay Colony in South Delhi is another example of skill building and entrepreneurship. The students facilitated the women of the slum to get training in weaving and tailoring, develop locally-demanded products, and build marketing acumen. It helped migrant women get a decent source of livelihood and dignity of life.

Pratham, an Indian NGO, the "Teaching-at-the-Right-Level" is an innovative initiative that has proved to be highly effective in raising children's basic reading and arithmetic in a short period of time and at a low-cost. The Pratham model has a rigorous evaluation system carried out by the Abdul Jameel Poverty Action Lab of the MIT in the United States. Impressed with the project outcome, the representatives of Japan International Cooperation Agency (JICA) working for basic education projects in Africa reached out to Pratham and spent time in rural Uttar Pradesh for gaining complete understanding of Pratham's instructional work. Based on this preparatory visit, a workshop was organized in July 2017 in New Delhi for members of JICA supporting projects in Niger, Madagascar, Burkina Faso and Ghana. The JICA teams shared details of the work they would do in Africa. As a result of these exchanges, it is hoped that Pratham will experiment with some of the community-based models that JICA projects are implementing in Africa and that the JICA projects may supplement their current work in Africa with elements of Pratham's model for basic learning. Interventions of this nature can be replicated in the participating countries in Asia and Africa.

***Sources*:** Compiled from IMT (2017), I'm the Change: Parables from a Developing World, New Delhi & Pratham's unpublished notes shared with RIS.

Ways to Raise Skill Levels

Training is expensive. If a person leaves a job then the training may be wasted. Since companies no longer provide long period employment they are reluctant to bear expenses of training. This problem can be somewhat resolved by having clusters of similar skill using industries since if a company loses a worker to another firm it is as likely to gain a worker. Furthermore, a worker who has lost a job is more likely to find another one. Industrial policy can play a role in making skill training more effective and efficient.

In Germany the apprenticeship system is well established; the dual system is (still) the main pathway into employment for young people, almost 60 per cent follow the apprenticeship route. FDI in African countries could be encouraged to develop manufacturing facilities in those countries and in providing requisite training facilities. The apprenticeship system could be adapted to the needs of African countries to ensure a relatively smooth transition into employment and stop emigration. Students in high school could work part time in a company. On graduation from school they would get a job. Students, if they take advantage of the scheme, must accept a job with the company; how the modalities are to be handled would need to be worked out.

India already has a large number of programmes to support capacity building in Africa. Their scope could be expanded from capacity building at the level of policy formation or research or tertiary education to apprenticeships in Indian companies either those operating in Africa or those operating in India. The main industries in East Africa are food processing and textiles. Both India and Japan have the capability to improve efficiency in these industries and to make them more competitive internationally. Starting from building capacity, the countries should seek to build capacity in industries downstream and upstream of the two sectors. Another area where efforts should concentrate is in the universities. Earlier East Africa had very good universities which have atrophied over time. They

need to be revived. Though they may not be immediately needed to improve capabilities in food processing and textiles, they would be needed later as backward linkages are being established. The machine sector in these countries is very weak.

The Way Forward

Skill Development among the African labour force is expected to be a key priority area in Africa to sustain the recent higher economic growth of African countries and to cater to the needs of new foreign companies. Lessons from the operation of many current innovative training progammes in Countries like Kenya, Ghana, Mozambique and Nigeria can be combined with the expertise that India and Japan have capacity building and supplying training initiatives to make these programmes more responsive to students' demands and more attuned for job opportunities. More Asian countries can be invited to participate in these efforts to raise skill levels of the African youth in various sectors and industries including the manufacturing sector. There are lessons to be learned from Africa as well for all the developing countries that are trying to make efforts in developing skills among their youth.

Endnotes

1 Vulnerable employment is defined as unpaid family workers and own-account workers as a percentage of total employment

2 Amadou Sy Jobless growth in Sub-Saharan Africa, Thursday January 30, 2014, Africa in Focus, Brookings, accessed at https://www.brookings.edu/blog/africa-in-focus/2014/01/30/jobless-growth-in-sub-saharan-africa/ on 20 August, 2017.

3 As per the report by the labour ministry, Govt of India, less than one out of the four MBAs, one out of five engineers and one out of ten graduates are employable. The wide disconnect between industry and academia continues to spin out less trained employees for jobs.

4 MacArthur and Routman, 2014, Youth Unemployment in Sub-Saharan Africa: Varying Solutions to Complex Problems, Africa Focus, Brookings

[5] Biavaschi, Costanza, Eichhorst,Werner, Giulietti,Corrado, Kendzia,Michael J., Klaus F. Zimmermann, Muravyev, Alexander, Pieters, Janneke, Rodríguez-Planas, Nuría, Schmidl, Ricarda(2012), 'Youth Unemployment and Vocational Training'.

[6] See Technical and Vocational Education and Training accessed at http://www.unesco.org/new/en/dakar/education/technical-and-vocational-education-and-training/

[7] Agenda 2063 has laid out an ambitious programme for the development of Africa countries and implementing it would require skilled people. But each country would draw up its own development strategies and plans so the requirement for skills would vary between countries. The draft 10 year Plan will provide specific details and the skill training activities of the Indo-Japanese programme will have to mesh with that.

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