Report on the Rwanda Mission

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GRIPS Development Forum

A GRIPS Development Forum (GDF) team consisting of Kenichi Ohno, Izumi Ohno, and Akemi Nagashima visited Kigali during August 5-8, 2014 to study the features of Rwanda's remarkable growth in recent years from the perspective of international comparison of policy methods, and draw lessons for other developing countries including Ethiopia[1]. The GDF team conducted many meetings jointly with JICA's parallel mission consisting of Ms. Miho Oikawa, Mr. Masaaki Hamada (JICA Industrial Development and Public Policy Department), and Ms. Yuko Ikeda (JICA Ethiopia Office).

We visited government ministries and agencies, a private sector organization, a policy think tank, an industrial estate, and donors with industrial support programs including Japan, Germany, the African Development Bank and the World Bank. Mission schedule, organizations visited and information collected are shown in attachments 1-3. We would like to express our deep appreciation to all people who kindly received us and shared valuable information with us. Our special thanks go to the JICA staff at the Africa Department and the Rwanda Office in particular, who assisted us greatly in executing this mission. We also thank Rwandan Ambassador to Japan Dr. Charles Murigande, as well as Japanese Ambassador to Rwanda Mr. Kazuya Ogawa and his embassy staff.

1. Overview

Rwanda has a unique and remarkable history of economic development. After the tragic genocide in 1994, the Rwandan economy remained weak with per capita GDP hovering in the range of $200 to $300 during the period from 1998 to 2002. Subsequently, with the initiation of proactive development policy in the early 2000s, the economy began to rebound strongly and sustained high growth with per capita GDP rising at an average rate of 10.7% between 2002 and 2013 (World Bank data). In 2013 per capita GDP stood at $620, about twice the level prior to the genocide. President Paul Kagame, who assumed office in 2000, has transformed Rwanda into a developmental state and guided the nation toward economic growth. The country aims to attain middle income status by 2020 ("Vision 2020").

During this recent ascent achievements were made in both policy method and economic performance with the result that certain aspects of the Rwandan economy already resemble

[1] The purpose of our JICA-commissioned missions, including this one, is to collect information on industrial policy formulation in selected countries for the policy learning of other developing countries. During Phase I of Japan-Ethiopia industrial policy dialogue 2009-2011, the GDF team visited Singapore (August-September 2010), Korea (November 2010) and Taiwan (February 2011). During Phase II, India (September 2012), Mauritius (October 2012), Malaysia (June 2013), and Indonesia (June 2014) were visited in addition to Rwanda. Separately, Ethiopia, Vietnam, Thailand, Mozambique, Zambia, Tanzania, Ghana and Uganda were also visited on other budgets.

those of advanced economies while other aspects still retain weaknesses expected of a typical latecomer country. This unevenness is one the most striking features of the Rwandan economy today.

Rwanda's advanced aspects, which are rarely seen in other countries at similar income levels, include the following:

- President Paul Kagame is seriously and strongly committed to development and gives clear policy directions, to which the country responds.
- High-ranking technocrats are competent and have excellent presentation skills.
- Policy is made through systematic stakeholder consultation, the government has strong policy ownership, and policy documents are well-written. National Dialogue is annually held with the participation of the President, and public private dialogue is also active.
- There is little corruption, citizens enjoy personal security, and streets are clean.
- Performance contracts, based on the tradition of *Imihigo*, are pervasive. Promised policies are monitored and assessed at every level of government.
- Significant poverty reduction has been achieved with population below poverty line falling from 77% in 1995 to 45% in 2011.
- In the World Bank's Ease of Doing Business survey in 2014, Rwanda ranks No.2 in Africa after Mauritius, or No.32 globally.
- High value services such as ICT, telecom and finance are emerging, with services occupying 45% of GDP in 2013.
- Overall national self-sufficiency in agro products has been attained overcoming the heavy food aid dependency of the past.
- National branding effort has created the image of a rising nation replacing the dark image of the past.

These features collectively make Rwanda an African Miracle in the eyes of global analysts and investors. A large number of returning Diaspora—the patriotic Rwandans equipped with global knowledge and professionalism coming home from America, Europe and neighboring African countries—provide the human capital necessary for high-value industries and supporting policies. On the other hand, three deficiencies of Rwanda identified by this mission, which are also commonly seen in many other low-income countries, are (i) a weak (Rwandans prefer to say "young") private sector in sharp contrast to the advanced public sector; (ii) high aid dependency in the absence of competitive foreign exchange-earning industries[2]; and (iii) inadequate execution of policies despite their elaborate formulation, which reduces impact.

2. Causes of high growth

In the opinion of the GDF mission, which was echoed by some development partners of Rwanda, recent high growth can be explained mainly by three factors.

[2] The Rwandan economy is relatively closed with the export volume equivalent to 15% of GDP. Coffee, tea and minerals accounted for 59% of total export in 2013 (World Bank data).

First, fast growth is not uncommon in economies that start from a very low level. Because the Rwandan economy was devastated after the 1994 tragedy, it had much room to rebound when political stability and policy confidence were restored. Post-crisis recovery is a natural phenomenon and can continue for 10-15 years or more as witnessed in post-WW2 Japan, China and Vietnam in the 1990s, or Myanmar and Ethiopia today.

Second, continuous injection of purchasing power into the national economy through public money and ODA has sustained growth. Government spending is about 20% of GDP with foreign aid supporting 40% of fiscal revenue. This is demand-driven growth rather than productivity-driven one backed by strongly emerging industries and structural diversification and transformation. True, agriculture and services are doing reasonably well, but their dynamism alone cannot explain the 8% growth recorded in the recent few years. The government is clearly aware of this situation and determined to transform the current consumption boom into a “private sector-driven” (supply-driven) growth.

Third, policy improvements and initial economic achievements mentioned above have generated business confidence and good reputation which sustained high international attention and robust inflows of foreign aid and investment. The government should be credited for the successful national branding and image re-creation.

From the perspective of East Asian experience, however, demand-driven booms and projection of a good image are not sufficient to produce and sustain high-quality growth. For this purpose, private sector dynamism, supported by appropriate policy actions, must be ignited. The Rwandan government values logical consistency, well-defined participatory frameworks and the pursuit of global best practices. However, it seems relatively weak in *gemba*-based pragmatism and unbroken attention to down-to-earth details which are the hallmark of East Asian development including Japanese[3]. To achieve high and sustained growth to middle income and beyond, procedural correctness must be supplemented by gemba pragmatism (see sections 8 and 9).

While strong policy ownership and national pride mark the development processes of both Rwanda and Ethiopia, the two countries are quite different in their policy approaches. Rwandans often commission top-class international advisors and consultants to produce well-structured global standard documents and mechanisms but they are relatively weak in helping small farmers and producers on the ground. Ethiopians, on the other hand, often struggle to draft relatively clumsy policy documents by themselves but have established implementing agencies such as textile, leather and kaizen institutes for boosting priority sectors, agricultural and health extension services and a farmer training center in every

[3] Gemba is a Japanese term signifying a physical location where production actually takes place such as a factory floor or a farm. Improvement of gemba through relentless attention to details is the heart of kaizen (Japanese-style continuous, bottom-up and low-cost productivity improvement) spearheaded by Toyota and practiced by virtually all competitive manufacturers in Japan. Gemba-orientation is also visible in other high-performing Asian economies.

village, a national network of technical and vocational education and training (TVET) and engineering universities, state-run and World Bank-assisted industrial zones, and so on, through trial-and-error and with national budget (topped up by aid). Ethiopia can learn national marketing and branding from Rwanda, while Rwanda can learn gemba-oriented hands-on policy making from Ethiopia[4].

3. EDPRS2 and key policy components

Rwanda has so far drafted three five-year plans toward Vision 2020, which is an overarching national aspiration to catapult the country into middle income. They are the Poverty Reduction Strategy Paper (PRSP: 2002-2006), the First Economic Development and Poverty Reduction Strategy (EDPRS: 2007-2012), and the Second Economic Development and Poverty Reduction Strategy (EDPRS2: 2013-2018). PRSP aimed to move the country from dependency on humanitarian aid to economic recovery, while EDPRS turned economic recovery into sustained growth. The main objective of current EDPRS2 is to accelerate progress toward middle income status and better quality of life.

Based on the greater-than-expected achievements of the recent past, Vision 2020 itself was revised in 2012. The original vision created in 2000 targeted a per capita income of $900 by 2020 but it was moved upward to $1,240 by 2020. The required annual growth was set at an ambitious 11.5%. EDPRS2 has the following thematic areas, targets and priorities.

Thematic area	Target	Priorities
Economic transformation	Average GDP growth of 11.5%	Domestic & international connectivity, export, investment in priority sectors, urbanization, green economy
Rural development	Less than 30% poverty	Land use & human settlements, agricultural productivity, graduation from extreme poverty, rural economic opportunity
Productivity & youth employment	200,000 off-farm jobs p.a.; increased output per worker	Skills & attitudes, technology & innovation, entrepreneurship, financial access, business development, labor market interventions
Accountable governance	More than 80% service delivery; increased citizen participation	Citizen participation, demand for accountability, improved service delivery (macroeconomic stability, demographic issues, food security & malnutrition, etc.)
Cross-cutting issues	Capacity building, environment & climate change, gender & family, regional integration, HIV/AIDS & non-communicable diseases, disaster management, disability & social inclusion	

Source: Economic Development & Poverty Reduction Strategy II (2013-2018), abridged version, May 2013.

[4] Kaizen was adopted in Ethiopia as a nationwide productivity movement with Japanese assistance in 2009. The second phase of JICA cooperation ends in November 2014 with the third phase expected to follow. Rwanda, which lacks such basic gemba-oriented activities, is a prime candidate for kaizen especially in light of the fact that the Rwandans are highly disciplined and responsive to national calls for excellence.

Drafting of EDPRS2 took one year, starting a year before the end of EDPRS. It began with the self-assessment of performance in the past five years by sectors and districts[5] which was supplemented by the Household Living Standard Survey 2010/11 and the Demographic Survey 2010. Five principles of innovation, emerging priorities, inclusiveness and engagement, district-led development, and sustainability were set. In industry, priority sectors were categorized into three groups: existing, emerging and future[6]. Comprehensive hearings of stakeholders were organized through the EDPRS2 website (where over 10,000 SMS opinions were received), road shows with artists and celebrities, and community-based work days. Also, strategic retreats with development partners were organized twice. After that, the document was finalized by the Ministry of Finance and Economic Planning within a few months. The drafting team at the Ministry consisted of approximately 25 Ministry officials and a few external consultants and technicians. Within the team, a focal person was assigned for each thematic area such as economic transformation, rural development, etc. who actively interacted and coordinated with relevant ministries and agencies.

The Ministry of Finance and Economic Planning explained the formulation of growth numbers of EDPRS2 to the mission as follows. Given Vision 2020, the World Bank's lower middle income threshold in 2020 was forecasted at $1,240 per capita, from which the necessary annual growth of 11.5% was derived. Inter-sectoral consistency was checked by the IMF-type Excel-based "Financial Programming" without sophisticated econometric modeling.

Recent growth was analyzed as follows. The vibrant service sector led the growth. Service growth was broad-based and included telecom (thanks to liberalization), financial services, micro-finance, tourism, trade, transport, real estate and construction. Food production is large but declining due to falling import of inputs and loss of competitiveness. The Rwandan franc is strong and regional integration is progressing within the East African Community, which means Rwandan crops are not competitive against imports. Land consolidation and village crop specialization for scale merit are to counter this problem. Rwanda has a nationally integrated market thanks to the construction of feeder roads funded by donors. The Ministry of Finance and Economic Planning does not have productivity data of Rwandan industries.

The main challenge of EDPRS2 is how to generate the required growth of 11.5%. The government-driven economy must be transformed into a private sector-driven one. Industries need strengthening, skills must be upgraded, and funds must be mobilized by increasing export receipt and domestic revenue. This concern is widely and acutely shared by all quarters of the Rwandan government. As mentioned above, outstanding growth since

[5] Rwanda is composed of five provinces which are subdivided into a total of 30 districts. Below districts are sectors, then cells and villages as the lowest administrative level.

[6] Existing sectors are tea, coffee, mining, horticulture, construction materials, tourism, and food processing and beverages. Emerging sectors are logistics, ICT-related services, private equity funds, remote back-office operations (for finance), and electronics assembly. Future sectors include green economy and new green investments.

1994 was driven mainly by aggressive spending for recovery and development through public investment and international aid. Meanwhile, the share of private investment remained small[7]. Growth fell significantly to 4.6 % in 2013 due to the partial suspension of donors' aid for general budget support which was triggered by a certain suspicion against the Rwandan government. This incident clearly showed the quantitative impact of ODA in the current growth mechanism. In our interviews, the Ministry of Finance and Economic Planning, the World Bank and the African Development Bank all agreed that private sector dynamism was key if Rwanda was to sustain high growth and reduce aid dependency. With a relatively high population growth rate and urbanization, it is estimated that 200,000 new off-farm jobs need to be created every year.

During the years of the First EDPRS, Rwanda established new institutions and strengthened old ones for the purpose of accelerating economic development. Most importantly, in September 2008, the Rwanda Development Board (RDB) was created as a principal agency for implementing private sector development by merging existing organizations (see next section).[8] It has a broad mandate including cross-cutting functions such as investment, export, human capital, institutional capacity and privatization, as well as specific sectors such as ICT, trade and manufacturing, services, agriculture, and tourism and conservation. RDB is directly under the President and its CEO is a member of the cabinet meeting. These features were copied from Singapore's Economic Development Board.

Other industrial policy initiatives which were recently introduced include the following.

- TVET policy was formulated and the Workforce Development Authority (WDA) was established under the Ministry of Education (2009). A State Minister of Education in charge of TVET was appointed (2013).
- Special Economic Zone Policy (Government, May 2010) defined land allocation, incentives, infrastructure development, regulatory framework, and RDB was made the supervising authority.
- Small and Medium Enterprise Development Policy (Ministry of Trade and Industry, June 2010) proposed support for entrepreneurship, Business Development Services, regulatory framework, and policy institution (Ministry of Trade and Industry designs policy, RDB implements and coordinates).
- Industrial Policy (Ministry of Trade and Industry, April 2011) specified short-, medium- and long-term policy directions for existing and new industries, giving concrete contents to the preceding Rwanda Industrial Master Plan 2009-2020 of December 2009.

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[7] Rwanda's public investment accounted for 16.2% of GDP while private investment amounted only to 8.2% of GDP in 2013. The corresponding numbers in neighboring countries are as follows: Kenya (5.3% vs. 14.3%, in 2009), Uganda (5.9% vs. 18.5%, in 2013), Ethiopia (14.3% vs. 18.7%, in 2012), and Tanzania (8.0% vs. 29.5%, in 2013). Rwanda's investment is highly skewed toward public investment by the standard of East Africa (data provided by the World Bank Rwanda Office).

[8] RDB was created by merging eight government agencies: the Rwanda Investment and Export Promotion Agency (RIEPA); the Rwanda Office of Tourism and National Parks (ORTPN); the Privatization Secretariat; the Rwanda Commercial Registration Services Agency; the Rwanda Information and Technology Authority (RITA); the Center for Support to Small and Medium Enterprises (CAPMER); the Human Resource and Institutional Capacity Development Agency (HIDA); and the Rwanda Environmental Management Authority (REMA).

- National Export Strategy (Ministry of Trade and Industry, April 2011) classified sectors into traditional (tourism, coffee, tea, minerals), non-traditional (BPO, floriculture, horticulture) and potential (interior design, fashion, biotechnology, etc.) and proposed promotion plans.
- Private Sector Development Strategy 2013-2018 (Government, January 2013) showed integrated policy direction for the Ministry of Trade and Industry, RDB, WDA, the Private Sector Federation (PSF)[9] and other related public and private organizations to follow.
- ICT development has been guided by a series of policy documents (Government). The First National Information Communication Infrastructure (NICI1) 2005-2010 created a legal framework, NICI2 2005-2010 laid ICT infrastructure, and NICI3 2010-2015 aims at an expanded use of ICT. SMART Rwanda 2015-2020, the next policy under preparation, will propose realization of a knowledge-based economy with an extensive use of ICT.
- The National Employment Program (Government, January 2014) is a five-year action plan in line with EDPRS2 to produce 200,000 off-farm jobs annually. Featuring skills development, private sector development, and strengthening of labor market functions, it presents measures to be undertaken jointly by the Ministry of Education, WDA, the Ministry of Trade and Industry, RDB, the Ministry of Public Service and Labor, PSF, and local organizations.

Overall, these policies are mutually consistent and collectively share the direction for national economic development. The basic idea behind these policies is overcoming the constraints of a landlocked country as well as earning/saving foreign exchange by (i) promotion of light-weight and high-value sectors such as ICT, tourism and financial services through active FDI attraction; (ii) production and export of high-value agro products; and (iii) supporting import-substituting manufacturing of household goods and construction materials. In sum, it can be said that agricultural productivity and value-creation must go hand-in-hand with stable and gainful job creation by the development of manufacturing and services.

Regional integration is an important component of this policy direction. Rwanda is a strong promoter of the East African Community together with Kenya and Uganda. An oil pipeline to Kenya, electricity import from Ethiopia, and a railroad link to Uganda are planned to reduce high energy and transport costs. Rwanda hopes to become an air link hub for Africa with an expansion of RwandAir and planned construction of a new airport. Many government officials talk about turning land-locked disadvantage into land-linked advantage and Rwanda becoming a regional, African and even global hub. While the feasibility of this grand plan must be examined, it is evident that Rwanda has a strategic and ambitious plan for economic development.

[9] PSF is a professional organization that promotes and represents the Rwandan business community. It has eight sectoral chambers such as ICT, tourism, industry, etc. and two cross-cutting chambers for women and young entrepreneurs. Each chamber has sector-specific associations under which individual companies belong. Registered members as of August 2014 counted about 80,000. PSF's main mandate is advocacy with additional activities in capacity building, finance, marketing, B-to-B meetings, information, and tours.

Some of the policy measures and institutions which play crucial roles in Rwanda's economic development are discussed more fully in the following sections.

4. Rwanda Development Board

The Singapore model was benchmarked to create the Rwanda Development Board (RDB). After the genocide, the Rwandan Patriotic Front (ruling party) dispatched many missions to Singapore to study various aspects of its development policies including investor support. RDB was conceived as a modified version of Singapore's Economic Development Board offering one-stop service, investment incentives, and logistic, trade and other support by business-minded authorities. Dr. Rama Sithanen, Former Vice-Prime Minister and Minister of Finance and Economic Development of Mauritius, was invited to assume the Chairman of RDB.

RDB was officially established in 2008 and started operation in 2009. It is an implementation agency with an objective of empowering the private sector. Its key goals are promotion of local and foreign investment, export, and job creation. To carry out this task, it has three departments in charge of (i) investment promotion and implementation with five priority sectors (tourism & conservation, ICT, trade & manufacturing, services, and agriculture); (ii) human capital and institutional development which provides an enabling environment for private sector development; and (iii) assets and business management. In Rwanda, strategic projects which are not taken up immediately by private investors are operated as state-owned businesses which are later privatized. For example, previously state-run tea factories are now all in private hands, and fiber optics laid by the government are operated by the private sector. Apart from these departments, the Strategic Investment Unit under the CEO Office of RDB has the power to negotiate special incentive deals with preferred investors. RDB's one-stop shop for investors provides smooth investment registration which contributes to Rwanda's increasingly higher marks in the World Bank's Doing Business ranking.

RDB's functions and organizations continue to evolve[10]. In October 2013, the CEO of RDB was elevated to be a cabinet member to facilitate inter-ministerial and agency coordination on the matters related to private sector development. Recently, with the cabinet reshuffle of July 2014, Mr. Francis Gatare replaced Ms. Valentine Rugwabiza as the CEO of RDB. Also, new structure was imposed where a few divisions moved out of RDB. Part of human capital building went to the Ministry of Public Service and Labor as well as the National Capacity Building Secretariat, the ICT Department now focuses on FDI and export while other ICT functions left, and tourism functions were enhanced (with convention services likely to move out). These changes did not affect RDB's core mandate. As of August 2014, RDB staff

[10] The JICA's internal study on RDB dated in February 2012 gave a mixed assessment of the agency. Its establishment backed by strong political will, projection of a positive image of Rwanda, and efficient one-stop service were highly evaluated while overlapping division of labor with existing ministries and agencies and weak investment follow-up were cited as negative factors. Some of these problems have already been fixed as explained in the current report.

numbered 293 who were housed in the RDB Headquarters and Telecom House (ICT Department only) in Kigali. RDB also employs about 300 national park staff who will however be privatized in the future. Although RDB does not have its own overseas offices, RDB staff are dispatched as commercial attaches in the embassies of Canada (Montreal), China (Shenzhen), and India (Mumbai)

For monitoring investment projects, one key account manager is assigned to each FDI project who follows up and trouble-shoots until the project is properly in operation. This "implementation" team consists of about 30 RDB staff. Another "after-care" team of about 10 staff continues to monitor all projects in operation with less frequency. There are no micro or small investors to follow up because Rwanda sets a minimum size of investment for registration[11].

RDB feels that the private sector of Rwanda is not as vibrant as hoped for but there are signs of new growth in telecom, water, services, etc. Rwanda's export is dominated by a few crops which should be replaced by more valued and processed exports. To strengthen the private sector RDB engages in various measures and services.

For enterprise support, the Trade and Manufacturing Department of RDB conducts the Manufacturing Growth Program which was started in 2013. RDB hires consultants (Rwandans and Kenyans from Ernst & Young) for diagnostics and formulation of growth action plans of individual companies suffering from low operation. RDB pays up to certain hours of their consultancy services beyond which each company must pay for additional service. If the problem is caused by external factors beyond the power of company management, RDB takes the issue to the policy level for solution. In the first year of this program (2013), 20 companies were coached in this way. Separately, there is a plan to develop local experts (Small Business Development Advisors) in 2014 with 10-day training (by hiring local consultants) after which a certificate is issued. Existing "Proximity Business Advisors" are primary candidates for this program. 800 such local experts are targeted in 2014, who will be dispatched to all districts when the training is completed[12].

For export promotion, the Export Development Program was initiated also in 2013. Trade Links, an Irish firm, teaches on standards, packaging, contracts, and export plans with the funding of Trademark East Africa, an international NGO for facilitating trade and regional integration in East Africa funded by Western donors. 15 companies were selected for this program among the 40 firms that previously tried to export through trade fairs. Services are rendered free of charge to the companies except expenses for reaching out to regional

[11] Investment certificates are issued to projects of at least $100,000 for local investment and at least $250,000 for FDI only. In 2013 total registered investment (local and FDI) amounted to 262 in number and $1.4 billion in capital, or worth 19% of GDP.
[12] The mission expressed amazement at the proposed speed of this expert training plan. In Ethiopia, about 400 local kaizen experts were produced after two phases of JICA's cooperation spanning five years, whose skills must be further strengthened in the third phase. In Singapore, during the 1980s JICA's productivity development project spent eight years coaching local enterprises and experts before the country was ready to teach others.

buyers and distributors. Through this program there are already some export contracts signed mainly for agro products such as cassava and maize milling, baby food, construction materials (granite), and Inyange (mineral water). RDB is also training local advisors for export development which includes four government officials and 14 private experts.

Other support programs by RDB include TVET-industry linkage (with WDA under the Ministry of Education, see below), Sector Skill Councils (see below), and the proposed Supplier Development Program that will link FDI firms with local suppliers. In preparation for this program, a survey is being conducted on the current input procurement of large firms to identify items that may be produced and procured locally.

5. Industrial human resource

For value creation, industrialization and economic diversification, human capital is crucial. Rwanda also needs industrial skills to remain competitive in the East African Community (EAC), reverse the trade imbalance, and increase employment. Since all cannot be realized at once, creation of import substitution industries and value-added exports must be strategized. This means that industrial human resource development must be selective and closely linked to future labor demand as well as the direction of national industrialization drive.

The Ministry of Education recognizes that skills at all levels and in all sectors are seriously lacking. To remedy this problem, access to primary and secondary education must be complemented by strong higher-level education. Moreover, to produce demand-driven education, TVET by both public and private hands is highlighted. The government plans to increase the number of TVET institutions and their enrollment by three to four times within the next three to four years. Within five years the Ministry of Education wants to see more TVET students than normal- track students. In this connection, JICA supports Tumba College of Technology including its linkage with industry. Vulnerable and handicapped people will also be supported more strongly in the future.

Sector Skills Councils were recently launched as the principal mechanism for strengthening the TVET-industry linkage based on public-private engagement. The objectives include provision of infrastructure for skills formation, training of trainers, and transformation of curriculums from knowledge cramming to competency creation. Councils are in the initial formation stage and their concrete modalities will be decided in the near future. The Ministry admitted that Rwanda's private sector was still "young" and it was difficult to expect all sectors to embrace this approach immediately and grow at the same pace. For this reason, this policy must be applied selectively to most prospective sectors. Councils have already been set up for several priority sectors[13] with RDB acting as a collective chair with active

[13] As of August 2014, Sector Skills Councils already existed for mining, construction, agriculture, energy, manufacturing, financial service, ICT and hospitality. However, not all were operational and the frequency of meetings remained up to each Council. These sectors largely overlap with the sectors prioritized by RDB.

PSF participation. The Ministry hopes that the hospitality and construction sectors will spearhead this approach.

This policy is expected to produce better curriculums and teaching materials that respond to changing industrial needs. It will also promote pre-graduation “industrial attachment” and post-graduation “internship” of students (this terminology comes from Singapore). It is critical that these measures will lead to actual employment in targeted sectors. While skills development is the responsibility of the Ministry of Education, other ministries will cooperate to increase absorption of TVET graduates in industries. The Ministry of Trade and Industry will help startup companies with business development and entrepreneurship support. The Ministry of Public Service and Labor will provide regular labor demand forecasts including labor demand from FDI and public works in the pipeline. Government projects such as road construction, power transmission and others will also be used for job creation and skills development and matching[14].

Sector Skills Councils are an ambitious undertaking. This mechanism is apparently imported from Singapore’s Council for Professional and Technical Education, which implements a detailed matching between TVET curriculums, courses and budgets and the number of students in each field on the one hand, and forecasted industrial skill needs and national industrial plans four to five years ahead on the other. Singapore can engage in such an elaborate labor matching because of its very high policy capability, long experience and compact size. A strong private sector, tripartite coalition among government, management and labor, highly advanced TVET programs, active participation of enterprises in managing TVET and revising curriculums, and skills training centers located inside industrial estates are already in place, which collectively form a solid basis for effective implementation of such matching. But most other countries, including Japan, find it impossible to imitate this feat. For a latecomer country with a weak private sector and without necessary policy tools in place, a sectoral skills matching mechanism is a great challenge.

6. ICT

Rwanda prioritizes ICT. Given the country’s geography where bulky products are difficult to export or import, the focus on ICT was a natural one although somewhat surprising for a low-income country recovering from war and genocide. In the last one-and-half decades, Rwanda has built ICT infrastructure; connected all districts with central government; promoted ICT use in government, education, industry and services; introduced the One Laptop per Child Program; operated four ICT buses for rural communities; adopted 4G technology through Korea Telecom; invited Carnegie Mellon University to offer master programs in ICT and computer engineering, etc. So far the results are highly visible and national commitment to ICT development is evident.

[14] According to the State Minister of Education in charge of TVET, this approach was copied from Ethiopia’s low-cost housing project which facilitated skills development for youths and provision of contracts to SMEs.

Telecom House in central Kigali serves as the Home of ICT in Rwanda where many ideas and companies emanate. A JICA expert is assisting the formulation and implementation of the national ICT strategy along with the establishment of k-Lab, which is an incubation center for ICT entrepreneurs. The mission was greatly impressed with the dynamism of young leaders we met from the Ministry of Youth and ICT, the ICT Department of RDB, the ICT Chamber of PSF, and k-Lab.

The history of ICT promotion policy dates back to 1998 when President Kagame proclaimed the vision that ICT should be the catalyst for Rwandan development. The First National ICT Strategy and Plan 2000-2005 (a.k.a. National Information Communication Infrastructure Phase I or NICI1) provided regulatory and enabling environment for ICT development and liberalized the telecom sector. Subsequently, NICI2 2005-2010 laid out national backbone infrastructure including the internet center and e-Government, while NICI3 2010-2015 is promoting development of ICT services. SMART Rwanda 2015-2020, the next ICT master plan under preparation, will aim at the creation of a knowledge-based economy by expanding ICT use to produce more and better services in both public and private sector.

As of 2013, ICT sector profile includes mobile subscribers reaching 65% and internet subscribers of 20% (both numbers are expected to jump significantly with the scheduled launch of 4G in September 2014). The One Laptop per Child Program had reached 203,000 kids and 95.3% of hospitals were connected electronically. SMART Rwanda intends to accelerate the use of ICT even more by overcoming the existing challenges in ICT literacy, content, and internet penetration.

Despite these achievements, the long-term vision of ICT as a future industry of Rwanda remains unclear. SMART Rwanda proposes broad and active use of ICT in e-Government, agriculture, education, healthcare, environment, infrastructure, urban development, job creation, etc. but it seems rather terse in charting a development strategy of the ICT industry itself especially regarding the level and scope of technology and human resource to be targeted and support measures and marketing strategies required for this purpose. Production of ICT services is a different matter from its use, just as making a car requires different skills from driving one. If Rwanda wants to be an excellent user of ICT infrastructure to catalyze and strengthen its domestic industries and services (indirect creation of competitiveness), that is one good option. Another option is to export ICT services, expertise, engineers and even systems to earn foreign exchange (direct creation of competitiveness). ICT as a competitive industry needs a proper goal, supporting measures, and a phased strategy on how much should be relied on incoming FDI and how much to be done by Rwandans. To us it seems more natural to pursue both paths—use and export ICT—and the master plan should accordingly spell out the long- and medium-term strategies for each in detail. But we were not convinced that this was the way Rwanda was heading and we are still unsure even after the mission.

7. Special Economic Zones

The feasibility of industrial estates with superior procedural and infrastructure services was studied in 2006 to overcome Rwanda's geographic disadvantage. The initial idea was Free Trade Zones exempted from tax and tariff obligations provided that tenant companies exported 80% or more of their products. Exports to neighboring countries were targeted. However, Rwanda's accession to the EAC in 2007 meant that it had to conform to the requirements of the EAC Customs Union, which invalidated the strategy of exporting to EAC neighbors with special conditions. Thus, the idea of Free Trade Zones was replaced by Special Economic Zones (SEZs) which combined the functions of free port, export processing zone, bonded warehouses, and investor services.

At present the first SEZ is being constructed, policy and legal frameworks are prepared, and the SEZ authority has been established under RDB. In the future, Rwanda plans to develop more SEZs in other sectors including business process outsourcing, tourism and financial services, and the SEZ authority will be upgraded as an independent agency.

Kigali SEZ, the first SEZ in Rwanda, is situated on a hilltop near the airport in the Eastern part of Kigali. It takes about 20 minutes by car from the city center. Phase 1 consists of 100 ha of land divided into 85 plots, which are already sold out. Infrastructure has been completed except the delayed selection of a private internet provider. Tenant companies can be in any sector, even users of dye and paint, as long as they pass environment impact assessment ("Everything but Guns"). Centralized waste water treatment is installed and a carrier of solid waste to the dumping area has been designated. The funding is provided by public private partnership which includes the Ministry of Finance and Economic Planning (30%), state-run corporations, and private firms and banks. The SEZ is managed by a special purpose vehicle, which means a private company assigned for the task. Plots are sold to companies and the proceeds will used to develop more SEZs.

Sectoral composition of Phase 1 companies includes construction materials, agro processing, motorcycle assembly, mattresses, bio-degradable plastic, and traders and distributors. In terms of nationality, two Chinese factories are already operational and others are from Denmark, Lebanon, India, Tanzania, Uganda, etc. Among the 100 ha of Phase 1 development, 16 ha (8 ha x 2 locations) is reserved for the relocation of 14 existing factories from the city center. Standardized sheds are already completed for relocation[15].

Phase 2 of Kigali SEZ will have 175 ha of land divided into over 100 plots. It is under construction with 70-80% of infrastructure completed and 60% of the plots already "booked"

[15] Relocating companies are selected from good performers and receive official support for relocation. Their sectors include coffee, steel, tobacco, paint, biscuits, and plastic water tanks. Some relocators decided not to come because prepared sheds were too small for their operation (600m^2, 1,200m^2 and 2,400m^2). Two such unoccupied sheds were sold to new investors (Chinese textile and Danish packaging). In the first phase of relocation, sheds were built by a Chinese contractor supervised by a Kenyan company. In the second phase of relocation (which is still in Phase 1 of Kigali SEZ), sheds will accommodate size and style requirements of companies and will be built jointly by local and Chinese contractors.

(a deposit of $10,000 has been made).

There is a wave of Chinese producers relocating to Africa and some of them target Rwanda. Ms. Helen Hai, a Chinese FDI promoter who managed Huajian Shoe Factory in Ethiopia, is helping to establish a baby clothes factory here for Walmart purchase through AGOA. Chinese investors seem to be in a hurry. Eight more industrial estates are planned and “plug-and-play” factories (ready-made sheds) are mulled mainly to accommodate Chinese investors who are eager to come in.

There is no minimum wage regulation in Rwanda. The Ministry of Trade and Industry feels that Rwandan wage is competitive enough to attract factories relocating from Asia[16]. Wage advantage is particularly secure if SEZs and factories are located in rural areas. The Ministry is even considering to lower the wage by offering food, accommodation and social security to workers

At present 90% of cargo is transported by land through the North (through Uganda and Kenya) and Central (through Tanzania) corridors, especially the former. Future railway connection to Uganda (and Kenya) should further assist industrial shipment.

8. General issues in policy making

Three cross-cutting issues concerning industrial policy formulation and execution were identified by the mission.

First, current achievements should be combined with gemba-based pragmatism. Rwanda’s economic growth, as well as public and private efforts behind it, during the last two decades were truly remarkable. Nevertheless, the current growth mechanism may not be sufficient to produce private sector-led development or graduation from aid dependency. There is no need to abandon the existing policy contents, frameworks and institutions, but they should be enhanced by the adoption of gemba-orientation so that policy can respond more effectively to varied needs of individual entrepreneurs and deliver necessary supporting measures on the ground. Transparent and systematic procedures and frameworks, on the upper level of policy making, are important elements imported mainly from the West. They can produce great results if national leaders and policy makers are also equipped with the ground-level knowledge of what works and what does not in the context of specific factories, farms and schools. Such knowledge, which turns theories and plans into real actions that work, can be acquired only through continuous interest, experience and interaction with a large number of private actors who produce, trade, invest, compete, and innovate. Development officials in East Asian governments are usually very comfortable with daily

[16] An industrial official in charge did not know the average wage of factory workers in Kigali, but he cited the wage of RWF4,000 per day for a professional mason and RWF2,000 per day for a support worker, which roughly translates to $150 and $75 per month respectively. The standard wage for factory workers may be difficult to obtain in Rwanda because such workers are just emerging.

interactions of this kind. While Rwandan officials interviewed by the mission were highly competent and strongly committed to national development, additional lessons could be learned from the mindset, attitude and methods of development officials and experts in East Asia including Japan.

Second, there is an issue of proper balance between internalizing and outsourcing policy works. The Private Sector Development Strategy of the Ministry of Trade and Industry was commissioned to Deloitte consultants. RDB has handholding programs for diagnosing and advising potential enterprises. For Exporters Development Program, an Irish consulting firm is dispatched to RDB Headquarters by TradeMarks East Africa. For Manufacturing Growth Program, a mixed team of Kenyans and Rwandans from Ernst & Young is providing diagnostic and advisory services using standard management and marketing menus. In principle, we have no grudge against mobilizing external teams for policy purposes at the outset. However, it is also imperative to "import substitute" industrial expertise so that domestic officials (at first) and domestic private service providers (ultimately) can provide such services in sufficient quality and quantity without depending on aid, NGOs or foreign consultants in the medium to long run. This was the overarching objective of Japan's industrialization strategy in the mid 19th century. More recently, JICA's industrial projects usually have such an "internalizing" component from the beginning, with the understanding that domestic experts will take over the works initiated by Japanese experts[17]. Without such substitution, a project is deemed a failure. Our mission did not have enough time to determine whether the use of outsourced experts in Rwanda was for coaching companies only or for multiplying Rwandan experts who could replace foreigners.

Third, there is a question of stability versus flexibility in policy frameworks. Rwanda's SME policy is changing rapidly, introducing new mechanisms before previous ones take root. Moreover, it is not entirely clear how responsibilities for SME development are divided among the Ministry of Trade and Industry, RDB, and PSF. The state-run, free-of-charge Business Development Service (BDS) established in 2006 was replaced by fee-based BDS Centers in 30 districts through PSF-RDB collaboration in 2010. In 2011, BDS Centers were placed directly under RDB which commissioned service provision to private consultants. More recently, RDB created the Business Development Fund (BDF)[18], a new mechanism to assist SMEs into which existing services will be merged. There must be good reasons behind these adjustments. It is not unusual to revise institutions in any country and that may even be necessary when situations change or if the country is in an early stage of development. But speed of institutional change in Rwanda is extraordinary. All developing countries tend to say they are in a hurry, but even in that case, it is highly desirable and

[17] For example, the main purpose of JICA's cooperation with Singapore's productivity development in 1983-90 was training domestic officials and private experts rather than just counting the number of companies advised, and similarly for Phase 2 of JICA's kaizen project in Ethiopia in 2011-14. In Thailand, from 1999 to 2004, JICA trained 450 Thai experts for shindan (public purpose SME consultancy) after which Thai NPOs and universities took over to continue the shindan teaching.

[18] BDF is an affiliate of the Development Bank of Rwanda set up with government support in 2012 to facilitate SMEs' access to finance.

rewarding to spend a few solid years in properly designing policy targets, actions, schedule and institutional frameworks most suitable for the local context, with all foreseeable possibilities discussed, rather than jumping onto policy and trying to amend it as (obvious) problems arise. East Asian economies such as Singapore, Taiwan and Malaysia normally take about three years to formulate a new policy and about one year to revise an existing one. Due consideration of all views and contingencies takes that much time. Rwanda may wish to lean more toward policy stability and predictability. Officials should spend more time and energy on ensuring the effectiveness of training and support on the ground even with less-than-perfect institutions than revising policies frequently.

9. How Japan can contribute

There appears to be much room for Japanese contribution in introducing gemba-based pragmatism to Rwanda's policy making (the first item in the previous section). Japan is good at filling the gap between policy formulation in the high level and its implementation at factories, shops, schools, hospitals, and crop fields. Ambitious policy targets and reasonable policy frameworks are already in place in Rwanda. But details must be filled in. The perspective of Japanese experts who stay at gemba, work closely with engineers, operators, workers, farmers, etc., and propose and improvise measures to overcome the problems at hand can complement the existing policy mechanism. This perspective should provide a feedback between gemba and policy making, regularly inform implementation issues to policy authorities, adjust policy to gemba reality, and reduce the probability of excellent plans and strategies remaining only on paper or being implemented with little impact.

Even with a limited policy area and on a small scale initially, Japanese experts should consciously offer such policy information and services in their assigned fields, and simultaneously teach national officials and experts how to do the same. The Japanese government (including JICA) should monitor the progress of Japanese experts, regularly discuss strategies with them, and create a communication channel with relevant government leaders and officials when necessary. Quality, not quantity, should be the goal of Japanese industrial cooperation in Rwanda in particular and in Africa in general.

Japan's current Country Assistance Strategy for Rwanda (approved in April 2012) supports sustainable growth with four pillars: economic infrastructure, agricultural development (value addition and commercialization), social services (safe water supply), and growth-supporting human resource development (science and technology TVET). Within this framework, JICA is implementing or has implemented projects in One-Stop Border Post, One Village One Product, ICT strategy formulation and implementation, and TVET and TVET-industry linkage, among others. Given the emphasis on private sector development, off-farm job creation and urbanization in EDPRS2, new industrial cooperation may be initiated by Japan. Ideally, the new project should be designed in such a way that it has close interaction with JICA's existing ICT and TVET cooperation.

The first possible step may be a review of Rwanda's SME policy in the past and at present and exploration of its future directions. Since JICA is considering the dispatch of an SME expert, the TOR can include this review work as its main component. As discussed above, SME policy in Rwanda is in a formation stage with frequent trial-and-error, and lacks many components normally seen in other countries. The Deloitte-drafted Private Sector Development Strategy is strong on creation of enabling environment and public private dialogue forums but concrete action plans for skills and enterprise capacity building may be wanting. Institutions change fast and mandate is not allocated clearly or predictably among ministries, agencies and the private sector. Under such institutional fluidity, the Japanese expert should advise on the long-term and overall picture of SME policy from the East Asian perspective rather than being assigned to work on a narrow sub-issue.

Impact of past and current SME policies should be reviewed, which includes the current Private Sector Development Strategy, RDB's Exporters Development Program and Manufacturing Growth Program assisted by outsourced experts. The detailed curriculums and content of existing business coaching programs should be evaluated against international standards as well as Rwanda's specific industrial needs. SMEs and business organizations in different sectors and districts should be interviewed for their awareness and assessment of each policy component. Policies desired by the private sector and proposed and executed by government should be listed and compared. The quality and number of business consultants in government, districts and the private sector should be surveyed and the possibility of "import substitution" of experts should be explored. In conducting this basic policy research, the perspective of international comparison is extremely valuable. Concrete cases of policy successes and failures from various countries should be cited for reviewing and designing Rwanda's SME policy measures[19].

Based on such research, past achievements and remaining issues should be identified, and alternative future directions should be proposed with concrete timetables and numbers. This should be a joint interactive process between the Rwandan authorities and Japanese officials and experts, not a commissioned report drafted by a foreign expert and commented on later by the government. Such an interactive project should provide a small but good start for strengthening Rwanda's SME policy as well as conveying Japanese mindset and method of industrial policy making to the relevant Rwandan policy makers.

Attachments:
1. Mission schedule (for GRIPS team)
2. Organizations/persons visited
3. List of information collected

[19] While Japan and Taiwan have highly advanced SME policies, they are hard to replicate in most developing countries. Singapore also has well-developed SME assistance which is unique and different from the East Asian norm. Southeast Asian developing countries, especially Malaysia, may offer a more feasible model of SME development to latecomer countries. Nevertheless, one model is usually insufficient to guide SME policy of any country. Various policy components should be gathered from different countries, with proper combination and necessary adjustment, to form a policy package most suitable for Rwanda.

Attachment 1

Mission Schedule (for GRIPS team)

Mission Members

Kenichi Ohno	Professor, National Graduate Institute for Policy Studies (GRIPS), Tokyo, Japan
Izumi Ohno	Professor, National Graduate Institute for Policy Studies (GRIPS), Tokyo, Japan
Akemi Nagashima	Research Associate, National Graduate Institute for Policy Studies (GRIPS), Tokyo, Japan
Miho Oikawa	Special Advisor, PSD Group, Industrial Development and Public Policy Dept., JICA
Yuko Ikeda	Project Formulation Advisor, JICA Ethiopia Office
Masaaki Hamada	JICA Consultant

Mission Schedule

Date				Time	Activity
1	Aug	5	Sun	AM	Arrival
				PM	JICA Rwanda Office
				PM	Embassy of Japan in Rwanda
				PM	Permanent Secretary, Ministry of Trade and Industry (MINICOM)
2		6	Mon	AM	African Development Bank (AfDB), Rwanda Office
				AM	Industry Development Unit, Ministry of Trade and Industry (MINICOM)
				PM	Institute of Policy Analysis and Research Rwanda (IPAR)
				PM	Directorate of Policy Evaluation, Ministry of Finance and Economic Planning (MINECOFIN)
3		7	Tue	AM	Department of Trade and Manufacturing, Rwanda Development Board (RDB)
				AM	GIZ, Rwanda Office
				PM	Private Sector Federation (PSF)
				PM	State Minister in charge of TVET, Workforce Development Authority (WDA)
				PM	World Bank, Rwanda office
				PM	Official dinner reception at Japanese Ambassador Residence (GRIPS team)
4		8	Wed	AM	Directorate of Macroeconomics, Ministry of Finance and Economic Planning (MINECOFIN)
				PM	Joint Meeting with Ministry of Youth & ICT (MYICT), RDB/ICT, PSF/ICT Chamber, and kLab
5		9	Thu	PM	Departure to Addis abada, Ethiopia

Attachment 2

Organizations/Persons Visited

The Government / Governmental Organization of Rwanda

Organization	Name	Position
Ministry of Finance and Economic Planning (MINECOFIN)	Richard Mushabe	Acting Director of Policy Evaluation and Research
	Alexis Ruzibukira	Director of General Industry and SMEs
	Amina Rwakunda Umulisa	Director of Macroeconomics
	Obald Hakizimana	Senior Economist
	Charles Kalinda	Public Investment Specialist
	Thomas Mazuru Semahoro	Policy Analysis and Research Expert
The Ministry of Trade and Industry (MINICOM)	Emmanuel Hategeka	Permanent Secretary
	Jean Pierre Dukuzimana	Professional in charge of manufacturing development, Industry Development Unit
Rwanda Development Board (RDB)	Eusebe Muhikira	Head of Trade and Manufacturing
	Muhizi Rugamba	Division Manager of Strategy Competitiveness
	Martin Carlos Mwizerwa	Division Manager of National ICT Planning & Coordination
Ministry of Education, Workforce Development Authority (WDA)	Albert Nsengiyumva	Minister of State in Charge of Technical and Vocational Education and Training
Ministry of Youth & ICT, together with Private Sector Federation ICT Chamber (MYICT)	Lambert Ntagwabira	Senior Technologist, ICT Skills Development

Private Organization

Organization	Name	Position
Private Sector Federation (PSF)	Donatien Mungwarareba	Director of Member Service, Capacity Building and Entrepreneurship Promotion
The Institute of Policy Analysis and Research (IPAR-Rwanda)	Malunda Dickson	Senior Researcher
kLab	Jovani Ntabgoba	General Director
ICT Chamber, PSF	Patrick Kabagema	President
	Alex Ntale	Director

International Organizations

Organization	Name	Position
World Bank, Rwanda Office	Yoichiro Ishihara	Senior Economist
Deutsche Gesellschaft für International Zusammenarbei (GIZ), Rwanda Office	Ulrike Maenner	Country Director
Africa Development Bank (AfDB), Rwanda Office	Edward B. Sennoga	Country Economist

Governmental Organization of Japan

Organization	Name	Position
Embassy of Japan in Rwanda	Kazuya Ogawa	Ambassador Extraordinary and Plenipotentiary
	Tatsuya Oniki	Coordinator of Economic Cooperation
	Mayumi Fujita	Researcher
JICA Rwanda Office	Takahiro Moriya	Chief Representative
	Ryutaro Murotani	Acting Senior Representative
	Satomi Kamei	Program Advisor (Education and Vocational Training)
	Fumiaki Ishizuka	Program Manager (Water and Sanitation)

Attachment 3

List of Information Collected

Source	Title	Authors/Publisher
Ministry of Finance and Economic Planning (MINECOFIN)	Power Point Document: Republic of Rwanda, A Model of Reform-Driven, Market-Based, Sustainable Development	MINECOFIN
	Brochure: Economic Development and Poverty Reduction Strategy II 2013-2018 (EDPRS2 -Sharpe our development) (May, 2013)	
	Economic Development and Poverty Reduction Strategy 2013-2018 (EDPR2)	
	Rwanda VISION 2020 (July, 2000)	
	Rwanda VISION 2020 (Revised 2012)	
The Ministry of Trade and Industry (MINICOM)	Brochure: BDF -Your Business Development Partner-	Business Development Fund (BDF)
	Rwanda Industrial Master Plan 2009-2020 (December 2009)	MINICOM
	National Industrial Policy (April, 2011)	
Rwanda Development Board (RDB)	Brochure: Rwanda Special Economic Zones	RDB
Ministry of Youth & ICT (MYICT)	National ICT Strategy and Plan NICI-2015	Ministry of Youth & ICT (MYICT)
kLab	kLab Guide kit -Rwanda's 1st Techpreneur Innovation Open Space	MYICT, PSF, Rwanda ICT Chamber, RDB and JICA
Private Sector Federation (PSF)	Brochure: enterprise -Private Sector Federation Magazine- (July, 2014)	PSF
The Institute of Policy Analysis and Research (IPAR-Rwanda)	Rwanda Case Study on Economic Transformation -Report for the African Centre for Economic Transformation (ACET)- (2012)	IRAR (Dickson Malunda and Serge Musana)
	Against The Odds: Achieving MDGs in Rwanda	IPAR
World Bank	Rwanda Economic Update; Seizing Opportunities for Growth ~with a Special Focus on Harnessing the Demographic Dividend~(December, 2013)	World Bank
	International Development Association International Finance Corporation Multilateral Investment Guarantee Agency, Country Partnership Strategy for Republic of Rwanda for the Period FY2014-2018 (May 1, 2014)	
	Quantitative Analysis of Crisis: Crisis Identification and Causality	Yoichiro Ishihara
JICA	Institutional Framework and Implementation Flow of SME Support in Rwanda	JICA