

Chapter 8: Cross Border Transport Infrastructure (CBTI)

Kaori Matsushita

Cross Border Transport Infrastructure (CBTI) is indispensable to economic activities in Africa. However, the high cost of distribution due to the limited capacity of infrastructure facilities and inefficient customs/cross-border formalities constrains economic and social development in Africa. Under the circumstances, TICAD IV, held in May 2008, designated regional infrastructure development as a key task and have been striving to improve both the physical and software sides of CBTI in Africa in order to improve the efficiency of physical distribution.

This report summarizes the current situation of trading and physical distribution in Africa, discusses the importance of CBTI, and proposes a course of action for assisting CBTI.

Cross Border Transport Infrastructure (CBTI) is defined as follows:¹ CBTI is a comprehensive and necessary infrastructure for cross-border transportation between countries. Such infrastructure includes physical infrastructure such as ports, railroads, main roads, transshipment facilities, border facilities including one-stop border posts (OSBPs), weigh bridges (vehicle weight measuring scales), and inland container depots (ICD), all of which constitute international transit corridors. CBTI also includes legal systems related to various cross-border matters, such as cross-border traffic regulations (police check), customs, international agreements, quarantine, and bond/security systems, as well as organization control/legal systems for smooth operation and maintenance of physical infrastructure.

1. The Current Conditions of Trading and Physical Distribution and Issues of Cross Border Transport Infrastructure in Africa

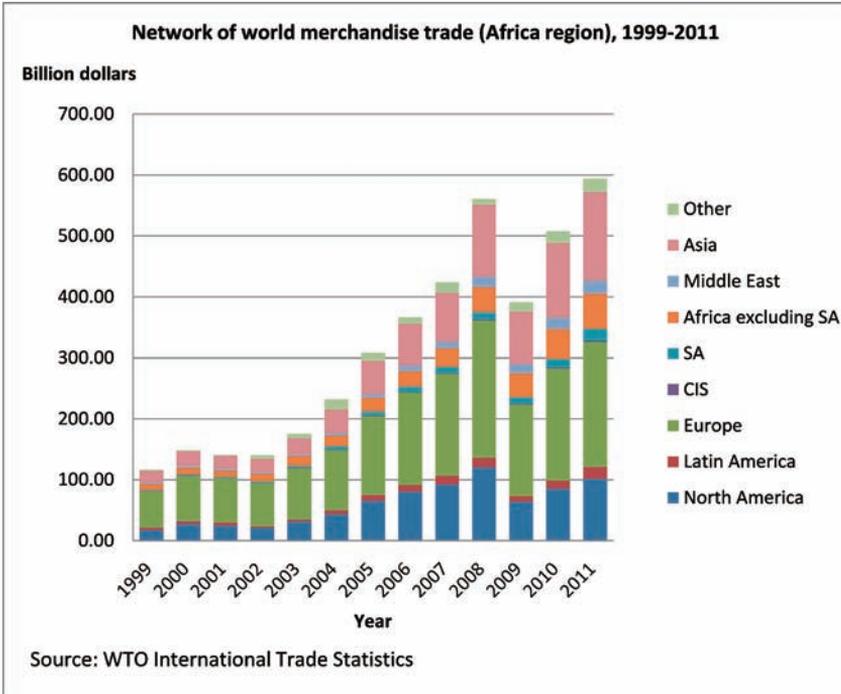
1.1 Trading/physical distribution

The value of exports in the whole of Africa including North Africa

1. This is based on the definition in JICA “Cross Border Transport Infrastructure Feasibility Study Phase 3 (Project Study)” (March 2009)

rapidly increased from 2003, dipped in 2009, and reached 594.2 billion dollars in 2011 (433.3 billion dollars for the Sub-Saharan Africa (SSA) region) (Figure 1). The ratio of exports to Europe has been high, but recently trading with emerging countries including China and India has been expanding. Africa has been attracting global attention as a region rich in fuel and mineral resources, and the development of its resources has taken off and caused the export volume to surge.² The value of imports increased from 481.5 billion dollars in 2008 (342.1 billion dollars for the SSA region) to 559.5 billion dollars in 2011 (404.1 billion dollars for the SSA region). Trading in Africa is on the rise and increased from 12.03 billion dollars in 2000 (8% of total trading volume) to 62.48 billion dollars in 2010 (12% of total trading volume).

Figure 1. Transition of African Export Value by Destination (1999–2011)



There are many issues concerning the time and cost of importing and exporting by countries in Africa. According to the Logistic Performance Index (LPI) in the world, which is an analysis of indexes related to

2. According to 2011 data, fuels and minerals account for 64% of import value.

import, export, and trading of 155 countries in the world (IBRD/WB, 2012), the highest ranked country in the SSA region is South Africa (23rd) followed by Benin (67th), Botswana (68th), and Malawi (73rd). Other countries in the SSA region were ranked below 80th.

The number of documents, days, and costs required for export and import in the SSA region is higher than the world average (Table 1).³ Complicated port paperwork, lack of information sharing systems, delays in introducing IT, and excessive check points along the routes prolong the time for physical distribution and cause delays in cargo transportation. Especially, figures for inland countries⁴ such as Burundi, Central African Republic, Chad, Republic of Congo, Niger, Rwanda, and Zimbabwe are particularly poor. Thus, there is a critical need to reduce the days and cost requiring for physical distribution in inland countries.

Table 1. Number of Documents, Days, and Cost required for Import and Export

| Region | Export | | | Import | | |
|----------------------------|---------------------|---------------|------------------------|---------------------|---------------|------------------------|
| | Number of Documents | Required Days | Cost (US\$/ Container) | Number of Documents | Required Days | Cost (US\$/ Container) |
| East Asia/Pacific | 6 | 21 | 923 | 7 | 22 | 958 |
| East Europe/Central Asia | 7 | 26 | 2,134 | 8 | 29 | 2,349 |
| South America/Caribbean | 6 | 17 | 1,268 | 7 | 19 | 1,612 |
| Middle East/North Africa | 6 | 19 | 1,083 | 8 | 22 | 1,275 |
| OECD High-income Countries | 4 | 10 | 1,028 | 5 | 10 | 1,080 |
| South Asia | 8 | 32 | 1,603 | 9 | 33 | 1,736 |
| Sub-Saharan Africa | 8 | 31 | 1,990 | 9 | 37 | 2,567 |
| World Average | 6 | 22 | 1,470 | 7 | 24 | 1,742 |

Source: Doing Business, June 2012, World Bank
(<http://www.doingbusiness.org/data/exploretopics/trading-across-borders>)

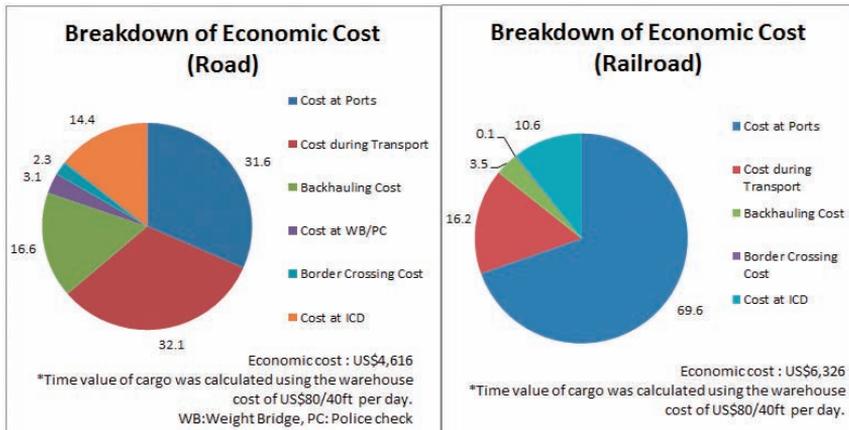
Reasons for long transport time and high transport cost vary from region to region. Major bottlenecks include insufficient capacity and the

3. Compared to the averages in the SSA region for 2006 and that for 2012, days required for export have reduced from 36 to 31 and for import have reduced from 45 to 37, showing a gradual improvement.

4. For example, the maximum days required for import is 101 days in Chad, the minimum is 10 days in Mauritius, the maximum import cost is 8,255 dollars in Chad, and the minimum is 577 dollars in Sao Tome and Principe.

inefficient physical distribution system of ports. For example, the holding time at ports is 2 to 3 days for regions with efficient physical distribution systems, less than 7 days for Asia, North Africa, the Middle East, and Latin America, but 14 days on average for the SSA region (IBRD/WB, 2012). JICA (2009) calculated the economic cost (necessary expenses are added to the cost based on the required time for the cargo) for exporting a 40ft container from Mombasa in Kenya to Kampala in Uganda. The result showed that the cost at ports accounted for 31.6% (1,666 dollars) of the entire economic cost by road transport and 69.6% (4,402 dollars) of the entire economic cost by rail transport. Nathan Associates (2011) evaluated the cost, required time, and reliability of ports, railroads, and border facilities for physical distribution in the North Corridor and Central Corridor, and found that scores for ports and railroads were lower than those for roads and border facilities.

Figure 2. Comparison of Economic Cost of Transport
(40ft container from Mombasa in Kenya to Kampala in Uganda)



Source: JICA, 2009

1.2 Cross Border Transport Infrastructure (CBTI)

Many transport infrastructures in the SSA region were built and developed as corridors connecting ports with hinterlands for exporting resources and agricultural products in the colonial period.

Since African countries gained independence in the 1960s, the conditions of roads, railroads, and ports in each country have deteriorated due to

insufficient skills and funds for maintenance as well as damage to road surfaces caused by overloaded vehicles. As for railroads, in addition to aging freight vehicles and tracks, the volume of traffic has decreased on many lines due to operational reasons including failure of the concessions. The use of containers at ports was introduced in the early 1990s in Africa, but the development of roads and ports to handle the physical distribution of large containers has not kept pace.

The necessity of CBTI development in the SSA region was recognized in the 1970s. Aid agencies and regional economic communities (RECs) in Africa have pointed out the necessity of a “corridor approach” that develops interregional physical infrastructure and legal/procedural systems in an integrated manner. For example, the Trans-Africa Highway was proposed in 1971, the Sub-Saharan Africa Transport Policy Program in 1987, the Spatial Development Initiative in 1996, and the Corridor Diagnostic Study of the Northern and Central Corridors of East Africa (CDS) in 2011, as outlined below.

BOX

(1) Trans Africa Highway (TAH)

The concept consists of nine corridors traversing Africa lengthwise and crosswise (total length of 56,683 km), and was proposed in 1971. In 2003, the United Nations Economic Commission for Africa (UNECA), African Development Bank, and AU examined the development status of the TAH and addressed the needs for TAH development, maintenance, and control by securing funds for each country along the route. Since then, development of the TAH has been promoted mainly by the African Development Bank.

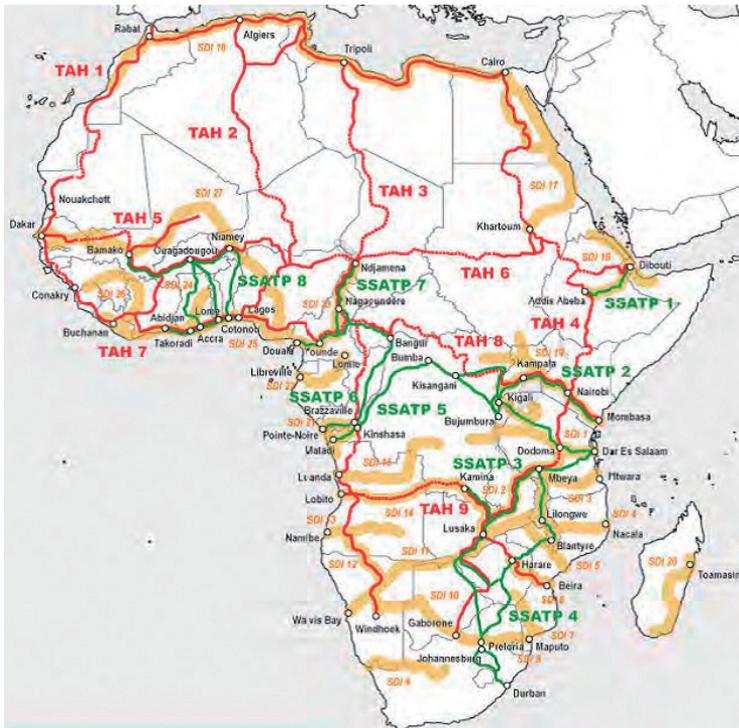
(2) Sub-Saharan Africa Transport Policy Program (SSATP)

This was established in 1987 through the combined efforts of the World Bank and UNECA. The SSATP has identified eight important regional economic corridors for developing transportation corridors from inland areas to each large-scale international port. The SSATP itself mainly conducts research on transport infrastructure development and formulates strategies and political measures. Under the strategy, each donor and cooperative agency, mainly the World Bank, supports individual infrastructure issues.

(3) Spatial Development Initiative (SDI)

The SDI is a concept proposed in the industrial development strategy of South Africa in 1996. Not only physical corridors such as roads, railroads, bridges, ports, and inland channels but also electric power, resources development, and industry policy were comprehensively considered. The New Partnership for Africa's Development (NEPAD) took up this approach and has proposed a program for broad-ranging regions.

Figure 3. Major interregional corridors in Africa



Source: JICA, 2010

(4) Corridor Diagnostic Study of the Northern and Central Corridors of East Africa (CDS)

Starting in 2009, the corridor diagnostic study of the Northern and Central corridors of the five EAC member countries (Kenya, Tanzania, Uganda, Rwanda and Burundi) was conducted with the support of USAID and DFID. In the study, priority projects were specified based on the results of analyzing the physical performance of ports, railroads and roads in two target corridors and also forecasts for 2030.

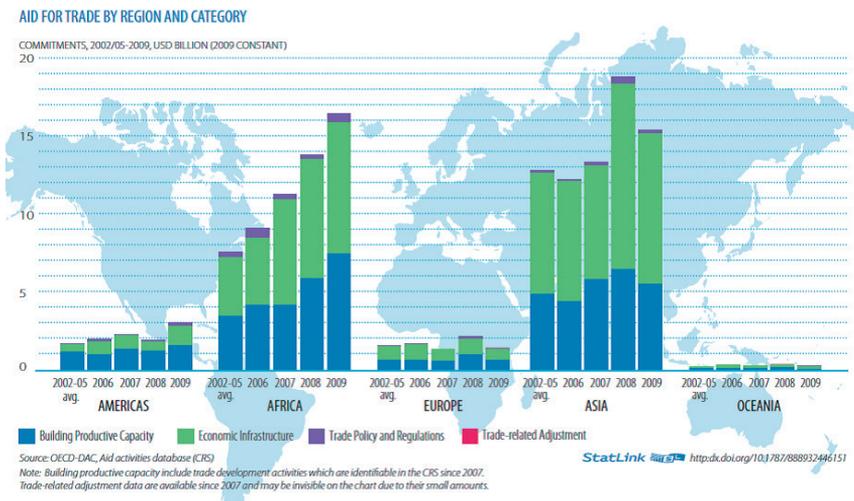
(5) Programme for Infrastructure Development in Africa (PIDA)

In 2010, the African Union Council decided to formulate PIDA, which provides a guideline for comprehensive infrastructure development in the whole of Africa. Studies were conducted mainly by the African Union Commission, African Development Bank, and NEPAD, and PIDA was approved by the African Union Summit in January 2012. In the transport sector, 24 programs (worth 25.4 billion dollars in total) that should be given priority to go forward by 2020 were selected based on the analysis of the African Regional Transport Integration Network (ARTIN), TAH, and 40 important corridors, 19 ports, and 53 airports. PIDA is an innovative program that was started by African initiatives. Relevance with PIDA is desired for the future development of regional infrastructure. Following approval by AU, NEPAD and the African Development Bank have been introducing PIDA to stakeholders throughout the world. It is necessary to pay particular attention to the future formulation and implementation of the project.

In addition to infrastructure development efforts, it is important to consider “Aid for Trade (AfT).” AfT activities promote technical assistance related to trading, supply-side assistance including improving production capacity and developing distribution infrastructure, and structural adjustment related to the deregulation of trade by initiatives of the World Trade Organization (WTO), OECD, and the World Bank. A regional comparison of assistance to Africa shows that the amount committed has greatly increased since 2002, doubling by 2009 to reach 13 billion dollars. Most of the resources have been used for the development of trade-related capacity and infrastructure (Figure 4). According to a case study analysis, an increase in AfT leads to an increase in export volume and reduction of import cost.⁵ Especially in Africa, it is effective to reduce the cost of container transport (OECS/ WTO, 2011). Trade facilitation in the SSA region is expected to be promoted through this initiative.

5. A doubling of AfT related to infrastructure increases import volume by 3.5%, and a doubling of AfT related to trade facilitation decreases import cost by 5%. (OECD / WTO, 2011)

Figure 4. Aid for Trade by Region and Category, Transition of Commitments (2002 – May 2009)



Also, the World Bank and the African Development Bank implemented the East Africa Trade Transport Facilitation Project (EATTFP) in four countries in East Africa (Kenya, Tanzania, Uganda, and Rwanda) and provided assistance for improving systems related to CBTI including railroads, roads, ports, customs, borders, and weigh bridges of two major corridors. USAID conducted a feasibility study of OSBP development of major borders in East Africa and also assisted in establishing OSBP for railroads at the Malaba border between Kenya and Uganda. Great Britain implemented Trade Mark East Africa (TMEA) and Trade Mark South Africa (TMSA) and assisted in regional integration such as assistance in enforcement of Tripartite that unites three RECs, COMESA, EAC and SADC, and improvement of the tariff system.

Recently, countries in Africa formed Regional Economic Communities (RECs)⁶ with neighboring countries to take measures for facilitating

6. The Africa Union has authorized the following eight agencies as RECs: (1) The Community of Sahel-Saharan States (Cen-Sad), (2) Common Market for Eastern and Southern Africa (CMESA), (3) East Africa Community (EAC), (4) Economic Community of Central African States (ECCAS), (5) Economic Community of West African States (ECOWAS), (6) Intergovernmental Authority on Development (IGAD), (7) Southern African Development Community (SADC), and (8) Union of Maghreb Arab (UMA).

trade and physical distribution and regional integration. Issues to be focused on and progress of economic integration differ among the RECs, but they have promoted discussion and harmonization related to regional infrastructure studies, formulation of development plans, harmonization of regulations, standardization of cross border formalities, union of customs tariffs, and the common market. In recent years, they play an important role in the implementation of the CBTI development programs supported by aid agencies. The increasing trade volume in Africa shown in Figure 1 confirms that regional integration is moving forward.⁷ Since 2010, discussions on establishing an African Continental Free Trade Area (C-FTA) have been held in the African Union (UNECA, 2012). CBTI is extremely important to support the efforts by countries in Africa to accomplish economic growth.

2. Japan's Contribution to Cross Border Transport Infrastructure Development

Including the period before TICAD IV, Japan has strived to develop infrastructure in Africa in cooperation with the international community. Below are cases that are especially closely linked to CBTI. Japan has focused on three approaches: corridor development, facilitating border formalities (OSBP assistance and customs capacity improvement), and institutional development of cross border transport systems.

2.1 Corridor development

(1) Mombasa port and port area road development project (North Corridor)

This is a project to improve CBTI by integrally developing Mombasa Port in Kenya and roads to strengthen the regional corridor to inland countries. Mombasa Port is the only international trading port in Kenya and is among the largest in East Africa.⁸ It functions not only as an import and export base in the country but also as a gateway to the North Corridor connecting to Uganda, Rwanda, and Burundi. With steady economic growth in Kenya and East Africa since 2003, the volume of cargo handled at Mombasa Port has been increasing and reached 695,000

7. However, many RECs are funded by contributions from member countries. There are many issues related to promoting interregional integration because RECs do not have legal force over their own project budgets or member countries.

8. In entire Sub-Saharan Africa, the capacity of the Mombasa Port is placed in fifth after Durban and Cape Town in South Africa, Lagos in Nigeria, and Abidjan in Cote d'Ivoire (JICA, 2009).

TEU in 2010 even though the annual container handling capacity is only 450,000 TEU,⁹ causing issues such as ships having to wait at sea for loading and unloading and the prolonged storage of unloaded containers. It is necessary to improve the capacity to handle large container vessels, accessibility to ports, and operational efficiency. Regarding port area roads, traffic congestion on the road connecting Mombasa Port to the North Corridor is already serious, and is expected to worsen after 2016 when a new container terminal that is being built by an ODA loan project is completed. The only transportation from the center of Mombasa including the port to the southern part of the city is by ferry which crosses the channel. This is hindering the development of the southern city region and the physical distribution toward Tanzania. Backed-up physical distribution caused by undeveloped infrastructure at Mombasa Port and port area roads is hindering economic growth in Kenya and inland countries in East Africa. There is an urgent need to facilitate physical distribution through infrastructure development.

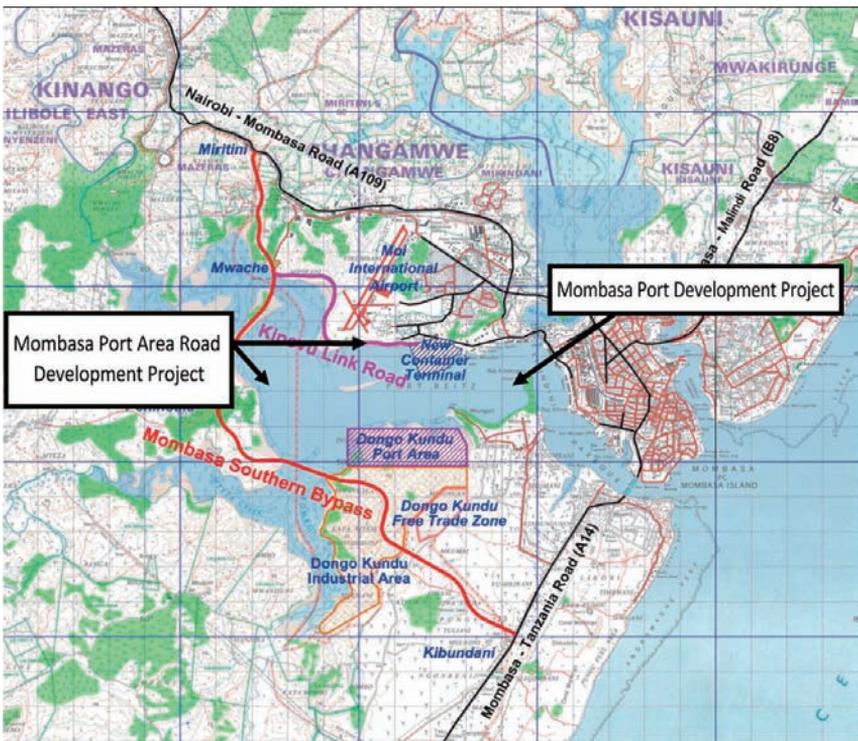
To solve such problems, Japan decided to implement the “Mombasa Port Development Project” (L/A signed in November 2007) and “Mombasa Port Area Road Development Project” (L/A signed in June 2012). These two projects will develop a container terminal where large container vessels can come alongside the pier, a road connecting the new container terminal to the North Corridor, and roads to Mombasa Port (road length 25.51 km, two long bridges, and one elevated bridge) to increase the capacity of Mombasa Port.

9. TEU (twenty-foot equivalent unit): Cargo volume converted into the number of 20-foot containers.

Figure 5.



Figure 6.



When the Port Development project is completed, the container volume that can be handled at Mombasa Port will increase from 480,000 TEU in 2006 to 990,000 TEU in 2017, more than double that in 2006. A significant increase of material handling capacity is expected (see Table 2).

Table 2. Expected Benefits of Mombasa Port Development Project

| Index | Reference Value (Result in 2006) | Target Value (2017) [2 years after project completion] |
|---|-------------------------------------|--|
| Container cargo volume | 480,000 TEU | 990,000 TEU |
| Total tons of vessels entered | 9 million GT | 15.43 million GT |
| Ratio of container shipping (annual) | 62% | 73% |
| Vessel waiting time | 1.49 days /vessel | 1.0 day /vessel |

(2) Nacala Corridor in Mozambique

In the Nacala Economic Corridor located in northern Mozambique, there are expectations for natural resource development of coal in Tete Province, agricultural development using the vast land and abundant water resources in Nampula Province, Niassa Province, and Zambezia Province, and industrial development based on the potential of Nacala Port, which is a natural good port. Development of the Nacala Corridor will provide a dependable transport link from Nacala Port not only to Nampula Province with the largest population in Mozambique and Niassa Province but also to inland Malawi and Zambia at moderate prices. Expected benefits include increased physical distribution in northern Mozambique, economic vitalization of widespread areas, improvement of living standards, and reduction of poverty.

Comprehensive development of the Nacala Corridor under the Nacala Corridor Development/Improvement Program is being conducted, as shown in Table 3.¹⁰ The main project, "Tropical Savannah, Agriculture Development Program, Japan – Brazil – Mozambique Triangular Cooperation (ProSAVANA-JBM)," is intended to enhance agricultural production capacity in Mozambique using the experience in agricultural

10. Projects in education, water supply, and health fields are implemented or planned in addition to infrastructure and agriculture projects, to attain comprehensive development of the entire region.

development of Cerrado in Brazil and to establish an economic model that benefits not only food security but also small-scale farmers.¹¹ In the Nacala Corridor development, cooperation between governments and private sectors in the three countries of Japan, Brazil, and Mozambique is emphasized, and the activities are focused on maximizing mutual benefits.¹²

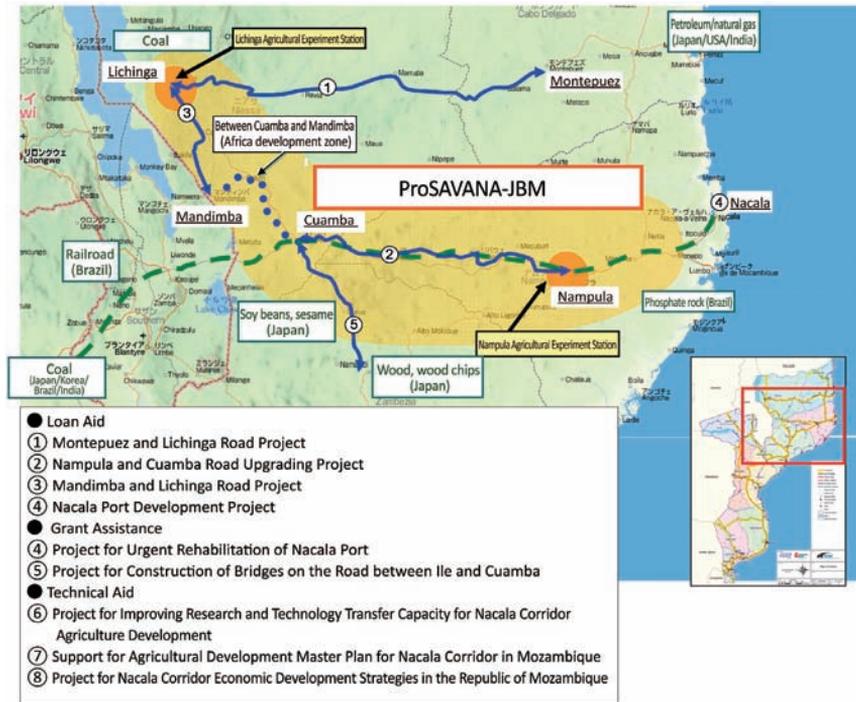
Table 3. Infrastructure Projects of Nacala Corridor in Mozambique

| Project Name (Cooperation Type) | Expected Result |
|--|--|
| Montepuez and Lichinga Road Project (loan) | Paving, improving and expanding the width of 201 km of road, which is part of the 516-km national road connecting Montepuez to Lichinga and related infrastructure improvement |
| Nampula and Cuamba Road Upgrading Project (loan) | Road improvement between Nampula in Nampula Province and Cuamba in Niassa Province (building approximately 350km road and six bridges) |
| Project for Construction of Bridges on the Road between Ile and Cuamba (grant) | Road development and replacing 13 bridges between Ile and Cuamba |
| Mandimba and Lichinga Road Project (loan) | Road improvement of 88.88-km road between Mandimba and Lichinga |
| Project for Urgent Rehabilitation of Nacala Port (grant) | Improvement of yard capacity for storing new containers Container cargo volume: 89,714 TEU (2011) → 161,590 TEU (2017) |
| Nacala Port Development Project (loan) | Increase of cargo handling volume at Nacala Port · Total cargo volume: 16.39 million tons (2011) → 47.38 million tons (2019) · Container cargo: 89,714 TEU (2011) → 234,000 TEU (2019) |

11. For more discussions on this project, see chapter 5 of this volume.

12. http://www.jica.go.jp/topics/news/2012/20120514_02.html

Figure 7. Cooperation Projects of Nacala Corridor in Mozambique



Source: Compiled from various JICA project documents

2.2 Facilitation of border formalities

(1) One stop border posts (OSBPs)

Border posts are installed at many cross border points in the SSA region to conduct immigration control and customs clearance, screening, and quarantine. There are many time-consuming border points to be crossed, for the following reasons:

- (1) Insufficient agreements between countries
- (2) Complicated paperwork that differs from country to country
- (3) Delay in computerizing documents
- (4) Quality and moral issues of cross border officials
- (5) Undeveloped cross border facilities

One stop border post (OSBP) have been introduced as a solution to these problems. In this system, neighboring countries at a border jointly

conduct immigration control, customs clearance, and quarantine at the one-stop border post. These tasks are handled separately at present. The experience of OSBP at three places (Chirundu, Malaba, and Namanga) in the SSA region is introduced below.

Chirundu (Zambia/Zimbabwe)

Chirundu is at the border between Zambia and Zimbabwe and is located on the North-South Corridor. The border is important for the transport of inland mineral resources such as copper produced in Zambia to Durban Port in South Africa and Beira Port in Mozambique. Japan has implemented assistance by drawing up a bilateral agreement between Zambia and Zimbabwe, grant aid assistance for the Chirundu Bridge Construction Project, and the Chirundu Border Related Facility Construction Project by providing non-project grant collateral funds and dispatching volunteers. Many partners have participated in this project. The World Bank conducted the baseline study¹³ which analyzed the traffic volume and reasons for delays at Chirundu. The British DFID allocated a project manager and introduced ICT. Such cooperation related to facilities and personnel was accumulated in 2009, and the first OSBP in Africa started operating after an OSBP-related legislative bill was enacted in the two countries.¹⁴

The effectiveness of the OSBP has been confirmed. For example, regarding the number of passing trucks, 225 trucks passed per day in 2007 (120 north-bound trucks, 105 south-bound trucks) but 380 trucks passed per day in 2011 (200 north-bound trucks, 180 south-bound trucks) (JICA/EAC, 2011). As for time taken to cross the border, that for passenger cars was reduced from 1–2 hours to 20 minutes, that for buses from 2 hours to 1 hour, and that for trucks from 1–2 days to less than 1 day. Future challenges are to fully utilize introduced facilities, standardize customs formalities, and promote further cooperation between the agencies of the two countries.

Malaba (Kenya/Uganda)

Malaba is an important border between Kenya and Uganda in the North Corridor. The first OSBP exclusively for railroads in East Africa was

13. Barney Curtis, "The Chirundu Border Post: Detailed monitoring of transit times", SSATP Discussion Paper No. 10, World Bank, 2009.

14. Zimbabwe One Stop Border Posts Control Act, No. 21 of 2007 and Zambia One Stop Border Control Act, No. 8 of 2008.

established in 2007 at Malaba based on a bilateral agreement concluded by the governments of Uganda and Kenya in 2006. Malaba is one of the target sites of “Capacity Building for the Customs Administrations of the Eastern African Region (Phase 2)”, a technical assistance project by JICA. Major activities of this project are introduction of a customs clearance system necessary for operating the OSBP (Real Time Monitoring System and Cargo Control System: RTMS/CCS) and capacity building through training of joint border monitoring and customs clearance work (tariff classification and customs valuation).

As a result of introducing the OSBP, the time required for railroad crossing has been reduced from 4-7 days to 2 hours. For road cargo, the time was reduced from 4 days to 3 hours (JICA/EAC, 2011).¹⁵ The improvement of yard and customs facilities and the implementation of 24-hour operation and joint customs screening by the two countries for some items (12 items accounting for 30% of all cargo) have influenced such improvement.

The handling of extra-territorial rights and administration (management and execution) under the bilateral agreement is an issue for the OSBP at Malaba.¹⁶ The further development of systems is planned.

Namanga (Kenya/Tanzania)

Namanga on the border of Kenya and Tanzania is located on the corridor connecting Nairobi, the capital of Kenya, and Arusha, the central city of northern Tanzania. Namanga is used for 41% of exports from Kenya to Tanzania and 20% of exports from Tanzania to Kenya. In the yen-loan “Arusha-Namanga-Athi River Road Development Project” Japan will build 104.3 km of road between Arusha and Namanga on the Tanzania side, which is part of the international main road (240 km long) connecting Arusha in Tanzania to Athi River in Kenya, and will also develop infrastructure related to OSBP. This project is co-financed by the African Development Bank, which has provided loans for road construction on the Kenya side (135.7 km) and part of the Tanzania side,

15. The Trade Mark East Africa “Review of the impact of trade facilitation instruments”, 2012 introduces other ex post valuation of OSBP in Malaba (shortened from 3 days to 3 hours, and from more than 12 hours to 6 hours on average).

16. For example, regarding criminal investigations of violations of the Immigration Control Law, such as large-scale tax evasion, smuggling, and handling of prosecuted defendants, it is not clearly stipulated which country’s authority should seize the articles and arrest and detain the defendant (JICA, 2009).

consulting expenses, and OSBP facilities on the Kenya side.

The same as Malaba, Namanga is also a target site of “Capacity Building for the Customs Administrations of the Eastern African Region (Phase 2).” It is planned to develop OSBP operation manuals for the cross border related agencies including customs, quarantine bureaus, and immigration bureaus and OSBP facility administrative rules to enable OSBP to operate smoothly when the facilities are completed.

Based on the experience at Malaba and Namanga, EAC compiled the “OSBP Source Book,” a practical guidebook, with the support of JICA. This source book outlines steps necessary for establishing OSBP and indicates points for developing organizational and institutional systems, simplifying cross border formalities, designing facilities, and introducing ICT. After the completion of the EAC, workshops related to the OSBP source book were held in SADC in Southern Africa and UEMOA in Western Africa, and a local-version source book, which incorporates the actual conditions in each region, has been compiled. The book is expected to be upgraded based on detailed information, cases, and lessons in each country and to be used in the future.

Photo: Workshop related to OSBP Source Book (2011)



(2) Capacity Development of Customs on the Borders of East Africa, Namibia and Botswana

As described in the previous section, JICA is implementing a project for improving the customs ability on the borders of five East African countries as well as Namibia and Botswana. The abolishment of tariffs in the region and the introduction of common external tariffs were realized in the five East African countries by 2010. At present, work is underway on building a common market. As cooperation for facilitating trade in the region, since 2007 JICA has implemented “Capacity Building for the Customs Administrations of the Eastern African Region” to introduce RTMS/CCS and provide training (Master Trainer Program) for training instructors on customs duties including the tariff classification and customs valuation.

On the border of Mamuno/Trans-Kalahari between Botswana and Namibia, the “Project for the Establishment of the One Stop Border Post (OSBP) between Botswana and Namibia at Mamuno/Trans Kalahari Border Post” has been implemented since 2010. The border is becoming increasingly important because the border connects Walvis Bay in Namibia and Johannesburg in South Africa, and the route connects North America, Europe, and Southern Africa with shorter times and distances. Both Botswana and Namibia have strategic intentions to establish a model case of OSBP in the region in order to lead the negotiations with other countries in the future. Although the initial project plan has been reviewed because of the belated approval of the bilateral agreement between the two countries, OSBP is expected to be steadily introduced with the support of the Project.

2.3 Harmonization of cross border transport system

In many regions in Africa, overloaded vehicles constantly travel on the paved roads, damaging the road surface. However, appropriate measures to control overloaded vehicles cannot be taken because regulations differ from country to country. Furthermore, there are issues such as shortages of appropriate vehicle weighing machines and facilities and lack of cooperation by transportation companies. In response, the EAC has studied a legal framework of regulations on overloaded vehicles since 2010 with the support of JICA (JICA, 2011).

As a result of discussions on harmonizing regulations, five member states agreed on 23 items, including vehicle gross weight limit (56 tons)

and interlink vehicles (full length of up to 22 m permitted on only specified routes), to build the foundation of institutionalization. Going forward, institutionalization at the EAC will be undertaken by the following process. The EAC assembly will approve an EAC law that defines broad principles of vehicle regulation, and the EAC Council will proclaim domestic laws and ordinances that stipulate detailed operational and administrative matters. The EAC laws and ordinances will supersede conflicting domestic laws and ordinances in member states.¹⁷ This is a strong and immediate mechanism for establishing a harmonized institutional system.

3. Direction of Cooperation in TICAD V

3.1 Lessons

(1) Comprehensive corridor development considering the entire corridor Obviously, trade promotion and economic growth can be achieved only by combining a wide range of policies for them, of which CBTI development constitutes only a part. CBTI development must be positioned in a comprehensive corridor development framework that takes into consideration industrial development, resource development, and trade promotion of the entire supranational area.

As mentioned above, Japan has undertaken a project at Mombasa Port in Kenya with a view to benefiting the entire North Corridor and stimulating the economy in the Mombasa region. In addition, regarding the Nacala Corridor in Mozambique, Japan has worked on comprehensive corridor development linked to agricultural and resource development with the cooperation of governments and private sectors, aiming to improve the economic performance of the entire corridor and deliver benefits to poverty groups. The approach aiming for synergy effects by programming multiple issues will serve as a useful reference for future projects.

(2) Importance of a three-way approach involving infrastructure development, institutional development, and human resource development

To improve CBTI, key requirements are not only the development of conventional infrastructure such as ports, roads, and railroads, but also assistance in development systems and appropriate operation of

17. Based on subparagraphs (4) and (5) of Article 8 in EAC law

regional agreements and domestic regulations, as well as human resources development of cross border officials (customs, immigration, quarantine, cross border police, etc.) and the private sector (customs clearance agencies, transportation companies, etc.) are important. As for customs, as implemented in Japan's technical assistance projects, an approach designed to improve capacity in accordance with the international standard by cooperating with the international agency, the World Custom Organization (WCO), seems to be effective.

(3) Cooperation with Regional Economic Communities (RECs)

When improving the systems (regional agreements, customs system standardization, harmonization of traffic laws, bond system, etc.) noted in (2) above, a legal framework covering multiple countries needs to be introduced. In Africa, RECs have already been established in regions with social and economic connections, and institutional improvement activities are being carried out in each region. Therefore, focusing on CBTI in cooperation with RECs will deliver benefits to business more effectively and efficiently.

3.2 Direction of future cooperation

The population of Arica is expected to continue increasing. It is important to facilitate trade by developing CBTI in order to develop industry and thus contribute to employment creation and regional development and also to satisfy the demands of the expanding market. Future efforts should target comprehensive corridor development by intensively allocating resources to corridors with high development potential in order to promote a shift from resource-dependent economies to a versatile and advanced regional industrial structure. As specific assistance measures for CBTI, it will be effective to form a cooperation structure in order to enhance port functions which are bottleneck in the physical distribution system, to develop the transport infrastructure to promote industrial and agricultural development using regional resources, and to assist in facilitating cross border formalities.

References

- African Development Bank. 2011. *African economic outlook 2011*. Paris: OECD.
- African Union Commission, African Development Bank, and Economic Commission for Africa. 2012. *Programme for Infrastructure Development in Africa (PIDA)*. Addis Ababa, Ethiopia: African Union Commission.
- Arvis, J., R. Carruthers, G. Smith, and C. Willoughby. 2011. *Connecting landlocked developing countries to markets*. Washington, DC: World Bank.
- Foster, V., and C. Briceno-Garmendia. 2010. *Africa's infrastructure: A time for transformation*, Washington, DC: World Bank.
- Hirano, K. 2009. *Issues in Africa: World history of development assistance*. Tokyo: Nippon Hyoronsha.
- Japan International Cooperation Agency, and East African Community. 2011. *One stop border post source book*. n.p.
- JICA Africa Department. 2009a. *Preparatory study report of Western Africa comprehensive OSBP assistance program formulation*. Study prepared for JICA, Tokyo, March.
- JICA Africa Department. 2009b. *Report of preparatory study of physical distribution improvement cooperation in the border area between Tanzania and Rwanda including Rusumo Bridge*. Report prepared for JICA, Tokyo.
- JICA Africa Department. 2011. *Report of African development strategy review session*. Report prepared for JICA, Tokyo.
- JICA Economic Infrastructure Development Department. 2009. *Project study: Final report. Report on Cross Border Transport Infrastructure Feasibility Study Phase 3*, prepared for JICA, Tokyo.
- JICA Industry Development, and JICA Public Policy Department. n.d. *Project materials, Capacity Building for the Customs Administrations of the Eastern African Region, Phase 2*.
- JICA Industry Development, and JICA Public Policy Department. n.d. *Project materials, Project for the Establishment of the One Stop Border Post (OSBP) between Botswana and Namibia at Mamuno/ Trans Kalahari Border Post*.
- JICA Social Development Department. 2008. *Final report of study (project study) of how the transport infrastructure assistance should be in Africa*. Report prepared for JICA, Tokyo, March.
- JICA. 2010a. *Preliminary study on the Southern Africa Growth Belt*:

- Integrated regional transport program. Report prepared for JICA, Tokyo.
- JICA. 2010b. Project study of regional transport infrastructure (ports/ railroads) in Sub-Saharan Africa. Study prepared for JICA, Tokyo.
- JICA. 2011. Study for harmonization of overload vehicle control in the East African Community. Study prepared for JICA, Tokyo.
- Nathan Associates, Inc. 2011. Corridor Diagnostic Study of the Northern and Central Corridors of East Africa. Report submitted to the Task Coordination Group, Corridor Diagnostic Study of the Northern and Central Corridors of East Africa, April.
- Organisation for Economic Co-operation and Development (OECD), and World Trade Organization (WTO). 2011. *Aid for trade at a glance 2011: Showing results*. Paris: OECD.
- Trade Mark East Africa. 2012. Review of the impact of trade facilitation instruments. n.p.
- World Trade Organization. 2012a. *World trade report 2012*. Geneva: World Trade Organization.
- World Bank. 2012b. *Connecting to Compete 2012: Trade logistics in the global economy; The logistics performance index and its indicators*. Washington, DC: World Bank.
- World Bank. n.d. World development indicators. Online database. <http://data.worldbank.org/data-catalog/world-development-indicators>.
- World Bank, and International Finance Corporation. 2013. *Doing business 2013: Smarter regulations for small and medium-size enterprises*. Washington, DC: World Bank.
- United Nations Economic Commission for Africa. 2012. *Assessing regional integration in Africa V: Towards an African continental free trade area*. Addis Ababa, Ethiopia: UNECA.