

# Chapter 6: Industrial Development of Africa

## – JICA’s commitment at TICAD IV and its follow-up

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### 1. Introduction

In the 1960s, there were high hopes for newly independent Sub-Saharan African countries. At that time, Africa was economically better off than Asia. In 1970, Zambia’s GNI per capita was \$432 and that of Malaysia, \$392 (at current prices), indicating that the Zambian economy was doing better than Malaysia’s. In 1968, Gunnar Myrdal published *Asian Drama*, which was very pessimistic about the development prospects of South and South East Asia.

Almost a half century later, however, the situation has reversed and Asian economies have surpassed African economies. In 2011, GNI per capita was \$9,656 for Malaysia and \$1,425 for Zambia. This leads to a question: What were the reasons for this divergence between the two regions? This question was one of the issues heavily discussed at TICAD IV.

After TICAD IV, building on its analytical work concerning the Asian growth experience and African development, JICA enhanced support of industrial development to follow up the meeting. JICA has launched a comprehensive approach to support African industrial development, i.e., combining policy-level support with concrete project assistance to private sector development. Such initiative has matched the challenges and priorities of African development today, as well as the political commitment of African leaders, and has developed into tangible actions in Ethiopia and Zambia, among others.

This chapter will first discuss the need for the industrial development of

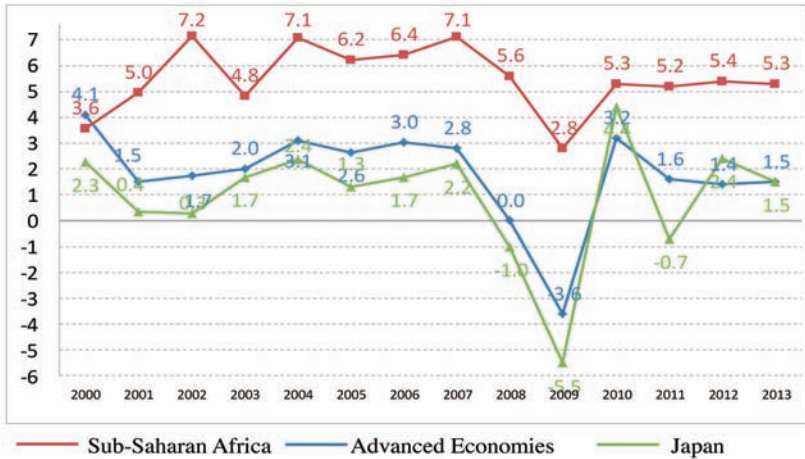
Africa in order to achieve its sustainable economic growth, touching upon issues such as youth unemployment, de-industrialization processes, diversification of economic structure, and investment climate improvement. It will then examine strategies to tackle these challenges and the strong determination of African leaders to industrialize. These will be followed by three cases of JICA's cooperation for Africa since TICAD IV, which include (1) research of the Asian experience and African development, (2) industrial policy dialogue and quality and productivity improvement (*kaizen*) in Ethiopia, and (3) support for investment promotion and economic diversification ("Triangle of Hope" approach) in Zambia.

## **2. Possibilities and Challenges – Necessity of Industrial Development of Africa**

Africa's long-term prospects for growth are good. The Economist Intelligence Unit (EIU) (2012) has forecast that average growth of the regional economy in 2013-16 will be around 5% a year. The economic performance of Sub-Saharan Africa, as Figure 1 shows, has been better than that of most developed countries.

There are challenges, however, to sustain this economic growth. First, the youth population in Africa (including North Africa) is rapidly expanding, with close to 200 million people aged between 15 and 24. Although the expansion means a demographic bonus in the future and will make Africa a huge market by 2050, it also means that creating jobs for the younger generation will be a critically important issue. Otherwise, the dividend could become a curse. This has an important bearing on political stability as well as inclusive growth in the region.

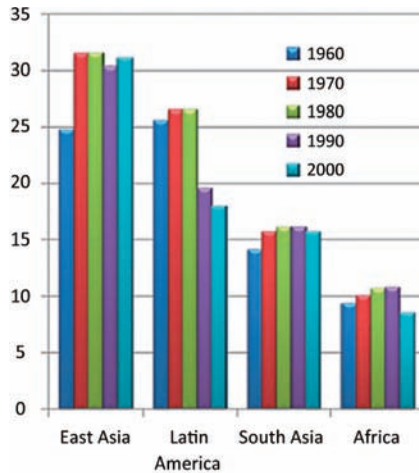
**Figure 1.** Africa’s sustainable GDP growth



(Source: International Monetary Fund (2012), World Economic Outlook Database, October 2012)

Second, despite the importance of the industrial sector in creating jobs, the employment share of this sector in Sub-Saharan Africa was only 10.6% of the overall population in 2009 (ILO 2011). Furthermore, the share of the manufacturing sector as a percentage of GDP has been declining since the 1980s (Figure 2) (Page 2012 and Page 2013). Industrial development is the key to creating more productive jobs, transforming the economic structure from rural agriculture-based economies to more diversified economies with much larger industrial and service sectors.<sup>1</sup> This includes light manufacturing, such as the agro-processing industry, which adds value to primary products.

1. Benin et al. (2010) estimates that agriculture’s share of GDP fell at an average annual rate of almost 7% between 2003 and 2009.

**Figure 2.** Share of manufacturing in GDP

(Source: Lin 2012)

Third, to transform the Sub-Saharan African economy, private sector development needs to be promoted. In a large number of Sub-Saharan African countries, the general operating environment for the private sector remains difficult, with more complex and expensive regulatory processes and weaker legal institutions, compared with any other regions (World Bank and IFC. 2012), and the manufacturing sector is still weak.

The fourth issue concerns foreign direct investment (FDI) promotion. Even though Africa has largely been enjoying an investment increase since 2000, most investment goes into the natural resources or mining sector. As Table 1 shows, the top 20 African countries that have the largest inward stock of foreign direct investment in 2011 are mainly natural resource-rich countries, and just 10 countries count for almost 80% of the investment amount into Africa. This means investment in Africa is highly concentrated and in specific sectors.

**Table 1.** FDI inward stock in 2011, top 20 African countries (mil \$)

1	South Africa	129890	11	Ghana	12320
2	Egypt	72612	12	Eq. Guinea	8785
3	Nigeria	69242	13	Tanzania	7825
4	Morocco	46300	14	Mozambique	7404
5	Tunisia	31414	15	Chad	7249
6	Sudan	22047	16	Côte d'Ivoire	6408
7	Algeria	21781	17	Uganda	6367
8	Congo	18127	18	Angola	6273
9	Libya	16334	19	D.R.Congo	5590
10	Zambia	12932	20	Liberia	5465
	Top10 share	77.4%			

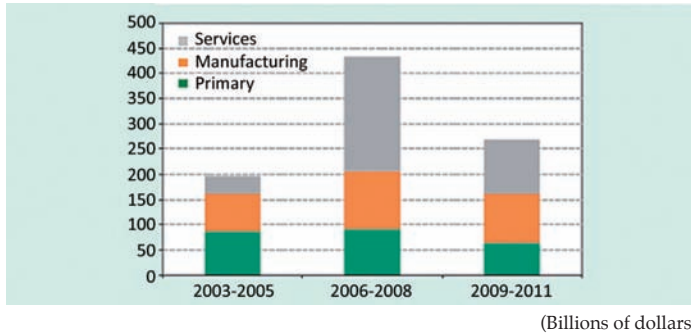
(Source: by this author based on data from UNCTAD World Investment Report 2011 and 2012)

Figure 3 shows that a gradual sectoral shift of investment is taking place. Investment in the service sector is emerging in particular. Contrary to popular perception, investment in primary industry is declining in the long run. This trend, however, does not necessarily mean a decline in the presence of primary industry. For example, coke and petroleum products are emerging in the manufacturing sector and many investments in the manufacturing sector play a supporting role for the extractive industry. UNCTAD (2012) describes this shift of investment as a diversification of natural resource-related activities rather than a decline of the extractive industry. This indicates that the industrial structure still heavily depends on natural resources.

Diversification of economic structure is imperative. First, natural resource-rich countries must diversify their economies to correct their over-dependency on their given endowments (natural resource curse and Dutch disease) and promote other sectors with more job creation effects, such as the manufacturing and service sectors. Resource-poor countries, on the other hand, need to diversify their economies by developing local industry, adding value to agricultural products (value-chain development).<sup>2</sup> To make these strategies work, African countries also need to diversify investment.

2. The One Village One Product Program (OVOP) could be one of the effective approaches.

**Figure 3.** Value of greenfield investments in Africa, by sector, 2003–2011



(Source: UNCTAD 2012).

### 3. Africa’s Leaders’ Determination to Industrialize – Accelerated Industrial Development of Africa (AIDA)

Africa’s leaders have shown strong determination to industrialize their countries. One occasion at which such determination was articulated was the January 2008 African Union Summit that focused on the Industrial development of Africa. The African Union (AU) (2008) adopted the Action Plan for the Accelerated Industrial Development of Africa (AIDA). This is the declaration by African leaders for national development through industrial development.<sup>3</sup>

“[I]t is Africa’s turn.... No country or region in the world has achieved prosperity and a decent socio-economic life for its citizens without the development of a robust industrial sector” (AU 2008:1).

AU (2008) emphasized that the crucial factors for African industrial development are, among others, general skills, stimulating productivity, promoting investment, providing infrastructure, technology transfer, and upgrading enterprise operations.

Development partners must increase their support for industrial development, aligning their support with the African initiative. JICA has

3. In line with such determination of African leaders for industrial development, there have been support activities from African academics; the establishment of the African Center for Economic Transformation (ACET) in 2007 by K.Y. Amoako is an example of the initiatives from the academic side to support governments with rigorous policy research and advice on transforming their economies.

been aligning its assistance to AIDA, and as a part of the AIDA monitoring process, in 2010, JICA and its partner, the National Graduate Institute for Policy Studies (GRIPS), were invited to make presentations in the Addis Ababa meeting organized by the AU and the Economic Commission for Africa (ECA) to introduce Japan's SME development policy (ECA 2010; Shimada 2010). This illustrates the growing interest in Asia's development experience on the part of Africa, especially in terms of Asia's industrial development.

There are numerous constraints for industrial development, ranging from lack of basic education to infrastructure. In the next two sections, we will focus on two aspects. One is how to make realistic strategies for industrial development. The other is how to promote more FDI, especially for non-resource-based sectors.

#### **4. Development Strategies toward Industrial Development**

At TICAD IV, held when there was a growing interest among African leaders in the Asian development experience, the JICA Research Institute organized a symposium on "Economic Development in Africa and the Asian Growth Experience."<sup>4</sup> The symposium aimed to hear African leaders' insights on the relevance of the Asian experience in accelerating economic growth in Africa. The symposium particularly highlighted the role of the state in promoting economic growth while maintaining equity through appropriate public policy.<sup>5</sup> Professor Stiglitz emphasized the relevance of the Asian lessons to strike a good balance between the state and the market (JICA 2008a).

Following TICAD IV and the G8 Hokkaido Toyako Summit, held in

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4 . The symposium featured several eminent African leaders as panelists: H.E. Jakaya Mrisho Kikwete, President of the United Republic of Tanzania and Chairman of the African Union; H.E. Meles Zenawi, the late Prime Minister of the Federal Democratic Republic of Ethiopia; H.E. Joachim Alberto Chissano, former president of the Republic of Mozambique; and Dr. Donald Kaberuka, President of the African Development Bank Group. Professor Joseph Stiglitz of Columbia University also joined the discussion via a video link. Mrs. Sadako Ogata, then President of JICA, served as Chairperson.

5 . The main points of the discussion in the symposium were as follows. It was noted that Africa is certainly growing; but the challenge is how to sustain accelerated growth. For this purpose, Africa needs to have an appropriate development strategy in which government is given more policy space to design a practical strategy that suits the unique situations in respective African countries.

Japan just one month after TICAD IV, JICA started several initiatives to follow up on Japan's commitment to Africa at the two meetings. One of them is research collaboration between the JICA Research Institute and Professor Stiglitz's Initiative for Policy Dialogue (IPD) with the late Prime Minister Meles of Ethiopia participating. The research aimed to open a debate on facilitating economic growth and poverty reduction in Africa by applying Asia's development lessons, and also to promote a more active role of governments in economic policies. The published results of the research called for fresh approaches to learn the lessons from successes both within and outside Africa, particularly drawing on the experiences of Asia.<sup>6</sup> While they maintain there is no policy package that fits all sizes, they argued that at the center of the policy misstep in Africa was a failure to get the balance right between the state and the market.<sup>7</sup>

After a JICA-IDP meeting in Addis Ababa, Ethiopia, the then Prime Minister Meles made two requests to JICA (Ohno 2011; Shimada 2010; Kuwajima 2011). One of these requests was to help formulate industrial development policy. The other proposal was to support and nurture private companies. In response to these requests by the Prime Minister, JICA has taken a comprehensive approach to the issue of industrial development in Ethiopia.

JICA's comprehensive approach is based on the assumption that as the following figure shows, industrial development needs a multifaceted policy and actions (Shimada 2013).

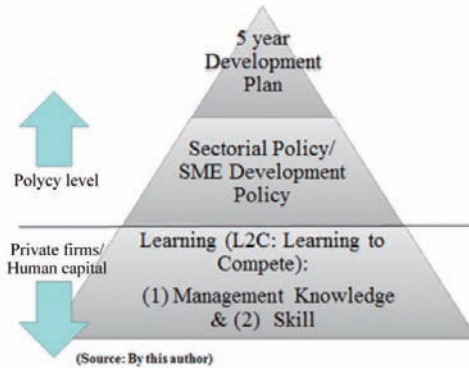
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6. The research resulted in the publishing of a book, which was brought out by Oxford University Press (Noman et al. 2012), titled "*Good Growth and Governance in Africa: Rethinking Development Strategies.*"

7. This book addressed the following important questions: Why has the overall economic growth performance of Africa been disappointing during the past 50 years? More importantly, what are the policy options for reversing that trend? What are the possibilities and policies for Africa?



**Figure 4:** Comprehensive approach to industrial development



First, at the policy level, macro-policy such as a five-year development plan must be in place to set the overall policy goal and plan. A lack of clear policy and plan on the part of the government generates a sense of uncertainty among the private sector, resulting in less-than-optimal investments.

Second, in addition to the five-year development plan, detailed sectorial policy and SME development policy are needed to provide more precise guidance for policy implementation.

Third, at the private firm level, human capital accumulation (learning) is essential to improve productivity. There are two types of knowledge that need to be learnt. One is new skill/technology, and the other is management capabilities. These two components are inseparable for successful industrial development.

With the above comprehensible approach in mind, in response to the two requests from the late Prime Minister Meles, JICA started its initiatives. Regarding the first request, in partnership with GRIPS Development Forum, JICA decided to conduct a policy dialogue with Ethiopian authorities on the country's industrial development. Hand in hand with the policy dialogue, regarding the second request, JICA initiated a project on quality and productivity improvement (*kaizen*), aiming to improve productivity in the industrial sector in Ethiopia (Shimada 2011; GRIPS Development Forum 2011).

#### **4.1 Industrial policy dialogue and productivity improvement in Ethiopia**

The policy dialogue with Ethiopian authorities, headed by the Prime Minister, covered issues from the policy level to actual implementation on the ground. The dialogue started with “policy visions,” which is an overall long-term policy guidance. The visions included Agricultural Development Led Industrialization (ADLI) and Democratic Developmentalism (DD), which are the guiding principles that the Ethiopian government has been adhering to. Discussions then moved toward the five-year development plan, “the Plan for Accelerated and Sustained Development to End Poverty (PASDEP) (2005-2009),” and culminated in a debate over the new five-year plan, “the Growth and Transformation Plan (GTP) 2010/11-2014/15.” Also discussed were sector policies such as those for basic metals and engineering industries. The sector survey provided a useful reference in the design of an industrial master plan.

The dialogue tried to fill in the gap in terms of the mindset and methodology of industrial policy making, mostly based on international comparison of good practices in Asia such as Japan, the Asian Tigers, and ASEAN. It was pointed out that self-study, learning from neighbors, and trial and error are the factors commonly found in the Asian experience. Further, it was argued that simply copying specific policies of an Asian country would not be a solution. The understanding was that there is a set of policy menus for industrial policy, and specific policies should be selected and adjusted to the unique conditions of each country, creating a climate of collaboration for Private-Public Partnership (PPP) (Ohno, K. 2011 and 2012).

Another factor emphasized as important was the coordination among government ministries in formulating industrial policy (Ohno, I. 2011). This coordination was the key to the success of Asian countries. In Asia, the functioning coordination mechanism among the government bureaucracy as well as with the private sector helped to make development policy making transparent and accountable, and to avoid the politicization of the process.

Based on the policy dialogue, the GTP expanded the policy scope to include the promotion of import-substitution industries. The new Micro and Small Enterprise (MSE) Development Strategy also encourages the

introduction of the *kaizen* concept.<sup>8</sup>

#### 4.2 Quality and productivity improvement (*kaizen*)

The *kaizen* project started in October 2009, together with the policy dialogue.<sup>9</sup> *Kaizen* is a Japanese word that in this context refers to “continuous improvement” of productivity and quality without additional cost, promoted in a participatory process and through a bottom-up approach. Various instruments are used, such as the working environment improvement methodology called “5S”: *Seiri* (orderliness), *Seiton* (tidiness), *Seiketsu* (cleanliness), *Seisou* (cleaning up), and *Shitsuke* (discipline); these terms are normally referred to in English as Sort, Set in Order, Shine, Standardize, and Sustain.

Japan itself introduced productivity and quality improvement in 1955 at the start of the country's era of rapid economic growth, learning from the business management tools from the United States. This management practice method has spread among Japanese companies operating in Japan and abroad. JICA has also offered assistance to spread the practice of *kaizen* to many developing countries in Asia. In 1983, JICA started cooperation with Singapore's National Productivity Board (NPB), which evolved into the present SPRING-Singapore. After the success of the project, cooperation expanded to Thailand, the Philippines, Hungary, Brazil, Tunisia and Ethiopia, among others (Ueda 2009).

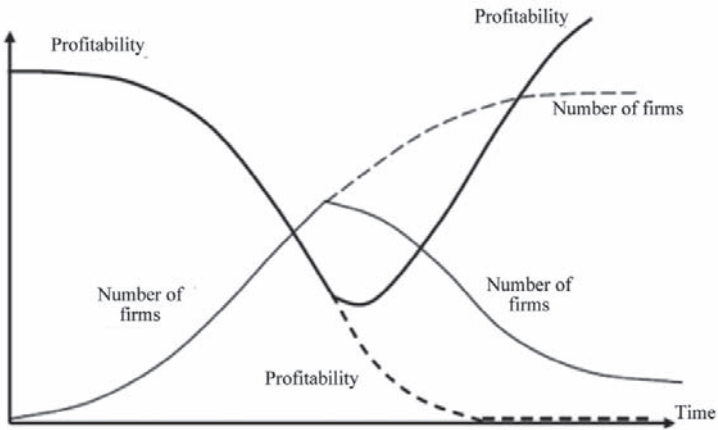
In terms of sustainable private sector development, the introduction of management tools is critical. Otsuka and Sonobe (2011) explain this process as follows (see Figure 5): once a new business is established, the pioneer receives sizable profits. The success of the pioneer firms will attract imitators to the industry, and in this way an industrial cluster is formed. During the early period when profits are reasonably high, entrepreneurs are not interested in introducing new ideas and knowledge. However, with more companies entering the industry, profitability of the firms starts to decrease. Without introducing new ideas and knowledge to improve operations, especially management tools, the profitability of many firms will decrease, making it impossible for them to continue business, and as a result, the number of companies

8. In a meeting, the late Prime Minister evaluated the JICA-GRIPS exercise as “filling the knowledge gap.”

9. Before JICA's initial technical assistance, the Kaizen Unit was created in the then Ministry of Trade and Industry (now the Ministry of Industry), and local *kaizen* leaders were devoting themselves to *kaizen* promotion.

will decrease (as shown by the dotted line in Figure 5). Many empirical studies have proven that management skill improvement is the key for cluster development (Sonobe and Otsuka 2011; Sonobe et al. 2011). This is why the Government of Ethiopia and JICA-GRIPS agreed to start introducing *kaizen* as a component of the country's industrial development.

**Figure 5.** An illustration of industrial cluster development patterns in terms of changing profitability and the number of firms.



(Source: Otsuka and Sonobe 2011)

To provide guidance on the *kaizen* approach, a team comprising JICA and Ethiopian experts visited a total of 30 selected private manufacturing companies, each of which received 10 consultation visits from the team. The team's method was not to give readily available solutions to the problems that the companies had, but to ask them questions on what the companies needed to think about to improve their operations. After the 10 consultations, extending over a half-year, as Table 2 shows, the 30 firms had obtained an average benefit of Ethiopian Birr (ETB) 500,000 (equivalent to around \$30,030). Given that the average number of employees was 402 per company, the pilot project generated a benefit of ETB 1,240 (\$74.5) per head, which almost equaled the prevailing gross monthly wage (\$75). Various quantitative data on successful cases are shown in Table 2. The highest benefit to a single company was ETB 3.25 million, around \$195,195.

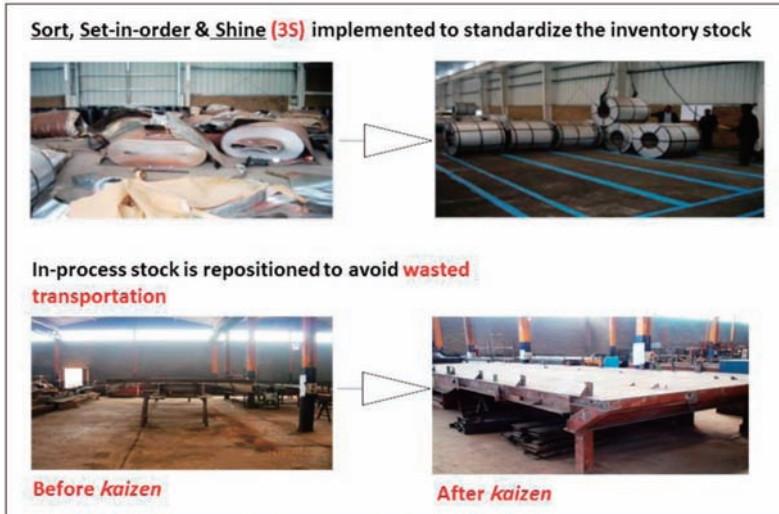
**Table 2:** Quantitatively measured results from the *kaizen* pilot project

Company	Notable results
Overall	Average quantitative benefit of ETB 500,000 (\$30,030) per company. Given that the average number of employees is 402 per company, the average benefit per head is ETB 1,240 (\$74.5), which is comparable to the prevailing gross monthly wage (\$75).
Company A (Metal)	Recovered ETB 118,995 (\$7,146) as additional value. Per-head value is ETB 1,000 (\$60).
Company B (Metal)	Reduced lead time from two weeks to one week.
Company C (Textile)	Halved time wasted by 780 min./month for a certain process and 624 min. for another process.
Company D (Chemical)	Reduced overproduction waste by 50%. Increased motion and movement by 100%.
Company E (Agro)	Additional production of 12,000 liters/day, which accounted for ETB 204,000 (\$12,252)
Company F (Metal)	Regained reusable materials worth ETB 2,400,000 (\$144,144), compared to company capital of ETB 770,000 (\$46,246). Per-head regain is ETB 58,500 (\$3,513).
Company G (Agro)	Identified, repaired, and reused machinery and equipment worth ETB 3,250,000 (\$195,195), compared to company capital of ETB 20,000,000 (\$1,201,201). Per-head benefit is ETB 9,420 (\$566).

(Source: By this author)

Figure 6 shows pictures taken before and after the project. The top-left pictures show the disorganized stock conditions before *kaizen*, and the pictures on the right, the conditions after *kaizen*. Everything became easier for factory workers to manage. They no longer needed to waste time in looking for misplaced materials. The bottom pictures show a small improvement at a metals factory, where they simply installed a table. With this table, workers could do away with heavy lifting work, thus reducing wasted time and effort.

**Figure 6:** Visual comparison of before and after the pilot project



(Source: By this author)

There are also challenges. The pace of progress is different among companies participating in the *kaizen* movement. The key lies in the corporate mindset. Workers should actively participate in improving productivity and directors have to listen to the workers' voices. Leadership is indispensable to thoroughly apply such a working method.

It must be highlighted that this success has been brought about by the initiatives of Ethiopian experts, who work enthusiastically with factory workers at private companies to improve their operations. This management skill was new to the Ethiopian experts before the project, but after the project, six out of nine experts who worked for the project became classified as consultants, authorized as competent in providing consultancy services, and three experts were classified as assistant consultants.

The initial project successfully ended in June 2011, including the *kaizen* dissemination plan. Encouraged by this achievement, the Ethiopian Government, in October 2011, established the Ethiopian Kaizen Institute (EKI), under the Ministry of Industry, with 65 technical staff. The institute is the world's first ever governmental institute that has the term *kaizen* in its name. The Ethiopian Government and JICA began the Phase 2 Kaizen Project in November 2011 for capacity building of EKI and

related organizations in order to disseminate *kaizen* throughout the country. This project is expected to contribute to establishing a system to disseminate *kaizen* in Ethiopia in a sustainable manner.

JICA’s cooperation to support *kaizen* in Ethiopia was the first case of its kind in Sub-Saharan Africa. The experience and the results of this project will form a useful basis for further projects in other African countries in the future.

Though not a magic wand, *kaizen* could be a useful method that will contribute to private sector development in Africa; if appropriately introduced, it will bring about changes in motivation and consciousness and help the acquisition and /or creation of knowledge and skills in the process for effective production and quality management.

To support the *kaizen* approach in other countries in Africa, it is crucial to secure an empirical base to provide a rationale for the conditions under which the approach will be functional and effective, and to identify what constraints should be overcome. From such a point of view, a greater emphasis on scientific analysis of individual projects with appropriate data is warranted.

## **5. Investment Promotion and Diversification through “Triangle of Hope” Approach in Zambia**

Turning now to investment promotion and diversification, which are other important factors for economic transformation, we would like to present a case study from Zambia. Zambia has been struggling to put an end to its over-reliance on mineral resources and to diversify its economy, as suggested in the Sixth National Development Plan (SNDP) formulated in 2011. The promotion of FDI in various sectors is considered one of its solutions. Zambia has been addressing this issue, and JICA has been supporting the comprehensive approach towards investment promotion, through the project called “Triangle of Hope (TOH),” that contributes to economic diversification.<sup>10</sup> The “triangle” represents a tripartite combination of (1) government will, (2) streamlining public administration, and (3) private sector participation. The idea was devised by Dato’ J. Jegathesan, who was the former

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10. JICA’s assistance was first initiated as the “Project for Triangle of Hope, Strategic Action Initiative for Economic Development (TOH-SAIED)” (referred to as the Phase 1 Project) implemented from 2006 to 2009. Then the Phase 2 Project called the “Zambia Investment Promotion Project – Triangle of Hope – (ZIPP – ToH)” followed from 2009 until 2012.



Deputy Head of the Malaysian Industrial Development Agency (MIDA) and JICA consultant for the project.<sup>11</sup>

Impacts and contributions of the project are summarized as follows (JICA 2012b; Homma 2013). First, the project successfully brought 9 investment projects to Zambia. (One of the investments is worth over \$200 million. These investments include Africa's first mobile phone factory; a large-scale university invested in by Malaysian investors; and a hospital project invested in by an Indian medical enterprise group.) Second, the project diversified investment from the mining sector towards non-traditional sectors such as education and health. Third, the project contributed to improvement of the Doing Business environment. For example, Zambia was identified as the world's 7th top reformer in Doing Business 2011 (World Bank and IFC 2010). Fourth, the project contributed to a dramatic increase of FDI inflow (FDI inflow for 2011 became 4 times larger than that of 2006). Last but not least, the project enhanced the capacity of the Zambia Development Agency (ZDA) as an investment promotion agency and improved services for investors.<sup>12</sup>

To achieve these results, a strong government will was initiated by the late President Dr. Levy Patrick Mwanawasa. Under his direction, 12 taskforces were formulated and 12 Action Agendas were prepared for development of 12 diversified areas.<sup>13</sup>

Throughout its cooperation period, the project focused on capacity building by the Zambian Government, in particular ZDA. The capacity building streamlined public administration on investment approval by reforming the investment application process, preparing manuals/guidelines, establishing one-stop shops, monitoring processes by tracer studies and others. It also aimed at promotional activities such as

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11. MIDA was renamed as the Malaysian Investment Development Authority in 2011.

12. ZDA was established under Zambia's Ministry of Commerce, Trade and Industry by merging five governmental agencies, namely Zambia Privatisation Agency, Zambia Investment Centre, Export Board of Zambia, Zambia Export Processing Zones Authority and the Small Enterprises Development Board. Although the ZDA has multiple functions, the basic function to promote inward FDI as the investment promotion agency (IPA) does not significantly differ from other countries' IPAs which are exclusively established for investment promotion purposes.

13. The twelve areas are as follows: education, medical and health, tourism, agriculture, cotton, banking and finance, air cargo hubs and inland ports, government streamlining, information and communication technology (ICT), Multi Facility Economic Zone (MFEZ), mining and micro, small and medium enterprises (MSME).



dispatching targeted investment promotion missions for Malaysia, India, South Africa and Japan and preparing promotional materials such as guidebooks, websites and sector/project profiles. The missions were sometimes implemented in the form of public-private joint missions. These activities contributed to further private sector participation in investment in Zambia even in the sectors which were not traditionally considered to be associated with private investment.

The TOH approach shows the importance of integrated efforts at the policy making level and implementation level to promote investments. This is an innovative approach and the difference from prior efforts in this area. It is also suggested that the TOH approach, including investment diversification, could serve as one of the solutions for African natural resource-rich countries which need economic diversification.

## 6. Ways forward

As we have seen, the keys to sustainable economic growth in Africa are industrial development (job creation), doing business improvement, and investment diversification. This chapter examined strategies to tackle these challenges and African initiatives for industrial development, AIDA, taking up cases of JICA's cooperation for Africa, which include (1) the analytical work of the Asian experience and African development, (2) industrial policy dialogue and quality and productivity improvement (*kaizen*) in Ethiopia, and (3) support for investment promotion and economic diversification ("Triangle of Hope" approach) in Zambia. These results of the projects designed and implemented as follow-up activities after TICAD IV imply that these approaches should be scaled up after TICAD V in accordance with AIDA. The international community is expected to support this African initiative.

The subsequent chapters will discuss the role of infrastructure. Without soft and hard infrastructure, such as Special Economic Zones (SEZ), roads, bridges, electricity and operational systems for industrial promotion, it is impossible to industrialize. Infrastructure is also very important to encourage the private sector, including Japanese companies, to invest more in Africa. In the process of the development of

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Asia, this ODA-FDI linkage worked very well in countries such as Thailand and Vietnam.

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