Republic of Ghana Ministry of Finance

THE PROJECT FOR HUMAN RESOURCE DEVELOPMENT SCHOLARSHIP PROGRAM IN GHANA

FINAL REPORT ON THE PREPARATORY SURVEY

MARCH 2016

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) JAPAN DEVELOPMENT SERVICE CO., LTD. (JDS)

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SUMMARY

1. An Outline of the Preparatory Survey for Cooperation

(1) Background and purpose of the preparatory survey for cooperation

The Project for Human Resource Development Scholarship Program (hereinafter referred to as the "JDS program") is the program to accept foreign students through the grant aid program for the purpose of developing younger human resources expected to be core staff in the future formulation and implementation of social and economic development policies in developing countries, which was initiated in fiscal year (FY) 1999. It is determined in the JDS program that JDS Fellows should be accepted with the same subject areas, target organizations for recruitment and host universities for the implementation period of 6 years (from the acceptance in the first year until the repatriation of the fourth batch JDS students). Ghana is the only target country for the JDS program in Africa, where the acceptance was started in FY 2012.

FY 2015 falls into the year when the fourth-batch Ghanaian Fellows will come to Japan as the last batch of the JDS program in Ghana that is currently implemented, and a preparatory survey for cooperation is to be carried out to formulate a new plan for the forthcoming second phase. In this survey, we formulated a plan for the four batch JDS program that would be initiated in FY 2016.

(2) Results of the preparatory survey

The preparatory survey was carried out on the second phase of the JDS program in Ghana in August 2015, in which consultants also participated as its members. The purposes of the survey included three points: (1) to explain the JDS program and its implementation system as well as the purposes and method of the preparatory survey for cooperation to the Government of Ghana for ensuring their understanding; (2) to make consultations on sub-programs, components, target organizations for recruitment, the number of Ghanaian Fellows to be accepted, host universities and others for reaching an agreement; and (3) to explain the schedule of recruitment and selection and make consultations on a method of recruitment and selection and JDS Fellows' eligibility requirements for reaching an agreement.

The acceptance plan that was agreed during the consultation meeting is as follows:

	Economy	Health	Agriculture	Resources/energy
Subprogram	Improvement of administrative capacities and institutional development	Revitalization of rural areas	Agriculture/rural development	Natural resources and energy policy
Component	Support for strengthening capacities for administering economic policies	Improvement of basic living environment (Support for strengthening capacities for implementing health policies)	Rice production and agriculture development support	Energy development support
Host university	Graduate School of International Cooperation Studies, Kobe University	School of Tropical Medicine and Global Health, Nagasaki University	Graduate School of Life and Environmental Sciences, University of Tsukuba	Graduate School of International Cultural Studies, International Post-Graduate Program in Human Security, Tohoku University
The number of accepted Fellows	Two in each batch	Three in each batch	Three in each batch	Two in each batch
Operating Committee	ittee Ministry of Finance (MOF), Ministry of Health (MOH), Ghana Health Service (GHS), Embassy of Jap		n in Ghana, JICA Ghana Office	
Implementing agency		Ministry	of Finance	
Target organization	 MOF National Development and Planning Commission (NDPC) Ministry of Foreign Affairs and Regional Integration (MFA) Ministry of Trade and Industry (MOTI) Ghana Investment Promotion Centre (GIPC) Ghana Statistical Service (GSS) Bank of Ghana (BOG) 	 MOH GHS and other agencies 	 Ministry of Food and Agriculture (MOFA) Ghana Irrigation Development Authority (GIDA), and other agencies 	 Ministry of Power Ministry of Petroleum Ghana National Petroleum Corporation (GNPC) Ghana National Gas Company (GNGC) Volta River Authority (VRA) Ghana GRID Company (GRIDCO) Electricity Company of Ghana (ECG) Northern Electricity Distribution Company (NEDCO)

2. Verification of the Relevance

We verified the relevance of the JDS program in Ghana from three aspects: (1) the positioning of the priority areas/development issues of the JDS program in the national development strategy and the Japan's policy for assistance to Ghana; 2) the adequacy of selecting priority areas (economy and health); and 3) the validity as seen from the human resource development needs of the target organizations. As a result, it was determined that the implementation of the JDS program in Ghana has high relevance.

The improvement of the capabilities of individual young administrative officers involved in policy making and target organizations to which they belong to, for which this program is intended, is consistent with the upper-level plan in Ghana and the Japan's priority assistance areas, and therefore its relevance is very high. As all of the selected areas represent the mainstay of the national development plan in Ghana and also the Japan's priority assistance areas, it can be judged to contribute to the development of human resources that can plan and implement appropriate policies in each area. Then as a result of the interviews on human resource development needs from target organizations in the situation checking survey, the gist of the JDS program aiming at improving the government officers' administrative capabilities is considered to be consistent with the demand of the Ghanaian side. In addition, knowing changes in policies and their cases in Japan that recovered from post-war chaos and poverty and joined the ranks of developing countries by undergoing the industrialization quickly after that unlike other developed countries could provide Ghanaian students with lessons in making policies in Ghana in the future.

3. Designing of a Program Scale for the JDS Program

Based on the acceptance plan, we estimated the operating cost for one batch. We assumed the following points then:

Item		Premise
Expenses borne by the Japanese side		167.87 million yen (Three-year national government bonds for the program in fiscal year 2016)
Expenses borne by the Ghanaian side		None
Conditions	Point of estimation	October in 2015
of	Exchange rate	1 USD = 124.4 yen, 1 Cedi = 32.21 yen
estimation	Period of service implementation	The period of service implementation is as shown in the operating schedule.
	Others	Estimation is to be made on the basis of the grant aid scheme by the Government of Japan.

4. Recommendations

(1) Recruitment activities

We will strive to secure high-quality applicants and simultaneously the sufficient number of applicants by enhancing the understanding of even the target organizations currently adopting the recommendation system at the recruitment stage so that they can also approve the open recruitment system as much as possible. In addition, since there are many local branches of the target organizations in the agriculture, health, and energy sectors, we will proactively expand public-relations activities in the regions. Transfer of staff from regional offices to central offices is common in government organizations of Ghana, and thus it is expected that staff members who gained field experiences in the regions could become leaders that make practical policies by acquiring theoretical abilities in addition to academic knowledge and analytical methods through studying in Japan. We will hold briefing meetings at as many target organizations as possible in Accra, the nation's capital and priority assistance areas for JICA and also visit personnel management officers of each target organization to encourage staff members' application individually. In addition, we will make efforts to secure applicants by encouraging potential applicants to apply for the program directly at the ministries and agencies where there were few applicants in the past, including the Ministry of Finance. Meanwhile, considering that JICA projects are in progress in each sector, it is desirable to ask related experts and others to talk to the division/ people whose studies in Japan are considered to be beneficial in order to encourage their application.

(2) Collaboration with repatriated Ghanaian alumni

1) Collaboration with repatriated Ghanaian alumni in recruitment activities and other on-site activities in the JDS program

With regard to the relationship between the repatriated Ghanaian alumni (ex-JDS fellows) and the JDS program, we will ask them to provide their advice to recruitment seminars and applicants' research plans, attend orientations before departure for Japan, send-off parties, and debriefing meetings after repatriation, and provide applicants and prospective Fellows in Japan with advice on their studies and living in Japan.

2) Collaboration with related Japanese nationals in Ghana and repatriated Ghanaian alumni

The JDS program office would like to strive to strengthen the networking between Japan and repatriated Ghanaian alumni as resource persons for Japanese communities in Ghana by further enhancing the presence of the JDS Fellows in Japan among such communities in Ghana, including the actions of providing them with information on events, seminars, exchange meetings, etc. of the Japanese communities or inviting them to meetings including study meetings as guest speakers depending on their topics in collaboration with the Embassy of Japan and the association of Japanese companies in Ghana, while comprehending their recent status periodically. In addition, repatriated Ghanaian alumni's participation in festivals such as the Japan Week that is held under the initiative of the Embassy of Japan every year would lead to the reaffirmation of their linkage with Japan and contribute to the cultural exchange between the two countries, and thus it should preferably be continued in the future.

- (3) Selection activities
 - 1) Improvement of Fellows' mathematical abilities and strengthening of measures against their occasional plagiarism before their admission

There were some applicants who had low scores and committed the cheating in the mathematics test at the selection stage. It is desirable that Fellows will acquire academic abilities to keep up with coursework by learning the minimally required mathematics by utilizing the time such as an orientation period before and after going to Japan. We will sternly tell the Ghanaian Fellows that cheat and plagiarism are the actions that shall absolutely be avoided after going to Japan, or otherwise they would have to return home without acquiring any degrees after getting expelled from universities in some cases.

2) Consideration of online application

It is said that online application is common to many of the scholarship programs by other donors in recent years, and the adoption of an online application system is desired for the program. However, it is desirable to continue to receive paper-based application forms as well even in such a case, because the Internet environment is unstable in Ghana.

(4) Institutional challenges

1) Establishment of a doctoral course

We have heard of the requests for establishing doctoral courses from all related parties including target organizations, Ghanaian Fellows, and university teachers. There are currently many cases where persons who have already acquired a master's degree are employed as civil servants in Ghana, and thus a scholarship for acquiring the master's degree does not appear to be so attractive to Ghanaian officers. The general worldwide trend is that final academic backgrounds are valued most in people's careers. For this reason, the implication of studying in Japan would be less significant when a doctoral degree is acquired in another country, even if a master's degree is acquired at a university in Japan. In addition, some of the target organizations oblige their staff members to hold a doctoral degree to be assigned to certain posts, and thus it is considered beneficial to open the door to a doctoral course in the JDS program as well.

Although there is no written stipulation that a doctoral degree be required for staff members' promotion according to our interview results, it is said that they would gain much greater

voices and influences in the organization by obtaining a doctoral degree. In addition, many of the positions at the level of directors or above in the center of policy making are virtually occupied by Ph.D. holders at some of the target organizations. However, when considering the establishment of doctoral programs in the JDS program in the future, there is a need for considerations through scrutinizing target organizations' needs, career paths, and their consistency with the development issues.

2) Consistency with other international student programs of JICA

There are several Japanese universities among the host universities that have accepted foreign students through other international student programs such as the ABE Initiative and PEACE in addition to the JDS program, but they manifested their bewilderment about a slightly different system among each other although all of them are the programs managed solely under JICA. They say that the occurrence of differences in systems and rules among the international student programs managed uniquely under JICA is complicated and confusing when viewed from the university side, and so it is desirable to unify them as far as possible in the future.

3) Selection of universities consistent with development issues in Ghana

There were some cases found among the universities that had been selected in the past where their course contents and development issues were not always consistent with each other. Therefore we have sometimes heard of the requests by target organizations, applicants, etc. that universities better matching the development issues in Ghana be selected. It is considered important to carefully review and examine whether or not course contents offered by universities match human resource development needs of target organizations at the stage where universities submit their proposals.

When activities outside regular programs are planned and implemented such as special programs at universities, it is never possible to see and hear relevant things in Ghana; one idea would be to allow Ghanaian students to visit advanced sites in various fields in Japan and experience the internship. Knowing the Japanese cases is considered to contribute to improving their analytical abilities by exploring solutions in comparison with the cases in their own country.

4) A need for Japanese education before the admission

Learning of basic Japanese is considered to be essential to spend daily life in Japan. It is desirable for new Ghanaian Fellows to acquire Japanese at the fairly basic conversation and reading/writing level before coming to Japan as well as before entering universities after coming to Japan to lead their life in Japan.

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CHAPTER 1 BACKGROUND AND HISTORY OF THE PROJECT FOR HUMAN RESOURCE DEVELOPMENT SCHOLARSHIP (JDS) PROGRAM

1-1 Current Status and Issues of the JDS Program

The Project for Human Resource Development Scholarship Program (hereinafter referred to as the "JDS program") is a part of the "plan to accept 100,000 international students" by the Government of Japan, and is the program to accept foreign students through the grant aid program for the purpose of developing human resources that play a core role in formulating and implementing social and economic policies in developing countries, established in fiscal year (FY) 1999. This program is intended to "accept excellent young administrative officers and others expected to be future leaders in target countries as international students at universities in Japan in order to ensure their great success in formulating and implementing social and economic development plans as human resources having the specialized knowledge gained during their studies in Japan after returning home and thus their contribution to expanding and strengthening friendly relations of both countries as persons having a good understanding of Japan." Target countries include mainly the Asian countries under the transition to market economy and Ghana, and 3,193 JDS Fellows have been accepted from 12 countries up to 2014.¹

The JDS program as a whole has been highly appreciated by the governments of the partner countries and the Japanese related parties. On the other hand, it was difficult to accept foreign students with a medium- and long-term strategies since the planning was performed on the fields of Fellows' acceptance, host universities, etc. every fiscal year in the past JDS programs; moreover, its contribution to strengthening of organizational capacities was not clear as it was intended for the improvement of individual foreign students' capabilities. For this reason, younger administrative officers of target organizations have been accepted as international students since 2009 by setting priority areas (sub-programs) and development issues (components under priority areas) for four batches (acceptance over the four years) as a phase and then selecting target organizations in beneficiary countries and host universities in Japan that suit the efforts to address issues in priority areas, based on the Japan's assistance policy (priority areas of assistance, etc.) and the issues and needs in target countries. The acceptance of JDS Fellows under the same areas, target organizations and host universities over the six years (from the acceptance in the initial year until JDS Fellows' repatriation in the fourth batches) is expected to improve the national policy formulation and the functions of administrative organizations, contributing to the resolution of important development issues.

The JDS program is characterized by its main focus on the development of human resources engaged in the areas of development issues determined by target countries in consultation with the Government

¹ JICA website (http://www.jica.go.jp/activities/schemes/grant_aid/summary/JDS.html)

of Japan, unlike conventional international study programs such as government-sponsored foreign student programs intended for supporting individuals' studies abroad; it has the goals of developing the practical capabilities of administrative officers involved in the formulation and implementation of policies and plans in target countries through acquiring a degree in each area of development issues and ensuring the repatriated JDS alumni's contribution to strengthening and expanding the foundation of cooperation between both countries as persons having a good understanding of Japan. In addition, the JDS program is also characterized by the regular measurement of the status of fulfilling the effects of studies in Japan through the monitoring before, during, and after JDS Fellows' stay in Japan and the follow-up on repatriated alumni.

1-2 Background and History of the Grant Aid

(1) Background and history of the request

Ghana maintains the political stability in West Africa, which achieved a recent high economic growth rate and successfully became a middle-income country in 2010. However, the country is encountered with a serious budget deficit and hit by inflation, facing a number of challenges such as chronic power shortages due to a rapid increase in electricity demand and inadequate infrastructure building, and thus it is essential to overcome these challenges for the stable socio-economic development of the country.

On the other hand, capabilities and systems of staff members and organizations in the government agencies that deal with development issues are insufficient as a whole to address the challenges in the country, and the development of core administrative officers and others is expected for improving administrative capabilities and institutional building in any of the priority assistance areas. Under such circumstances, we began to accept five Ghanaian JDS fellows in two areas every year for the first time in Africa in FY 2012. For the Ghanaian Fellows from FY 2015, further five persons in two areas were added as a part of the policy of the "African Business Education Initiative for Youth (ABE Initiative)," which led to the acceptance of 10 Fellows in four areas from the same year.

The JDS program of the first phase is being carried out in FY 2015, which falls into the last year of its fourth-year plan, and it was recently decided that a preparatory survey for cooperation should be carried out to define the framework of the JDS program for the second phase. In this preparatory survey, a basic plan is to be formulated for accepting Ghanaian Fellows for the four batches of the new JDS program and the procedures will be taken for recruiting, selecting and accepting Ghanaian Fellows scheduled to come to Japan in FY 2016 along with preparations for accepting them.

(2) Activities in this service

It was recently decided that the second phase of the JDS program should be carried out, and the preparatory survey for cooperation was conducted in response to it. Consultants participated in the survey, supporting the JICA for making a plan for the four batches of the JDS program that would be started in FY 2016. In addition to it, they supported the procedures of recruiting, selecting and accepting Ghanaian Fellows that would come to Japan in the same fiscal year.

In other words, work performed in the present service is roughly divided into the following items:

Period Item of implementation Implemented matter · Project reports, aid program-related documents, National Development Plan for Ghana Prior domestic Collection and analysis of information on Ghana preparations Preparation of an inception report and a work plan and Preparation and submission of an inception report including task items and role sharing (Contract among consultants, a work schedule, and a proposed framework for the second phase submission of them to JICA award -Preparation of questionnaires • English questionnaires for situation checking surveys were prepared. mid-August) • Translation of a table on target areas and issues • We implemented the collection of information on outlines of host universities, research Collection of information on host universities for which contents and teaching staff of their graduate courses, their systems of accepting foreign JICA prepares a proposed method of selection students, etc. based on the materials provided by JICA. Participation in a policy discussion meeting for a survey We participated in the management policy discussion meeting on August 7, 2015, team before its dispatch, held by JICA preparing and submitting its minutes of the meeting. Ouestionnaire and interview surveys with the teaching staff of the two host universities Surveys on the Fellows' accepting universities in the first phase and the Fellows staying in Japan and the Ghanaian Fellows staying in Japan in the first phase • Request for and confirmation of appointments On-site service Preparation and coordination of field surveys Explanation at a meeting with the Embassy of Japan in Ghana, JICA and the Government Support for consultations with the recipient government of Ghana along with preparation of its minutes of the meeting Supplementary explanation at the Operating Committee meeting along with preparation of its minutes of the meeting Checking of the details of recruitment and selection methods with the Operating Committee Implementation of a situation checking survey Surveying for comprehending the situations of the target organizations, etc. Questionnaire and interview surveys with repatriated Ghanaian alumni and their supervisors • Preparation of application guideline, application forms, and publicity materials (posters, Recruitment activities materials for HP) Request the target organizations to distribute the application guideline, application forms, etc. We distributed or sent related materials to individuals eager to apply Explanatory meetings on recruitment were held at the target organizations, etc. Responses to inquiries of the JDS system, information on the host universities, etc. (by telephone and e-mail) Collection of application documents

Table 1-1 An Outline of Work

Period	Item of implementation	Implemented matter
On-site service	Support for the work of selecting Ghanaian Fellows	Checking of omissions in the application documents
		Arrangements for conducting mathematics and English tests
		Arrangements for document screening
		Arrangements for onsite interviews
		Instructions on conducting medical examinations, etc.
		Arrangements for conducting comprehensive interviews
	Arrangements for the exchange of opinions between host universities and target organizations, etc.	 Make adjustments of the date/venue of the opinion exchange meeting between instructors of host universities and target organizations Updating of a draft basic plan
	Support for consultations with the recipient government	• Support for determining the final candidates and making an agreement on the draft basic plan for priority areas at the Operating Committee
	Provision of information to prospective Ghanaian Fellows, etc.	• Provision of information on host universities and living in Japan
In-country	Collection of information on host universities	Collection of information on host universities
services	Consultations and coordination with host universities	• Check the results of screening the candidate Fellows' documents with the host universities, communicating them to the overseas staff in charge of the service
		 Collection of activity plans for special programs from instructors of the host universities Collection of application documents
	Support for dispatching instructors of the host universities, collection of their activity plans, and payment of	• Payment of travel expenses, honoraria, etc. on the dispatch of university instructors to Ghana
	application/examination fees to the universities	 Collection of activity plans for special programs Payment of application/examination fees for prospective Ghanaian Fellows to host universities
	Preparation and submission of a summary design and estimation document	• We submitted the summary design and estimation document to JICA
	Preparation and submission of the draft basic plan for each priority area	• We made compilation into a plan of accepting Ghanaian Fellows for each priority area (basic plan) (in Japanese/English).
	Submission of the final draft report	• in Japanese/English
	Submission of the final report	• in Japanese/English

(3) An overview of political and economic situations in Ghana

In Ghana, the change of a government regime was frequently repeated over the 25 years from the independence in 1957 until the inauguration of the Rawlings regime in 1981, including four coups. The democratization advanced in Ghana during the 1990s, and elections were carried out peacefully in a multi-party system in 1992 and 1996, and the country enjoyed a long-term political stability under the leadership of President Rawlings. The President complied with the provision of disallowing the three consecutive reelection in the Constitution, and Candidate Kufuor of the opposition party was elected, officially becoming a President in January of the next 2001, which attracted attention as the change of the government regime was achieved peacefully between the ruling and opposition parties through the election for the first time in the history of Ghana. Following the expiration of the term of office of President Kufuor, President Mills of the National Democratic Congress (NDC) which had been the opposition party until then was elected. As the new Mills Administration put forward employment measures through agricultural development and securing the food self-sufficiency, reduction of disparities between North and South and departure from the economy dependent on primary commodities as priority policies; after the demise of the president in July 2012, Vice President Mahama became the successive president by the regulation, and he was elected in the election for the National Assembly in December 2012. The incumbent president expressed his intention to run for the presidential election in 2016 as well.

Ghana's economy is a typical primary commodities-dependent economy that relies on agriculture and mining, and agriculture is its key industry, which accounted for about 23 percent of the gross domestic product (GDP) and 43.2 percent of the working population there in 2012. Cacao, gold, and wood account for the first three as major exports, which they are in the environments susceptible to international markets and weather.² However, its GDP ratio was 35% in 1992 and it covered 60.5% of the working population, and it can be said that when seeing the trend during the past 15 years, the relative percentage of agriculture has been decreased significantly in the total economy, and instead that the proportion of the service industry has been increased.³

Ghana has the GDP that reached about 1,100 US dollars in 2010, becoming a middle-income country in 2010. Commercial production of oil was started in December of the same year, and the economic growth rate of 2011 was recorded to be 15%, including oil revenues. However, the recent economic situation is less satisfactory in Ghana, because the importation of natural gas was stopped due to the accident along the West Africa Gas Pipeline (WAGP) in Nigeria that had supplied natural gas to Ghana, Togo and Benin, occurring in 2012, which necessitated the oil importation there and also due to the sluggish international market of gold as the main export

² Bloomberg Business, http://www.bloomberg.com/news/articles/2014-08-04/ ghana-turns-to-imf-for-emergency-help-as-currency-crisis-deepens

³ World Bank "Poverty Reduction in Ghana, Prospect and Challenge" 2015

product. In addition, salaries of civil servants account for as high as 70% of the tax revenue in the country. Its budget deficit reached an average of 11.5% of GDP between 2012 and 2013, and the rebuilding of its fiscal balance has become a pressing issue. Furthermore, the inflation is intensified by its expansionary fiscal policy, reaching 15% in 2014. On the other hand, the exchange rate of Cedi against the US dollar has faced the rapid depreciation (36% as compared with the beginning of the same year in August 2014), hitting the national economy seriously.⁴

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	Indicator	2009	2011	2012	2013	2014
GDP	Total amount (million US \$)	25,773	39,517	41,643.89	43,457.04	38,620
ODF	Per capita (US \$)	1,100	1,563	1,607.25	1,638.03	1,590
R	eal GDP growth rate (%)	4.0	15.0	8.8	7.6	4.0
Inflation (annual average, %)		19.3	8.7	9.2	11.7	N/A
External debt balance (million US\$)		5,008	7,653	9,154	11,461	N/A
Trade	Export (million US\$)	5,839.7	12,785.4	13,552.3	13,751.9	N/A
Trade	Import (million US\$)	8,046.26	15,837.7	17,763.1	17,600.2	N/A
Budget deficit (against GDP: %)		8.8	6.0	13.2	10.6	N/A
Current balance (million US\$)		∆1,395	∆3,549	∆4,924	∆5,704	N/A

Table 1-2 Major Economic Indicators of Ghana in Recent Years

Source: Prepared by the consultant from: the National Development Planning Commission, 2013; Annual Progress Report, 2013; and the World Bank, Ghana Economic Update, October 2014, and World Bank, "Ghana at a Glance".

(4) Development strategies of the Government of Ghana and their challenges

The Ghana Poverty Reduction Strategy (GPRS) (for the years of 2003 to 2005), which was published in 2002 set a grand goal: "poverty reduction through the creation of wealth by economic growth and its equal distribution," containing the priority areas to achieve it: (1) stable maintenance of macro-economy; (2) production improvement and employment promotion; (3) human resource development and improvement of basic services; (4) responses to the socially vulnerable; and (5) improvement of the governance.

The Ghana Poverty Reduction Strategy Paper II (GPRS II) as a successor to the Ghana Poverty Reduction Strategy (GPRS) (for the years of 2006 - 2009) had a grand goal of "achieving the middle-income country by 2015," oriented more strongly to economic growth even while following the basic line of GPRS. Its key issues consisted of the three main pillars: (1) strengthening of the competitiveness of the private sector; (2) human resource development and improvement of basic services covering the responses to the socially vulnerable; and (3) improvement of governance.

In addition, the subsequent medium-term national development strategy (GSGDA I: Ghana Shared Growth and Development Agenda) (for the years of 2010 - 2013) basically succeeded to the direction of GPRS II, setting a grand goal of "socio-economic transformation and building a foundation for the equal growth."

⁴ Bloomberg Business, http://www.bloomberg.com/news/articles/2014-08-04/ ghana-turns-to-imf-for-emergency-help-as-currency-crisis-deepens

Development strategy	Ghana Poverty Reduction Strategy Paper (GPRS: Growth and Poverty Reduction Strategy, 2003-2005)	Ghana Poverty Reduction Strategy Paper II (GPRSII: Growth and Poverty Reduction Strategy, 2006-2009)	Medium-term National Development Strategy (GSGDA I: Ghana Shared Growth and Development Agenda)
Grand goal	"Poverty reduction through the creation of wealth by economic growth and its equal distribution"	Economic growth along with poverty reduction "Accomplish the middle-income country by 2015"	Socio-economic transformation and building a foundation for the equal growth
Key issues/ areas	 Stable maintenance of macro-economy Production improvement and employment promotion 	 Strengthening of the competitiveness of the private sector 1-1 Development of the private sector 1-2 Modernization of agriculture 1-3 Road/energy/chemical technology 1-4 ICT, tourism, and coal mining 1-5 Creation of employment and expansion of safety nets 	 Ensure the continued stabilization of the macro-economy Strengthen the competitiveness of the private sector Promotion of agricultural modernization and natural resource management Oil and gas development
	2. Human resource development and improvement of basic services Reponses to the socially vulnerable	 2. Human resource development and improvement of basic services 2-1 Education, skills, human resources development 2-2 Health 2-3 Family planning 2-4 Safe water and sanitation 2-5 Urban development 2-6 Responses to the socially vulnerable 	Human resource development, employment, and productivity
	3. Improvement of the governance	 3. Improvement of the governance 3-1 Political governance (democratization, decentralization, public sector reform, etc.) 3-2 Economic governance (fiscal policy management, international trade management, etc.) 3-3 Good corporate governance 3-4 Promotion of well-grounded decisions 	• Promotion of the governance with high transparency and accountability

Table 1-3 Development Strategies of the Government of Ghana until Now

Source: Prepared by the consultant based on the Ministry of Foreign Affairs of Japan, Report on Country Evaluation of Ghana (third-party evaluation)," 2010 and NDPC, Ghana Shared Growth and Development Agenda (GSGDA), 2010-2013

In March 2014, GSGDA II: 2014 - 2017 was formulated as the national development strategy succeeding to GSGDA. It puts forward the realization of "a stable, united, inclusive and prosperous country with opportunities for all" and its strategies contain "human development, productivity, and employment promotion" and the "improvement of the governance." As part of these efforts, it considers that the public sector reform is important, particularly that the execution of a management system based on an appropriate merit system is essential for effective policy management, advocating the significance of improving the quality of civil servants.⁵

Table 1-4	Current Development Strategy of the Government of Ghana	GSGDA II)
100101		000001111

Development strategy	Second growth and development agenda of GSGDA: Ghana Shared Growth and Development Agenda II, 2014-2017
Medium-term goal	A stable, united, inclusive and prosperous country with opportunities for all
Key issues and fields	1. Stabilization of macro-economy
	2. Improvement of the competitiveness of the private sector in Ghana
	3. Agricultural modernization and sustainable natural resource management
	4. Development of oil and gas
	5. Infrastructures and settlement assistance
	6. Human development, productivity improvement and employment promotion
	7. Strengthening of the governance for more transparency and higher accountability by better reflecting people's voices

Source: Prepared by the consultant based on NDPC, Ghana Shared Growth and Development Agenda (GSGDA) II, the consultant created based on 2014-2017

1-3 Civil Servant System in Ghana

Civil servants in Ghana are ordained by the Civil Service Act (PNDCL 327: Presidential Decree 327), which was formulated in 1993. Their grades are divided into five tiers for each duty, and the economic profession of the Ministry of Finance (MOF) has the tiers and the promotion conditions as shown in the table below.

Grade	Title	Conditions on the promotion to the next grade from the inside	Conditions on the application from the outside
1	Assistant Economics Officer	 Work as Grade 1 for three years or more A person who was chosen through the selection (test, interview) A person who has work experience for three years or more 	A person who has a bachelor of degree in the field of economy, management, statistics, finance, etc. at a university of authority A person who has work experience for one year or more
2	Economics Officer	 Work as Grade 2 for three years or more A person who was chosen through the selection (test, interview) There is a vacancy in the next grade A person who has work experience for six years or more 	Ditto except for the master's degree required A person who has work experience for three years or more

 Table 1-5
 Job Grades in the Ghana's Ministry of Finance

⁵ NDPC, Ghana Shared Growth and Development Agenda (GSGDA) II, 2014-2017

Grade	Title	Conditions on the promotion to the next grade from the inside	Conditions on the application from the outside
3	Senior Economics Officer	 Work as Grade 3 for three years or more A person who was chosen through the selection (test, interview) There is a vacancy in the next grade A person who has work experience for nine years or more 	Ditto (the master's degree required)
4	Principal Economics Officer	 Work as Grade 4 for three years or more A person who was chosen through the selection (test, interview) There is a vacancy in the next grade A person who has work experience for 12 years or more 	N/A
5	Chief Economics Officer		N/A

Source: Ghana Civil Service, Scheme of Service, Economics Class

The same promotion system is adopted in other ministries and agencies as that of the MOF described above for central ministries and agencies in principle. Acquisition of the master's degree is a prerequisite for those entering the MOF from the outside except for Grade 1, but it is not applicable for the internal promotion. As part of human resource development within the ministry, its staff members are required to receive the training determined for each grade, which is also a prerequisite of promotion.

On the other hand, agencies under the ministries appear to employ their own personnel systems. The following are the prerequisites of promotion at the Ghana Health Service (GHS):

- Results of personnel evaluation in the past three years
- Achievements of training received in the past three years
- Officers are determined to be enrolled at each grade for five years (except at Grade 3 for three years) in non-deprived areas. On the other hand they are enrolled for four years in deprived areas with a higher pace of promotion.
- The promotion to a higher grade is decided through an interview

Grade	Non-deprived area	Deprived area
$1 \rightarrow 2$	3 years	3 years
$2 \rightarrow 3$	5 years	4 years
$3 \rightarrow 4$	5 years	4 years
$4 \rightarrow 5$	5 years	4 years

 Table 1-6
 Minimum Years of Enrollment to a Grade at the GHS

1-4 The Trend of Japan's Assistance to Ghana and Situations of Private-Sector Cooperation and Civilian Exchanges

(1) The trend of assistance to Ghana in Japan

The Government of Japan positions the following four sectors as the priority areas to achieve development goals of the Government of Ghana (GoG) in its "Country Assistance Policy for Ghana," while encouraging Ghana's self-help efforts and stable economic operations: (1) agriculture (rice cultivation); (2) economic infrastructures (electricity and transportation/traffic), (3) health and science/mathematics education; and (4) capacity development of GoG in administrative and financial management.

A series of assistance programs are currently implemented in accordance with this assistance policy, out of which the three sectors: agriculture, economic infrastructures and health are determined to be the most prioritized areas. In addition to them, it is decided that the "improvement of administrative capabilities and institutional building" should be addressed in view of dealing with these development issues in a cross-sectoral manner.

Priority assistance area	Development issue	Content	Cooperation program
Agriculture (rice cultivation)	Agriculture and rural development	Focusing on rice cultivation for which Japan has the expertise, it will contribute to the promotion of intensified and commercialized agriculture through the development of production bases and distribution systems in addition to the assistance contributing to the improvement of small-scale rice farmers' productivity and profitability and the strengthening of extension systems. In addition, it will aim at the expansion of program areas and the emergence of synergy effects by taking advantage of the collaboration with the framework of the "Coalition for African Rice Development (CARD)" and the donors such as USID and AFD in a coordinated manner.	Rice promotion and agricultural development program
Economic infrastructure (electricity and transportation/ traffic)	Development of economic infrastructures	With regard to the electricity sector, enhancement of electric generation capacities, improvement of electrification rates, rural electrification, and rehabilitation of power transmission and distribution equipment will be promoted in order to promote the proper distribution of energy required for communities and economic growth. In the transportation/traffic sector, the development of road networks will be addressed to support local communities' living infrastructures and regional economic growth. In addition, the transportation development in the eastern region of Ghana (such as the development of road networks, including bridges) will be advanced for raising the level of national economy and promotion of broad economic growth.	Economic infrastructure development program
Health and science/ mathematics education	Health	Public health services will be improved through the construction of medical facilities in local and rural areas, enhancement of awareness building activities related to the health, and the capacity building of health care workers, and measures will be supported to reduce the mortality rate of expectant and nursing mothers and under-five children. In addition, assistance methods such as grant aid and technical cooperation schemes will be combined in a coordinated manner, and the collaboration with other donors, international organizations, etc. and the public-private partnerships will be promoted to enhance synergy effects among the projects and thus improve their overall outcomes. In addition, Japan will contribute to achieving the health-related MDGs (Millennium Development Goal) through the realization of EMBRACE (Ensure Mothers and Babies Regular Access to Care) as the maternal and child health assistance model that was proposed in the new international health policy.	Maternal and Child Health Service Enhancement Program in Upper West States
	Science and mathematics education	In the field of basic education, Japan will concentrate on addressing the school construction that Japan has relative superiority, the retraining of incumbent teachers, and the improved management of educational administration that is derived from the decentralization from the viewpoint of access to safe learning environment and its quality as well as improved school management with a particular focus on deprived regions based on the "School for All" model that was proposed in the new education cooperation policy.	Basic education improvement support program
Strengthening of administrative and financial capabilities	Strengthening of administrative and financial capabilities	This priority area is positioned as the underpinning area to promote the achievement of other development issues such as the "agriculture and rural development" and "development of economic infrastructures." In addition, it is necessary to support the development of human resources to lead the improvement of administrative and financial capabilities from the viewpoint of securing the sustainability and self-reliant development of cooperation outcomes in each development issue, striving for improving mid-level government officials' capacities in the central government and strengthening the functions of the Civil Service Training Centre.	Administrative and financial personnel training program

 Table 1-7
 A plan of Program Development in the Country Assistance Policy for Ghana

Source: Ministry of Foreign Affairs of Japan ,Country Assistance Policy" for Ghana: Annex "Program Development Plan, April 2014

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(2) Situations of private cooperation and exchanges

Ghana is an English-speaking country in West Africa occupied mostly by the countries where the official language is French, politically stable with good security. Twenty-two Japanese companies (Japanese companies: 13 companies; Japanese-affiliated local corporations: eight companies; companies with unknown types: 1 company) expand their businesses into Ghana as of October 2014, mainly trading companies and manufacturers.⁶

With regard to a cultural exchange program, meanwhile, the Yosakoi Festival, screening of Japanese films, sport events (judo, karate), a speech contest in Japanese, the Japan Festival (opening of stalls by about 10 organizations comprised of the Japanese government and private sector stakeholders) and so on are implemented as the Japan Week for one week between October and November every year under the initiative of the Embassy of Japan.⁷

1-5 Trends of Other Donors' Assistance

(1) Trends of major donors' assistance

Major donor countries for Ghana are the United States of America in the first place and the United Kingdom in the second place for bilateral cooperation in recent years, followed by Japan, Germany, Canada, and Denmark although their ranking is varied from year to year to some degree. In 2012, their ranking was: (1) the U.S.A (220.61 million USD); (2) U.K (127.66 million USD); and (3) Japan (115.39 million SUD). The World Bank is always in the first place for multilateral aids, followed by the African Development Bank, the EU, etc.⁸

Donor	Priority area	Support scale (2012)
World Bank (IDA)	Provide support in the three mainstays: (1) improvement of the economic system; (2) strengthening of the competitiveness and job creation; and (3) protection of poor and socially vulnerable groups.	\$ 373.43 million
African Development Bank	With the aim of economic growth involving the job creation, focus on as its mainstays of cooperation: (1) improvement of the productivity of Ghanaian companies; and (2) support for economic and structural reforms to improve business environments.	\$ 205.93 million
EU	Mainly regional development, infrastructure building, water and sanitation, governance, private sector development, and macro-economic assistance	\$89.54 million

 Table 1-8
 A Summary of Support by Major Donors

⁶ Statistical Survey on the Japanese Nationals Overseas (summary version in 2015); According to the Africa Business Promotion Support Network (AB-NET), main Japanese companies operating in Ghana include: Marubeni, Mitsui & Co., Ltd., Ajinomoto, Itochu, Fujitsu, Sumitomo Corporation, Yamaha Motor, Kawasho Foods, Hitachi Construction Machinery Japan, Mitsui Ocean Development (MODEC), Kubota, Kaneka, Seiko Epson, Hamaya, 62 Glory, Topcon, Sakata Seed, Marino Logistics, Mitsui OSK Lines, Tachibana, Nishizawa, Yoshikane Travel and Tours, Toyo Engineering, and Tokura Construction (http://ab-network.jp/category/by-country/republic-of-ghana).

⁷ Website of the Ministry of Foreign Affairs (http://www.mofa.go.jp/mofaj/area/ghana/data.html)

⁸ Website of the Ministry of Foreign Affairs (http://www.mofa.go.jp/mofaj/area/ghana/data.html)

Donor	Priority area	Support scale (2012)
United States	Agriculture and food security, democracy/human rights/ governance, economic growth and trade, education, insurance, and water	\$ 220.61 million
United Kingdom	Promotion of corporate activities and wealth formation, education, reduction of maternal and child mortality, improve the government accountability, and reduction of regional disparities and improvement of women's and girls' opportunities	\$127.66 million
Denmark	Improvement of commercial opportunities, private sector development, PPP, insurance, governance, decentralization	\$88.46 million
Canada	Children and youth, and food security	\$ 100.88 million

Source: each donor's website. Country Data Book of the Ministry of Foreign Affairs of Japan for the support scale of each donor (http://www.mofa.go.jp/mofaj/gaiko/oda/files/000072361.pdf)

(2) Other donors' scholarship programs intended for the master's programs

Japan has implemented the following international student programs for African countries, including Ghana.

Title of international student program	Description
ABE Initiative: African Business Education Initiative for Youth)	It aims to provide 1000 young people in Africa with education at universities or graduate schools in Japan as well as opportunities for internships at Japanese companies within five years. It is one of the support measures intended for developing human resources in the private and public sectors, deepening African countries' recognition of prominent technologies in Japan or Japanese companies, and facilitating an increase in African people visiting Japan for that purpose.
Japanese government-sponsored scholarship for foreign students by the Ministry of Education, Culture, Sports, Science and Technology	Implement the acceptance of "research students," "undergraduate students," etc. for the purpose of improving educational standards in Japan and other countries in the world and contributing to promoting mutual understanding and international cooperation.

Table 1-9 Japan's International Study System for Ghana

In addition, scholarships in Ghana with which Ghanaian Fellows can obtain a master's degree abroad are provided mainly by South Korea, Australia, etc., and otherwise by India, the Netherland, Denmark, Germany, etc. The major scholarship programs are presented below.

1) Korean scholarship program

The Korea International Cooperation Agency (KOICA) provides a scholarship program for obtaining master's degree and PhD, which is intended for civil servants in African countries, including Ghana. The supported areas are the priority support areas of the Government of Korea for Ghana, and the method of its application consists of a system of recommendation from the target ministries. Types of scholarships and allowances to be paid to foreign students are almost identical to those of the JDS program, but the expenses of temporary return to Ghana for researches are said to be covered. The selection method is in two steps: telephone interviews by universities after document screening. It is stipulated that the

application be made through a formal diplomatic channel to the Embassy of Korea in each country.⁹

2) Joint Japan/ World Bank Graduate Scholarship Program

This is the scholarship program operated through the contributions by the Government of Japan to the World Bank, which is the international study program for a master's degree and a doctoral degree intended for holders of the nationality among the Member States of the World Bank. An individual person can apply for a university among those in the list of universities all over the world through the Internet. It is possible to select a university out of the partner universities in the world (but mainly in English-speaking countries), including Japan with a wide range of faculties.

3) Australian scholarship

The Government of Australia has a scholarship program (Australian Awards) intended for civil servants, private company employees, and NGO staff in African countries including Ghana, with which it is possible to obtain a master's degree in Australia. Ghana and Nigeria are the current target countries for this program in West Africa. Scholarship students are recruited for priority areas agreed with each government, and the priority areas in Ghana include: (1) agricultural productivity; (2) environmental management; (3) natural resources management including mineral resource-related; and (4) public policies including revenue management, tax collection/management, and public financial management.¹⁰

4) Private scholarships for oil sector workers

Tullow, Inc. as the British petroleum development company sponsors the scholarship for graduate schools, intended for civil servants, company employees or others engaged in tasks related to oil development to obtain a master's degree in the United Kingdom. Its target areas include: (1) engineering, environment and earth sciences; (2) oil and gas economics; (3) law on oil and gas industries; and (4) Other types of applied chemistry.¹¹

5) Scholarships for universities in Ghana

The African Capacity Building Foundation (ACBF) and the aforementioned JJ/WBGSP initiate the Economic Policy Management Program that specializes in the one-year economic policy management course allowing the acquisition of a master's degree in economics at the University of Ghana, which is intended for practitioners having work

⁹ KOICA (http://africascholarships.com/koica-scholarship-program-international-students-korea/)

¹⁰ Australian Award for Ghana (http://www.australiaawardsafrica.org/african-countries/ghana/awards/ masters-awards/)

¹¹ Tullow Group Scholarship (https://www.tullowgroupscholarshipscheme.org/countries/23007.html)

experiences at government agencies or NGOs for three years or above.¹² According to the Ministry of Finance, it is popular among the students because they can obtain a master's degree within Ghana in one year, and it was said that four officers were receiving the scholarship at the Ministry of Finance in December 2015.

The following is information obtained through the interviews with target organizations and JDS Fellows for reference:

- It is only the JDS program among the scholarship programs of various countries that has a scholarship office in Ghana. Meanwhile, the Australian program has scholarship offices in Kenya and South Africa.
- In most of the western countries, universities themselves provide scholarships rather than the government. There are many cases where professors' research expenses are borne as scholarships.
- When a consultant asked the personnel affairs division of each ministry about which scholarship programs were more popular among the students, all the ministries answered that all of them were attractive equally. However, there were high demands for the coverage of expenses of temporary return to Ghana to collect data for master's theses and scholarships for doctoral courses, which are allowed under the Korean scholarship program and others but disallowed in the JDS program.
- The online application by individual applicants is common to the scholarship programs except for Japan and South Korea. There were also comments stating that the JDS program obligating application documents in hard copies would be old-fashioned.

¹² Economic Policy Management Program (http://www.ug.edu.gh/economics/courses/economic-policy-management-epm-programme-epm-ghana)

CHAPTER 2 CONTENTS OF THE JDS PROGRAM

2-1 An Outline of the JDS Program

The JDS program was modified into the new system from the acceptance in FY 2009, which is intended to improve administrative capabilities in each country, directed to personnel resources that may be able to make policies to resolve problems in each country in the future. In addition, it also aims to improve the capacities of individual administrative officers and target organizations that they belong to for making policies and operating programs and thus contribute to resolving development issues in each country by unifying areas, target organizations and host universities for four batches. The acceptance under the JDS program started in Ghana in FY 2012, which is the first-time event in Africa. An outline of the second-phase JDS program in Ghana is as follows:

- (1) A framework of the program
 - 1) Overall Goal

Administrative officials' capacities in government organizations/related ministries and agencies dealing with development issues are improved for policy planning, program management and the like.

2) Project Purpose

The project aims to foster younger administrative officials and others expected to be involved in social and economic development in Ghana and play a crucial role in it in the future through acquiring a (master's) degree at graduate universities in Japan. In addition, it is to contribute to the strengthening of a future partnership between both countries through building a human network.

- 3) Expected Outputs
 - JDS Fellows' capacities are improved for researches, policy-making and program operation and management.
 - JDS Fellows are engaged in formulating and implementing policies at the organizations they belong to after returning home, using the knowledge gained through their studies in Japan.
 - The foundation of the friendly relationship between Japan and Ghana is strengthened.
- 4) Target county/area of the program

Japan and Ghana

5) The maximum number of Ghanaian Fellows to be accepted

10 persons/ year (up to 40 persons in four years)

- 6) Priority areas and issues
 - Subprogram 1: Improvement of administrative capacities and institutional development Component 1-1: Support for strengthening capacities for administering economic policies
 - Subprogram 2: Revitalization of rural areas
 Component 2-1: Improvement of basic living environment (Support for strengthening capacities for implementing health policies)
 - Subprogram 3: Agriculture/rural development
 Component 3-1: Rice production and agriculture development support
 - 4. Subprogram 4: Natural resources and energy policy Component 4-1: Energy development support

7) Implementation system

The program is to be implemented with the cooperation from the JDS Program Operating Committee comprised of representatives of the Government of Ghana, the Embassy of Japan and the JICA office. At the Operating Committee, discussions will be held mainly on: (1) implementation policies; (2) program schedules; (3) areas of acceptance; (4) target organizations for recruitment; (5) host universities; (6) selection method; and (7) final determination of Ghanaian Fellows for Japan.

8) Target organizations

As shown in Table 2-1.

9) Target persons

The program is intended for personnel resources that may be able to engage in practical services of policy-making and the like at the mainstay of the government after returning home, and limited to the master's program.

10) Eligibility requirement (proposed)

The proposed main eligibility requirements for Ghanaian Fellow candidates for Japan are as follows:

- Work as a regular officer at a target organization for three years or more;
- Hold a nationality of Ghana;
- A person between 22 and 39 years old at the time of 1 April in the fiscal year of visit to Japan;
- Have a bachelor's degree;

- A person who has practical work experience for three years or more;
- A person who has not acquired or has no plan to acquire a master's degree at an overseas university while receiving a scholarship by another donor;
- A person who understands the purpose of the JDS program and has the intention to contribute to developing Ghana after returning home; and
- Healthy both mentally and physically.
- 11) Implementing agency

MOF

12) Provision of facilities by the Ghana side

It is desired that the Ghana side will provide a project office for the JDS program.

 dollars in 2010. becoming a middle-internet, be difficult to achieve MDG4 (reduce infinite common international market in the economic growth rate of 2011 was recorded in the exceeding of the same year, and the economic situation is less satisficatory in the ratios. The budget is the improvement of maternal and thile here in Gham, the biggest challenge in the health is addition, the incugality has been careful to be is health and the exceeding remains the migrovement of maternal and chile health is repositioned and thus the Government of Gham and recording of the ratios. The budget is the ratio of a most satisfies dependent economy that relises of new of 19 most satisfies dependent economy that relises of the resonance and the ratio market and the ratio market and the ratio market and the ratio market and the regions and thus the Government of Gham and recording three the satisfies of the regions and thus the Government of Gham and recording three the satisfies of the resonance and the ratio market and the ratio market and the ratio market and the ratio market and the resonance and the resonance and the ratio market and the ratio market and the resonance and the ratio market and the resonance and the resonance and the resonance and the ratio market and the	Subprogram	Improvement of administrative capacities and institutional development	Revitalization of rural areas	Agriculture/ rural development	Natural resources and energy policy
 dollars in 2010. becoming a middle-incorer country in 2010. Commercial production of a mortality) and MDG 5 (improve maternal health in distribute and mining and agriculture is a mining	Component		(Support for strengthening capacities for		Energy development support
improvement of the debt sustainability of the Government of Ghana will affect the contents management, financial management (fund spread of commercial farming, and thus the human resources to promote the human resourc	Background	Ghana has the GDP that reached about 1,100 US dollars in 2010, becoming a middle-income country in 2010. Commercial production of oil was started in December of the same year, and the economic growth rate of 2011 was recorded to be 15%, including oil revenues. However, the recent economic situation is less satisfactory in Ghana in recent years due to increased import of oil for power generation and sluggish international gold market conditions. The budget deficit reached 11.5% of GDP in average from in 2012 - 2013, and rebuilding of the fiscal balance becomes a pressing issue. In addition, impacts of an inflation arising from expansionary fiscal measures and a sharp decline in the exchange rate are also serious on the economy there. On the other hand, the stabilization of macro-economy is listed as one of the most important issues in the second national development strategy of Ghana (Ghana Shared Growth and Development Agenda: GSGDA II) (2014 - 2017), and efforts for rapid fiscal consolidation are desired there, but the actual situation is that staff with sufficient capacities are not yet assigned to related organizations, including the Ministry of Finance. In this background, the development of human resources engaged in medium- and long-term financial reforms at related organizations including the Ministry of Finance for addressing the medium- and long-term fiscal reforms has high significance of cooperation as it also leads to the benefit of the entire Government of Ghana. Furthermore, for Japan that will be	implementing health policies) Under the circumstances where it is anticipated to be difficult to achieve MDG4 (reduce infant mortality) and MDG 5 (improve maternal health) here in Ghana, the biggest challenge in the health sector is the improvement of maternal and child health. In addition, the inequality has occurred in basic health services that can be enjoyed among the regions, and thus the Government of Ghana determines the improvement of maternal and under-five mortality rates and an improved access to high-quality health services to be important issues. Maternal and child health is positioned as the priority issue in the "Health Sector Medium-Term Development Plan (2014-2017) by the Ghana's Ministry of Health, and the health sector in Ghana (donors and the government) formulated the MDG acceleration framework (Millennium Development Goal Acceleration Framework (MAF)) led by the Government of Ghana and the Joint Action Plan (JAP) (showing the efforts for MDG4/5) in view of situations of the recent progress in maternal and child health (particularly the delay in the results of maternal mortality). Based on them, the country is promoting the following items as priority intervention methods: (a) improvement of family planning; (b) an increase in delivery assistance by health care workers; and (c) improvement of emergency obstetric and neonatal cares. On the other hand, the situation is that in order to properly implement these interventions, the improvement of capacities is essential for administrative	Ghana's economy is a typical primary commodities-dependent economy that relies on agriculture and mining, and agriculture is a key industry there, accounting for about 23% of gross domestic products (GDP) and 43.2% of the working population in 2012, but it has the vulnerability to weather and international market conditions. According to the second national development strategy (GSGDAII) (2014 - 2017), it is essential to promote agricultural modernization, for which the essential matters are to be the improvement of agricultural productivities, job creation, strengthening of the competitiveness through providing added values to agricultural products including rice and their integration into domestic and international markets, irrigation development, improved accessibility to agricultural credits, and sustainable environmental management. In this background, Japan has the intention to contribute to the promotion of intensification and commercialization of agriculture through the development of production infrastructures and distribution systems in addition to supporting the improvement of small-scale farmers' productivity and profitability and strengthening of extension systems with an emphasis on rice cultivation that Japan has the expertise. In addition, assistance in agricultural infrastructure development and agricultural mechanization is scheduled to be carried out to support modernized agricultural production along with the improvement of rice qualities,	The resources sector in Ghana include mineral resources (gold, bauxite, etc.) and the production of oil and gas started in recent years; there has been a growing expectation for earnings obtained from the resources, but it is necessary to fully take into account the impacts of new oil production on public finances and national economy. It is necessary to deal flexibly with national policies to understand the impacts of these revenues on the national economy and also minimize their negative effects caused by resource revenues such as the Dutch disease. On the other hand, the country's energy demand has increased due to the national economic growth and the improvement of people's livelihoods, and thus the country has been recently hit by chronic power shortages. The second national development strategy (GSGDA II) (2014 - 2017) states that the current power generation capacity of 2,845 MW will not be able to keep up with the demand for electricity that is increasing at a pace of $10 - 15\%$ annually, and the power transmission and distribution equipment is also lacking in terms of both quantity and quality. Moreover, there still remain significant disparities between urban and rural areas, and so the Government of Ghana sets the highest priority on the sufficient power supply for all industries and households. Based on these circumstances, the enhancement of electrification rates, rural electrification, repair and enhancement of power transmission and distribution equipment, optimal regulation of electricity charges and the like have become
		improvement of the debt sustainability of the Government of Ghana will affect the contents of Japan's medium- and long-term support to	management (equipment and drugs), facility management, financial management (fund management for service delivery), and	farmers' linkages with the private sector and the spread of commercial farming, and thus the increase of human resources having the	pressing issues, and thus the development of human resources to promote the formulation, verification, and revision of resources and energy policies has become an urgent task.

Tuble 2 1 Tritumework of Teophanee in the Troject for Human Resource Development Scholarsinp Frogram in Onana	Table 2-1	A Framework of Acceptance in the Project for Human Resource	e Development Scholarship Program in Ghana
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University/ Faculty	Kobe University, Graduate School of International Cooperation Studies	Nagasaki University, School of Tropical Medicine and Global Health	University of Tsukuba, Graduate School of Life and Environmental Sciences	Tohoku University, Graduate School of International Cultural Studies, International Joint Educational Program of Human Security
Number of accepted Fellows	8 persons (2 persons x 4 batches)	12 persons (3 persons x 4 batch)	12 persons (3 persons x 4 batches)	8 persons (2 persons x 4 batches)
Implementing agency		Ministry	of Finance	
Expected research areas	 Economic policy Financial policy Financial management Trade policy Investment policy 	 Maternal and child health Community health Formulation of health policies, monitoring and evaluation 	 Agricultural crop distribution policy Development of rice production infrastructures and control of qualities of processed products Agricultural mechanization administration/agricultural mechanization corporate management 	 Resources sector policy Energy sector policy (oil and gas resources) Energy sector (electric power) policy or energy sector (electric power) engineering system
Operating Committee	Ministry of Finance (MOF), Ministry of Health	MOH), Ghana Health Service (GHS), Embassy of	f Japan, JICA Ghana Office	
Target organizations	 MOF National Development and Planning Commission (NDPC) Ministry of Foreign Affairs and Regional Integration (MFA) Ministry of Trade and Industry (MOTI) Ghana Investment Promotion Centre (GIPC) Ghana Statistical Service (GSS) Bank of Ghana (BOG) 	 MOH GHS and other agencies 	 Ministry of Food and Agriculture (MOFA) Ghana Irrigation Development Authority (GIDA), and other agencies 	 Ministry of Power Ministry of Petroleum Ghana National Petroleum Corporation (GNPC) Ghana National Gas Company (GNGC) Volta River Authority (VRA) Ghana GRID Company (GRIDCO) Electricity Company of Ghana (ECG) Northern Electricity Distribution Company (NEDCO)

(2) Agreed items at the Operating Committee

The preparatory survey for cooperation on the JDS program in Ghana was carried out during August 17 - 28, 2015.

The purposes of the survey are as follows:

- Explain the second phase of the JDS program, its implementation system, and so on to the Ghanaian side with the explanation of objectives and methods of the preparatory survey for cooperation to the Government of Ghana to achieve their understanding;
- Make consultations about sub-programs, components, target organizations for recruitment, the number of Ghanaian Fellows to be accepted, host universities, etc. for the JDS program to reach an agreement;
- Explain the schedule of recruitment and selection and discuss the methods of recruitment and selection or eligibility requirements to reach an agreement.

The Operating Committee was held on August 24 during the survey, and the following were agreed:

Date/time: August 24, 2015

Location: MOF meeting room

Participants: Operating Committee (OC) members

- Japanese side: Embassy of Japan and JICA
- Ghana side: MOF, MOH, and GHS

Content: Consultations on the JDS program and agreements on the framework

- 1) Consultation results and agreements
 - A. Operating Committee members and implementing agencies

It was approved that the members of the Operating Committee were the Embassy of Japan and the JICA Ghana Office as the Japanese side and the MOF, MOH, and GHS as the Ghanaian side just as in the first phase. It was decided that the Operating Committee continued to be chaired by the MOF.

B. Work office for the JDS program

Following the first phase, it was agreed that a room of GHS would also be provided to the consultants as the office of the JDS program in the second phase.

C. Framework of acceptance

Agreed item	Description of agreement
The JDS program to be agreed in this survey	The plan of accepting Ghanaian Fellows to be agreed in this survey is for four programs for the Ghanaian Fellows scheduled to be accepted between FY 2016 and FY 2019
The maximum number of accepted Fellows	The maximum number of annually accepted Fellows is 10 persons (the upper limit of 40 persons in 4 batches)
Sub-program and component	Selection of targeted sub-programs and components, and an agreement on their titles
Target organizations for recruitment and target persons	Agreements on target organizations and target persons
Implementing agency and Operating Committee	The implementing agency and the Operating Committee members
Host universities in Japan, a plan of acceptance, number of persons and expected research topics	Determination of host universities for components and agreements on the number of planned persons Agreements on expected research topics in components
Formulation of a basic plan and an entire flow of survey	Agreement on the method of formulating a basic plan and its composition and the next schedule Explanation of and an agreement on a flow from the entire survey to the main program

 Table 2-2
 Items and Contents of Agreements on the Plan of Accepting Ghanaian Fellows

Then the Minutes of Discussion (M/D) on the preparatory survey for cooperation approved at the Operating Committee is presented in Annex 4.

2-2 An Approximate Operational Cost of the JDS Program

Based on the acceptance plan described in the previous section, we estimated the program cost for Ghanaian Fellows in the first batch that will come to Japan in FY 2016.

The program cost estimation was based on the following assumption:

Condition of estimation

- Estimation time: October 2015
- Exchange rate: \$1 = 124.4 yen, 1 Cedi = 32.21 yen

Implementation expenses

- We estimated enrollment fees, tuition fees, and scholarships for ten persons at four host universities in the case of Ghanaian Fellows coming to Japan in FY 2016.
- We estimated application and examination fees for university entrance examinations in the case of Ghanaian Fellows coming to Japan in FY 2017.
- We estimated special program expenses with the cost of 500,000 yen per year for a Ghanaian Fellow (a half cost for the years of coming to Japan and repatriation).

Service expenses (in Ghana)

- We decided not to include the cost of office rental, because it was decided that the office expense for the JDS program would be provided by GHS.
- We included the expenses of recruitment, and selection for Ghanaian Fellows coming to Japan in FY 2017.
- The inflation rate in Ghana was considered and reflected into the estimation.

Service expenses (in Japan)

- The period of Ghanaian Fellows' arrivals in Japan was determined to be in mid-August 2016.
- Fellows were supposed to take an orientation in Tokyo after arriving in Japan and then move to their respective universities.
- The period of their repatriation was adjusted to the month of implementing graduation ceremonies at host universities.

Personnel expenses of the implementing agency

• We estimated by setting the number of working days per person to be 30 days abroad and 20 days in Japan.

2-3 An Outline of Items to be Borne by the Partner Country

Physical and monetary matters to be borne by the Government of Ghana in this program agreed by the survey team in the preparatory survey for cooperation include the following matters:

(1) Physical and monetary burdens

We agreed that GHS would provide an office room to the consultants as the work room for the Agent of the JDS program.

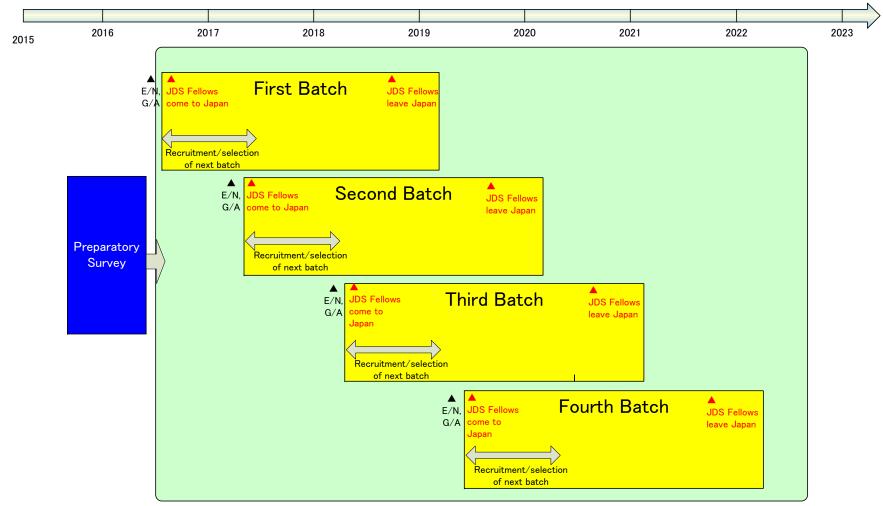
(2) Roles of the Government of Ghana in this program

In addition, roles of the Government of Ghana in the JDS program include the following matters:

- MOF plays the management role such as chairing two Operating Committee meetings per year as the implementing agency.
- Hold the Operating Committee to determine the finally successful candidates among the applicants for studying in Japan.
- Participate in the consultations with target organizations to be held when teachers of host universities visit Ghana.
- Hold debriefing meetings with Ghanaian Fellows after they return home to understand outcomes of their studies in Japan. In addition, efforts should be made in order that the Fellows can be assigned to departments where they can demonstrate outcomes of their studies in Japan after coming back to their ministries/agencies.

2-4 Schedule of the JDS Program

The schedule of the JDS program for four batches in FY 2016 or later that have been formulated by the preparatory survey for cooperation that was carried out this year is assumed to be as shown below. Specifically, the Exchange of Notes (E/N) and the Grant Agreement (G/A) will be concluded for each batch in each year.



Source: Prepared by the consultant based on the material provided by JICA

Figure 2-1 A Flowchart of the JDS Program in Ghana (4 batches)

2-5 Follow-up activities

As part of the follow-up activities for repatriated Ghanaian alumni, we plan to carry out: (1) a debriefing meeting immediately after the Ghanaian Fellows return home; and (2) a questionnaire survey (monitoring survey) with the members of the OC approximately in the third year after the acceptance is started.

(1) An outline of the debriefing meeting immediately after the Ghanaian alumni return home

Immediately after returning to Ghana, the debriefing meeting is held. Participants and contents will be described later in Chapter 3-2.

(2) Implementation of monitoring surveys four years after Ghanaian Fellows are initially accepted

JICA conducts a monitoring survey with the OC members for around four years after the start of acceptance of JDS Fellows. The survey items consist of a system of the JDS program, repatriated Ghanaian alumni, activities of the Operating Committee, and evaluation of agent activities. It aims to check the status with the recipient government on whether or not the following goal of this program is likely to be achieved in order to help improve the future program:

The project aims to foster younger administrative officials and others expected to be involved in social and economic development in Ghana and play a crucial role in it in the future through acquiring a (master's) degree at graduate universities in Japan. In addition, it is to contribute to the strengthening of a future partnership between both countries through building a human network.

CHAPTER 3 VERIFICATION OF THE RELEVANCE OF THE JDS PROGRAM

3-1 Effects Expected from the JDS Program

The effects expected from the JDS program firstly include the aspect of developing policy formulation and implementation capabilities through accepting young governmental administrative officers expected to be actors for developing and implementing social and economic development plans in the future in target countries of grant aid programs at universities in Japan. Secondly, the JDS program is based on the premise that administrative officers studying in Japan will be back on the payroll at their respective target organizations, which is expected to enhance the benefits of sharing their knowledge gained in Japan within their organizations or contribute to strengthening the organizational capabilities of solving social and economic problems in addition to individuals' capabilities. The third point is that young government administrators build human networks by studying in Japanese universities, contributing to the strengthening of friendly relations between the two countries as the persons of understanding Japan well. JDS Fellows in this program are expected to acquire the expertise through researches and build human networks to work actively as the personnel having the expertise to solve problems encountered in their countries practically.

As detailed in the next section, evaluation indicators are set in this program to measure its effects through measuring them regularly at the beginning of the program inauguration, during the studies in Japan, and after repatriation.

3-2 Data Related to the Indicators for Project Evaluation

We plan to conduct the monitoring and evaluation regularly in various stages or before, during, and after Ghanaian Fellows' studies in Japan in order to verify how much program goals were achieved and what about the implementation process.

We consider that the subjects of monitoring and evaluation in this program will be comprised of the following three types:

- · Changes in Ghanaian Fellows' abilities and their benefits for target organizations
- · Ghanaian Fellows' living and academic aspects in Japan
- The overall JDS program in Ghana

Target of monitoring	Content	Means of monitoring
Changes in Ghanaian Fellows' abilities and their benefits for target organizations (Monitoring/evaluation A)	Measure the changes in Ghanaian Fellows' abilities through their studies in Japan (skills & attitudes), and examine if there are the benefits of sharing outcomes of their studies for target organizations.	 Interviews with Ghanaian Fellows, report meetings, questionnaire surveys Interviews with host universities, questionnaire surveys Questionnaire surveys and interviews with Ghanaian Fellows' immediate supervisors at their dispatching agencies
Aspects of Ghanaian Fellows' living in Japan (Monitoring/evaluation B)	Regularly check if their living and studies are smooth in Japan.	 Interviews with Ghanaian Fellows, questionnaire surveys Interviews with host universities, questionnaire surveys
The overall JDS program in Ghana (Monitoring/evaluation C)	Whether the program is progressing smoothly or there are any challenges to it.	 Interviews with Ghanaian Fellows, questionnaire surveys Interviews with host universities, questionnaire surveys

Table 3-1 Targets, Contents, and Measures of Monitoring and Evaluation

By conducting a series of monitoring and evaluation, we will measure the effect at each stage of the program and help improve the JDS programs in progress and in the future.

As a method of monitoring, we are thinking of three types: (1) monitoring and evaluation through interviews, report meetings, and questionnaire surveys with Ghanaian Fellows; (2) monitoring and evaluation through interviews and questionnaire surveys with host universities; and (3) monitoring and evaluation through questionnaire surveys with the Fellows' supervisors of their dispatching organizations. We believe that questionnaire surveys can provide more objective evaluation of the effects of studies in Japan when conducted with a larger number of target persons.

- (1) Monitoring and evaluation through interviews, report meetings and questionnaire surveys with Ghanaian Fellows
 - Implementation of interviews and report meetings
 ("Table 3-1 Targets, contents and means of monitoring and evaluation" monitoring/ evaluation A, B, C)

During the periods of studies in Japan, we will make interviews with Ghanaian Fellows and agents on a regular basis (about once a quarter) to measure effects in their researches and hear about situations of their living and their demands for the overall JDS program, while giving them advice as required.

• Research aspect : whether or not researches are smooth, achievement of research goals, whether or not Fellows' research needs and the curriculum are consistent, what are challenges, how to make sure of research outcomes in the future, whether or not communications with teachers are smooth, and outcomes of studies in Japan;

- Living aspect : whether or not student life is satisfactory, whether or not Fellows are in good health both mentally and physically, whether or not there are any problems, levels of Fellows' satisfaction and what they expect for the future; and
- The overall JDS program: levels of satisfaction from this program and what to be expected for the future, whether or not safety management was appropriate, and what is requested from the agent on the procedures or systems of acceptance.

In addition, we will conduct the evaluation of outcomes of Ghanaian Fellows' studies in Japan by asking them to present the outcomes on the following aspects at two debriefing meetings to be held in Japan right before their repatriation and in Ghana right after returning home:

Holding of a debriefing meeting Timing : Twice right before and right after their repatriation Attendants at the debriefing meeting before repatriation: Embassy of Ghana in Tokyo, agent, Ghanaian Fellows Attendants at the debriefing meeting after repatriation: Operating Committee, repatriated Ghanaian alumni's supervisors, Embassy of Japan in Ghana, JICA Ghana office, local project office for the JDS program, **Ghanaian Fellows** Understanding of how much their studies in Japan have contributed to the Purpose : improvement of their capabilities as civil servants and their motivation to utilize their outcomes of studies in Japan Contents: • Status of achieving project goals · Presentation on career plans and action plans by taking advantage of outcomes/effects of their studies · Presentation on action plans on how to have target organizations benefit from the outcomes of their studies in Japan

- Results of building a human network in Japan
- 2) Implementation of questionnaire surveys

("Table 3-1 Targets, contents and means of monitoring and evaluation" – monitoring/ evaluation A, B, C)

Effects of studies in Japan will be measured by making questionnaire surveys with Ghanaian Fellows at the varied timing. We will exercise our ingenuity for the surveys, e.g. questionnaires will be prepared in a choices system to improve the response rate as much as possible, responses will be provided with a ten-step method for instance to ensure easier understanding of the condition of capability change quantitatively, etc. With regard to the survey frequency, we will carry out the surveys three times: right after coming to Japan, in the first year of study, and before repatriation to measure how capabilities that are considered

necessary for civil servants such as skills (expertise and techniques for development issues in relevant fields, problem solving abilities, logical thinking, judgment abilities, etc.) and attitudes (discipline, ethics, sense of responsibility, enthusiasm, etc.) change. We will analyze these survey results as part of the monitoring, whose results will be visualized in tables and graphics, and provide recommendations to JICA, the Operating Committee in Ghana, target organizations and others to help them improve the program in the future.

In addition, we will ask questions about the situations of their studies and daily life and their demands for the JDS program in concurrence with the distribution of questionnaires for capability measurement. As for the survey results, we will submit a report to JICA and the Government of Ghana every half a month to help improve the overall JDS program in the future.

Tuture.
Implementation of the questionnaire survey (for Ghanaian Fellows)
Timing : a total of three times - right after coming to Japan, one year after coming to
Japan, and at the time of holding a debriefing meeting
Purpose : Understand the change of Ghanaian Fellows' capabilities through their studies
in Japan and situations of their academic and living aspects
Content:
Improvement of Ghanaian Fellows' capabilities:
Skills (expertise and techniques for development issues in relevant fields, problem
solving abilities, logical thinking, judgment abilities, etc.) and attitudes (discipline,
ethics, sense of responsibility, enthusiasm, etc.)
Academic aspects:
Status of obtaining the knowledge for addressing development issues, outcomes of
researches, whether or not communications with teachers are smooth, the existence or
absence of troubles during the studies in Japan and their details, and whether or not
universities' support for Ghanaian Fellows and trainees are satisfying.
Living aspects:
Whether or not Fellows are healthy in mental and physical aspects, whether or not
Fellows have worries about something
The overall JDS program (for the acceptance process):
Whether or not the process and procedure of acceptance are smooth, the existence or
absence of troubles regarding the acceptance and their details, what is expected from
this program in the future, safety management, etc.
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(2) Monitoring through interviews and questionnaire surveys with host universities

("Table 3-1 Targets, contents and means of monitoring and evaluation" – monitoring/evaluation A, B, C)

When conducting the monitoring of Ghanaian Fellows once a quarter, we will also make interviews with the universities' student exchange divisions and responsible instructors as to whether or not Ghanaian Fellows' academic life is satisfactory. In addition to the regular exchange of opinions, the agent will visit universities as required when Ghanaian Fellows fall sick or their academic performances are poor to explore clues to solutions by exchanging views with the universities.

We will conduct questionnaire surveys with instructors of host universities on the changes in Ghanaian Fellows' capabilities (skills and attitudes) immediately before their repatriation. Simultaneously, we will also ask them questions about their demands for academic aspects and the overall JDS program to provide feedback to the future of JDS programs.

Implementation of the questionnaire survey (for instructors)					
Timing : At the time of holding a debriefing meeting					
Purpose : Monitoring of changes in Ghanaian Fellows' abilities through studying in					
Japan as well as their academic and living aspects					
Content:					
Improvement of Ghanaian Fellows' capabilities:					
Skills (expertise and techniques for development issues in relevant fields, problem					
solving abilities, logical thinking, judgment abilities, etc.) and attitudes (discipline,					
ethics, sense of responsibility, enthusiasm, etc.)					
Academic aspects:					
Status of obtaining the knowledge for addressing development issues, outcomes of					
researches, whether or not communications with teachers are smooth, and the existence					
or absence of troubles during the training and their details					
Living aspects:					
Whether or not Fellows are healthy in mental and physical aspects, whether or not					
Fellows have worries about something					
The overall JDS program (for the acceptance process):					
Whether or not the process and procedure of acceptance are smooth, the existence or					
absence of troubles regarding the acceptance and their details, what is expected from					
this program in the future, safety management, etc.					

(3) Questionnaire surveys and interview surveys with the immediate supervisors of Ghanaian Fellows' dispatching organizations

("Table 3-1 Targets, contents and means of monitoring and evaluation" – monitoring/evaluation A)

We will carry out questionnaire surveys with supervisors of Ghanaian Fellows' organizations just before their coming to Japan. It is desirable to understand changes in their capabilities by asking the same supervisor to answer the questions between before and after the Fellows study in Japan as far as possible.

The questionnaire/interview surveys with the immediate supervisors					
of Ghanaian Fellows' dispatching organizations					
Timing : Immediately before Ghanaian Fellows go to Japan and in three years after they return home (JICA will conduct three years after their repatriation)					
Purpose : Changes in their capabilities through their studies in Japan					
Content:					
Improvement of Ghanaian Fellows' capabilities:					
Skills (expertise and techniques for development issues in relevant fields, problem					
solving abilities, logical thinking, judgment abilities, etc.) and attitudes (discipline,					
ethics, sense of responsibility, enthusiasm, etc.)					
In addition to the above items, it is also desirable to ask them questions from the viewpoint of "how much the gained knowledge is utilized and contributed to the target organizations" in the survey after their repatriation.					
• How to take advantage of the outcomes of their studies in Japan to help them perform their services					
• How they leverage the network built during their studies in Japan					
• Whether or not the differences arise in the treatment such as their promotion, salary increase, etc.					
• How the knowledge gained through their studies in Japan is contributed to the target organizations					
• Are repatriated Ghanaian alumni assigned to the departments engaged in the relevant policy formulation and institutional building?					
• Are the capabilities of the target organizations for policy formulation and institutional building improved through repatriated Ghanaian alumni? Why?					

3-3 Results of Situation Checking Survey

As part of the situation checking survey, we conducted surveys of: 1) teaching staff of two universities in Japan who have accepted the Ghanaian JDS Fellows in the first phase and Ghanaian Fellows staying in Japan; 2) the status of target organizations in Ghana; and 3) repatriated Ghanaian alumni and their immediate supervisors in Ghana. Aggregated results of questionnaires are attached in Annex 7.

- (1) Implementation of the situation checking survey with target institutions
 - 1) Needs survey with target organizations
 - A. Survey method

We prepared a questionnaire in advance, distributing it to all (19 ministries and agencies) of the target organizations through the project office for the JDS program. We visited major target organizations in Ghana to conduct interview surveys and collect the answered questionnaires.

- B. Contents of the survey
 - Roles as organizations, challenges, and research needs

- The potential number of applicants that match the application conditions of the JDS program
- The presence or absence of the master's program system by other donors
- The possibility of officers' reinstatement after repatriation

We conducted interview surveys with some of the ministries and agencies in order to understand current situations such as each organization's interest in the JDS program and the number of target persons during the preparatory survey for cooperation. Its results are summarized in the table below. Additionally, we made questionnaire surveys with the target organizations that could not be interviewed.

The number of questionnaires sent to the ministries/agencies 19 and the number of those collected from them was 17. The results of questionnaire surveys are shown in the table below.

	Number of staff	Number of	Female applicants among	Number of master's	Number of recipients			
Name of organization	(regular)	potential	the potential applicants	degree holders among	of overseas scholarship at a master's			
	(legular)	applicants for JDS	the potential applicants	the potential applicants	degree level or higher			
Economic sector								
Ministry of Finance	645	109	32	52	Netherlands, India, China, Denmark,			
					Germany, South Korea			
National Development and	68	19	7	10	2 (South Korea)			
Planning Commission								
Ministry of Foreign Affairs	541	54	8	32	China			
and Regional Integration								
Ghana Statistical Service	417	87	5	6				
Ministry of Trade and Industry	288	115	59	61	4 (South Korea)			
Ghana Investment Promotion	76							
Centre								
Bank of Ghana	1,097	317	105	Less than 40%				
Total (excluding N/A)	3,132	701	216	Approximately 290				
Health sector	· · · · ·							
Ministry of Health	351 (Headquarters)	73	48	12	South Korea			
5	95,420							
	(including medical							
	practitioners)							
Ghana Health Service	58,008	2203	1200	661	26			
	(including medical							
	practitioners)							
total	351 (headquarters)	2,276	1,248	673				
	153,428							
	(including medical							
	practioners)							
Agricultural sector	• /							
Ministry of Food and	2161	425	102	22	21			
Agriculture								
Ghana Irrigation Development	180	68	28	21	None			
Authority								
Total	2,341	493	130	43				

 Table 3-2
 Results of the Surveys with Potential Applicants for the Target Period

Name of organization	Number of staff (regular)	Number of potential applicants for JDS	Female applicants among the potential applicants	Number of master's degree holders among the potential applicants	Number of recipients of overseas scholarship at a master's degree level or higher
Energy sector					
Ministry of Power	83	10	2	10 (Att.: the proportion of master's degree holders in the total number of persons)	3 persons in China, South Korea, JDS
Ministry of Petroleum	58	20		16 (Att.: the proportion of master's degree holders in the total number of persons)	2 persons (scheduled) with private scholarships
Ghana GRID Company	904	205	48	None	None
Ghana National Gas Company	210	108	46	112	None
Electricity Company of Ghana	6,365	1,165	7% out of the potential applicants	30% out of the potential applicants	None
Volta River Authority	1,424	1,377	247	116	None
Total	9,044	2,885	424	603	

Area		Economy		
Survey item/ comment	Ministry of Finance	National Development and Planning Commission	Ministry of Trade and Industry	
Human resource development needs	Tax collection and revenue management, financial management, project design, implementation and management	Personnel affairs, monitoring and evaluation, labor management, development policy making, financial management, project management, economic development policy	The current and future impacts of EPA, impacts of trade policies on the business environment, policies for the private sector and industries to be formulated in order to achieve the goal of the ministry	
Number of officials in the ministry/ agency	645 persons	68 persons	288 persons	
Number of administrative officers engaged in policy formulation	260 persons	-	-	
Number of administrative officers that match the recruitment conditions of JDS	109 persons	19 persons	115 persons	
Possibility of recommending Ghanaian Fellows in Japan annually for four years	Possible enough (8 - 10 persons per year)	Possible enough	Possible enough (5 - 6 persons per year)	
Target persons expected to study in Japan	Economic Officer, Budget Officer, Admin Officer	-	Senior commercial officer, Senior industrial officer	
Conditionality of studies abroad	It is not possible for officers to study abroad for three years after entering the ministry/ agency.	Same as on the left	Same as on the left	
Limitations on the layoff and reinstatement during the period of studying abroad	None particularly	Same as on the left. Officers are compelled to work at NDPC for five years after returning to their offices	Same as on the left	
Master's program by other donors	KOICA, China, Australia, the Netherlands	KOICA	KOICA, China	
Treatment for Fellows after repatriation	Assigned to the same department or the department whose job contents are similar. There is a program for domestic universities by ACBF and JJ/WBGSP besides them.	A master's degree is required to be promoted to the technical level.	Promoted through the appraisal.	
Comment by the Ghanaian side	Other scholarship programs have no tests but basically adopt a recommendation system, and so we can send officers in accordance with the strategy of the ministry. It will be good if the JDS also incorporates the elements of recommendations.	None	None	

Table 3-3 Results of Interviews with Target Organizations

Area	He	alth
Survey item/ comment	Ministry of Health	Ghana Health Service
Human resource development needs	Maternal and child health, community health, monitoring &evaluation, health care access in remote areas, improvement of maternal and child mortality, leadership, improvement of retention rates of health workers in remote areas, salary management	Strengthening of capabilities of health care personnel, monitoring & evaluation, maternal and child health, public health
Number of officials in the ministry/ agency	351 persons (at the headquarters only)	58,008 persons
Number of administrative officers engaged in policy formulation	-	142 persons
Number of administrative officers that match the recruitment conditions of JDS	73 persons	2,203 persons
Possibility of recommending Ghanaian Fellows in Japan annually for four years	Possible enough (five persons per year)	Possible enough
Target persons expected to study in Japan	-	-
Conditionality of studies abroad	Same as on the left	Same as on the left
Limitations on the layoff and reinstatement during the period of studying abroad	Same as on the left	Same as on the left
Master's program by other donors	KOICA, Egypt	Australia, United Kingdom, South Africa, the U.S.A., EU, Canada, Netherlands, India, Israel
Treatment for Fellows after repatriation	Promoted through the appraisal.	Depending on the field of research, when acquiring a master's degree in health, for example, it is possible to apply for management posts in an open application system, including the District Director and the Deputy District Director.
Comment by the Ghanaian side	MOH believes that the areas determined by JICA as health-sector priority areas are the areas where assistance is most needed, and thus it is desirable to work together there.	The number of applicants to be accepted for the scholarship should be increased for the organizations having no financial abilities (e.g. GHS).

Area	Agriculture	
Survey item/ comment	Ministry of Foreign Affairs and Regional Integration	
Fields that Fellows want to learn in Japan	Agricultural development strategy, marketing and delivery (distribution) of agricultural products, agriculture policy development, reducing the gap among farmers	
Number of officials in the ministry/ agency	2,161 persons	
Number of administrative officers engaged in policy formulation	1,322 persons	
Number of administrative officers that match the recruitment conditions of JDS	425 persons	
Possibility of recommending Ghanaian Fellows in Japan annually for four years	Possible enough (20 persons per year)	
Target persons expected to study in Japan	Agricultural officer Senior agricultural officer	
Conditionality of studies abroad	It is not possible for officers to study abroad for three years after entering the ministry/ agency.	
Limitations on the layoff during the period of studying abroad		
Master's program by other donors	KOICA, Australia, etc.	
Treatment for JDS Fellows after	Assigned to the department where the outcomes of studies can be	
repatriation	leveraged. Assigned as a team leader of the project.	
Comments by the Ghanaian side	None	

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Area		Energy			
Survey item/ comment	Ministry of Power/ Ministry of Petroleum	Ghana GRID Company	Electricity Company of Ghana		
Fields that Fellows want to learn in Japan	Monitoring and evaluation, administrative management, personnel training at the management level	Which power mix including the next generation power (such as renewable energy) would be the most optimal, management of energy efficiencies in each block	Setting of appropriate electrical charges		
Number of officials in the ministry/ agency	M. Power: 83 persons Petroleum: 58 persons	904 persons	6365 persons		
Number of administrative officers engaged in policy formulation	M. Power: 8 persons Petroleum: 11 persons	None (implement policies that ministries/ agencies established)	None (implement policies that ministries/ agencies established)		
Number of administrative officers that match the recruitment conditions of JDS	M. Power: 10 persons Petroleum: 20 persons	205 persons	1165 persons		
Possibility of recommending Ghanaian Fellows in Japan annually for four years	Possible enough (Annually: Power: 4, Petroleum: 5)	Possible enough	Possible enough (10 persons per year)		
Target persons expected to study in Japan	Senior officer	Senior officer Principal officer	Manager General manager		
Conditionality of studies abroad	Same as on the left	Same as on the left	Same as on the left		
Limitations on the layoff during the period of studying abroad	Same as on the left	Same as on the left	Same as on the left		
Master's program by other donors	China, KOICA. There is a scholarship provided by the oil company for the British study.	None. However 20 staff members are enrolled in national graduate schools by self-financing.	None		
Treatment for JDS Fellows after repatriation	There is a tendency that the acquisition of master's degree is evaluated positively at the time of the personnel rating	Scheduled to assign the alumni to the departments where they can leverage outcomes of their studies abroad to the largest degree	Promoted when there is a vacant post.		
Comments by the Ghanaian side	None	None	None		

As a result of surveying age limits, years of service, whether or not scholarships by other donors have ever received in the past and so on with the interviewed nine ministries and agencies, it was found that all of them would be able to nominate the personnel for four batches of the JDS program.

Nearly half of the potential applicants in the economic sector were holders of master's degree, including 52 out of the 109 potential applicants in MOF, 10 out of the 19 persons in NDPC, 32 out of the 54 persons in MFA, 61 out of the 115 persons in MOTI, and also just under 40% in BoG. In addition, the case is also sporadically found where officers go to master's programs of graduate schools in or outside Ghana with the scholarship by the oil company or at the expenses of the target organizations in the energy sector. There are considered to be fewer potential applicants who are interested in the application for these areas as compared with other areas.

All of the target organizations consider that those who study abroad while taking a temporary leave from a job for two years can return to their offices without problems. Candidates make an oath with the target organization before studying abroad that they shall work there for the period twice as that of their study in Japan (for four years in the case of two-year study like JDS Program), reinstated after returning home by finishing their studies in Japan. It is said that they will have to pay the fine, if they fail to fulfill their obligations. The application of the study leave system in which they are paid a salary by the ministry/agency during their studies abroad is also a reason why they can study abroad at ease. However as for the GIPC, its personnel affairs department (director) had a view that it would be difficult to nominate applicants at the time of encouraging the application because the study leave is allowed only for one year in accordance with the GIPC provisions and no salary is paid to Fellows in the second year.

With regard to the possibility of JDS fellows' reinstatement to the target organizations after the end of their study period, we received from all the organizations that they can be reinstated without trouble. All the ministries and agencies in Ghana sign a pledge with officers to be international students before studying abroad, obliging them to work for at least four years after reinstated. Note that we have received the response from all of the organizations that studying abroad in itself would not affect the salary increase or promotion which would rather depend on individual capabilities. On the other hand, the acquisition of the master's degree is not necessarily linked directly to the promotion. In addition, it is mandatory that civil servants be in one job grade for three years in the case of central government ministries and agencies; as the work period becomes a blank period without being converted into the number of working years when officers study abroad and thus their promotion may happen to be delayed as compared to contemporary colleagues who do not study abroad, it was also heard that officers hesitated to study abroad.

2) Surveys with Ghanaian Fellows (during their stay in Japan and in returning home) and the their supervisors

We conducted questionnaire surveys and direct interview surveys with Ghanaian Fellows during their stay in Japan and when returning home, their supervisors as well as university teachers.

A. Outcomes of studies in Japan and their utilization after repatriation

According to the questionnaires collected from the repatriated Ghanaian alumni, all of the five returnees in the first batch are reinstated to their original ministries or agencies, saying "They utilize outcomes of their studies for their services," from which the target organizations' intention to take advantage of the Ghanaian Fellows who studied in Japan is acknowledged (Because the second-batch Ghanaian Fellows had just returned to Ghana in late August when we conducted the situation checking survey and they were still in leave of absence, we did not conduct the surveys with supervisors of their organizations.) In academic aspects, they use results of their researches to help resolve development issues of the target sector, and apply how to use statistical software, analytical methods, and how to interpret analysis results that they learned for their services. In non-academic aspects, they pointed out the following points: they built a network with teachers, Japanese students, and foreign students of other countries during their stay in Japan, utilizing it after studying in Japan as well, they learned the Japanese discipline (punctuality in time, politeness, sense of responsibility, patience, self-sacrifice, organized manner, etc.), high efficiency of the Japanese work, their time management, logical thinking, enthusiasm and methods of work; their computer skills were improved, etc. In addition, cases were sporadically observed where they still kept in touch with university teachers, friends at and outside the universities, and the business persons that they visited during their field trips in the special program.

In addition, situations of sharing outcomes of their studies in Japan with their organizations were observed. The interviews with repatriated Ghanaian alumni indicated that they presented results of their researches and circulated their research paper within their organizations and also taught their colleagues statistical data analysis techniques. According to the supervisors at their offices, additionally, repatriated Ghanaian alumni officers' efforts for work, discipline, humility, enthusiasm, originality of their services were said to provide positive impacts on the workplace. It was also said that they played an important role in motivating their colleagues to achieve the goals of their organizations.

University teachers had the opinion that with regard to whether or not outcomes of Ghanaian Fellows' researches could contribute to the capabilities of their organizations for policy making and institutional building, as they were still young and it would appear to take several years until they were in the positions of being actually involved in policy formulation, etc., they could not know it yet in actual, depending on how the alumni would spend their time in the next 10 years.

The situations of repatriated Ghanaian alumni's reinstatement at the time of October 2015 (the first batch of the first phase and the second batch: 5 persons each and 10 persons) are as follows:

No.	Batch	Graduation	University	Workplace before	Job title before	Current workplace	Current job title
1.0.	Buten	date	name	studying in Japan	studying in Japan		
1	1	2014.7	International	Upper West Regional Health	Human Resource	Sanford International Clinics-Ghana	Human Resource Programs
			University of	Directorate, Ghana Health Service	Manager	(SIC-G)/ Ghana Health Service	Manager
			Japan				
2	1	2014.7	International	Midwifery and Health Assistants	Nurse Educator	Policy, Planning, Monitoring and	Health Policy Analyst
			University of	Training School, Pantang, Ministry of		Evaluation, Policy Analysis Unit	
			Japan	Health		/Headquarters, Ministry of Health	
3	1	2014.9	Kobe	Western Region, Bibiani Anhwiaso	District Statistical	National Accounts Section ,Economic	Statistician
			University	Bekwai District, Ghana Statistical	Officer	Statistics Directorate /Headquarters,	
				Service		Ghana Statistical Service	
4	1	2014.9	Kobe	Research Department, Bank of Ghana	Deputy Manager	Research Department,	Manager
			University			Bank of Ghana	
5	1	2014.9	Kobe	External Resource	Assistant	Public Investment Division, Ministry	Economic Officer, Monitoring and
			University	Mobilization-Bilateral, Ministry of	Economic Officer	of Finance	Evaluation Officer/ Public-Private
				Finance			Partnership Advisor
6	2	2015.7	International	Policy Planning Monitoring and	Health	Policy Planning Monitoring and	Health Information -Senior
			University of	Evaluation, Municipal Health	Information	Evaluation, Municipal Health	Technical Officer
			Japan	Directorate, Mampong, Ashanti, Ghana	-Senior Technical	Directorate, Mampong, Ashanti, Ghana	
				Health Service	Officer	Health Service	
7	2	2015.7	International	Ho Municipal Hospital, Ghana Health	Nursing Officer	Volta Regional Health Directorate,	Regional Monitoring and Evaluation
			University of	Service, Ministry of Health/Christian		Ghana Health Service, Ministry of	Officer
			Japan	Health Association of Ghana (CHAG)		Health/Christian Health Association of	
						Ghana (CHAG)	
8	2	2015.7	International	Martyrs of Uganda Health Centre,	Nursing Officer	Catholic Bishop's Secretariat	Policy Planning, Monitoring and
			University of	Ministry of Health/Christian Health	-	Navrongo-Bolgatanga Diocese Health	Evaluation Officer
			Japan	Association of Ghana (CHAG)		Service	
9	2	2015.7	International	Nursing /Nurse and Midwives Training	Senior Health	Nurse and Midwives Training	Tutorship ,Senior Health Tutor
			University of	College ,Koforidua (KNMTC),	Tutor	College ,Koforidua (KNMTC),	
			Japan	Ministry of Health		Ministry of Health	
10	2	2015.9	Kobe	Upper East Region, Bolgatanga	Principal	Upper East Region, Bolgatanga	Assistant Statistician
			University	District, Ghana Statistical Service	Technical Officer	District, Ghana Statistical Service	

Table 3-4Status of Repatriated Fellows' Reinstatement (as of October 2015)

B. Advantages of studying in Japan and graduate schools in Japan

•

According to the questionnaire and interview surveys with Ghanaian Fellows while staying in Japan and alumni after returning to Ghana as well as university teachers in Japan, we heard about the following comments regarding the advantages of studying in Japan as compared with graduate schools in Ghana or other countries:

(Ghanaian Fellows while staying in Japan and alumni returning to Ghana)

- Japanese culture can be learned in addition to academic work. We are very surprised to see that all of the Japanese people are engaged in their own work promptly and politely from university professors to janitors, feeling that Ghanaian people must also learn from them. People's moral is high there. (Ghanaian Fellows staying in Japan)
 - Infrastructures are well developed within the school. For example, many of the journals, etc. can be downloaded online, and there are a lot of books, newspapers and magazines in the library. The laboratory is also available for 24 hours, which provides the best environment for academic work (repatriated Ghanaian alumni).
 - I have also studied at the graduate school in the United Kingdom, but the curriculum of the host university in Japan is more practical and easier to be applied to my work. I practice and use the economic analysis technique that I learned in my work promptly after returning to my office (repatriated Ghanaian alumni)
- Japan is only the country that was previously a developing country among the developed countries, and I feel that our learning of how Japan has evolved in the postwar period by actually visiting there can be partly applied to Ghana's development (repatriated Ghanaian alumni).
- When the landslide happened around the university, I went to work to remove the sediment with my friends voluntarily. I learned the volunteer spirit in Japan that does not exist in Ghana (repatriated Ghanaian alumni).

(Members of the Operating Committee and target organizations)

- By living in Japan, it is possible to actually experience the world's leading science and technology levels and the culture giving birth to them (Operating Committee)
- It is believed that while being in contact with the repatriated alumni every day as their supervisors, they also acquired positive elements in performing work such as hard work, punctuality, and honesty in addition to the expertise (Target organizations)

(University professors in Japan)

- While living in Japan that had been once a developing country but became a developed country through rapid development, it is considered to motivate Ghanaian Fellows to feel that Ghana should be like that.
- They can experience advanced socio-economic infrastructures and come in touch with people's thoughts and behavior in Japan through their life in addition to academic work of course, and it is considered that they can use such experiences in the future.
- C. Expectations for the future JDS program

(From the Operating Committee members)

- The fixed number of persons should be reduced from the organizations that have financial capacities and can allow their staff to study abroad at their expenses, and the number of persons should be increased from the organizations lacking financial capacities.
- The process is too long for the JDS program after application until the applicants are selected. We would like to request that it be simplified in the future.

(From the target organizations)

- I would like to request the establishment of short-term training courses for senior officials who deviate from the age limit of the JDS program.
- As the number of target organizations and host universities is increased, I would like to request that the allowed number of Fellows also be increased.
- I would like you to include PhD courses in the scope of the JDS program as well. Many officers already acquired the master's degree particularly in the economic sector, having greater demand for PhD.
- We cannot be engaged in some posts without acquiring Ph.D., and thus I would like to request that it also be within the scope.
- Staff members cannot be assigned to some positions without obtaining a doctoral degree, including the Governor of BOG or research departments of each organization in the target organizations for the JDS. In addition, it was said that doctoral degree holders virtually occupied many of the upper positions (at the level of directors or above) at the Ministry of Health and GHS, although there is no written stipulation for it as a rule; and thus the acquisition of a doctoral degree would be very advantageous to the promotion. In addition, those who have acquired a doctoral degree would generally gain greater voices and influences in

their organization. Therefore, the doctoral degree should desirably be the target of the JDS program.

The topics that the target organizations would like their Fellows to research and the topics that they actually research are not always compatible with each other. It may be good if they can be matched at the stage of application.

(From university teachers)

- As expectations for the JDS program, the implementation of the doctoral course should be considered positively. Some of the Ghanaian Fellows have already acquired a master's degree, and they can acquire Ph.D. in two years in Japan in such a case. Nowadays the reality is that only the master's degree lacks the international competitiveness as human resources, and as the brand power of universities is also strong in Europe and the United States, the benefits of acquiring a master's degree in Japan is small. It would perhaps be more significant for Ghanaian Fellows to acquire PhD and become the personnel that can pass for international organizations and first potentially contribute to Ghana.
 - There are also various international student programs within the JICA, but whether or not the period as research students are approved or if the spring semester enrollment is acceptable depends on the programs, for instance. I would like you to unify them.

(From repatriated Ghanaian alumni/Fellows staying in Japan)

- Current book purchase costs are too small, because western books are expensive. Likewise the luggage delivery fee in returning home is also too small with the current amount.
- I would also like to request that the cost incurred when we return home temporarily for our researches be approved in the program. The situation here is different from that in Asia at a shorter distance with lower airfares.
- The consumption tax was raised during our stay in Japan. Yet the amount of the scholarship is not changed. It should also be raised in accordance with the price increase.
- I would like to participate in an internship at a Japanese company as in the ABE initiative.
- There is a hindrance to our daily life if we cannot speak Japanese, and so I would like to learn Japanese before admission.

D. Impression of Ghanaian Fellows as compared to foreign students in other countries

The International University of Japan and Kobe University as the host universities in the first phase produced a number of Fellows whose academic results were ranked in the top class. There is an impression that JDS fellows are excellent as compared with other programs in Africa. In addition, while foreign students who cannot get used to the climate and living in Japan and break down both mentally and physically are found occasionally among the Asian students, Ghanaian Fellows are stable mentally as a whole and there is no case where they get any serious illness.

3-4 Challenges and Recommendations

(1) Recruitment activities

Based on the experience in the first phase, we believe that the quality of applicants (their academic achievements and motivations for studies in Japan) tends to be lower in the recommendation system than that in the open application system. Some of the ministries and agencies strongly claim the adoption of the recommendation system, but we will strive to secure high-quality applicants and also the number of applicants through consultations at the recruitment stage and also by explaining the advantages of the open application system and promoting their understanding of it to be accepted in parallel to the recommendation system as far as possible.

In addition, the postal system has not been developed in Ghana, and the transmissions by e-mail or at websites are not common due to the power outage and poor communication circumstances, and thus there is a tendency that information cannot be delivered easily from the central area to local areas. Because there are many branch offices of the target organizations in local districts in the agricultural, health and energy sectors, we will also expand public relations activities proactively in local areas. Transfer of staff from regional offices to central offices is common in government organizations of Ghana, and thus it is expected that staff members who gained field experiences in the regions could become leaders that make practical policies by acquiring theoretical abilities in addition to academic knowledge and analytical methods through studying in Japan. We will hold briefing meetings at as many target organizations as possible in Accra, the nation's capital and priority assistance areas for JICA and also visit personnel management officers of each target organization to encourage staff members' application individually. We will hold explanatory meetings for as many target organizations as possible in the capital city of Accra and the regions, and visit an officer in charge of personnel affairs at each target organization for encouraging the application individually.

In addition, we will make efforts to secure applicants by encouraging potential applicants to apply for the program directly at the ministries and agencies where there were few applicants in the past, including the Ministry of Finance. Furthermore, as was carried out this year, it would be desirable to ask related Japanese experts to continue to talk to department/personnel who are considered to be worthwhile to study in Japan to encourage their application this fiscal year as well, because JICA projects are to be in progress in each field from now on.

- (2) Collaboration with repatriated Ghanaian alumni
 - 1) Collaboration with repatriated Fellows in recruitment activities and other onsite activities of the JDS program

Five ex-JDS fellows in the first phase who had already returned home attended the explanatory meeting in this fiscal year, asking them to present their own experiences. Matters related to life and academic work in Japan from the viewpoint of foreigners who had experienced in living there as students (from how to select and prepare research plans to courses in universities) appeared to have been convincing to participants in the explanatory meeting, becoming useful reference information. It is considered beneficial to occasionally set an opportunity for repatriated Ghanaian alumni's presentations in the next fiscal year or later as well. With regard to the relationship between repatriated Ghanaian alumni and the JDS program, we will ask them to give advice at recruitment seminars and on applicants' research plans, attend orientations before Fellows go to Japan, send-off parties, and debriefing meetings after repatriation, and moreover give advice to applicants and scheduled Fellows on academic and living aspects in the future as well.

2) Collaboration with Japanese interested parties in Ghana and repatriated Ghanaian Fellows

Repatriated Ghanaian Fellows are the cadets for future policy makers in the mainstay of the Government of Ghana, and can be key persons for collecting information by the Government of Japan and Japanese companies on the policies of the Government of Ghana and business environments in Ghana as well as for the purpose of business inroads. The JDS program office would like to strive to strengthen the networking between Japan and the ex-JDS fellows as resource persons for the Japanese communities in Ghana by enhancing their presence among the Japanese community association through regularly understanding their recent status, providing them with information on Japanese events, seminars, exchange meetings, etc. to expedite their participation and inviting them to meetings including study meetings as guest speakers depending on the contents in collaboration with the Embassy of Japan in Ghana and the association of Japanese companies. In these networking events, participation of long term training participants as well as ABE Initiative alumni are highly promoted. Participation of large number of Japanese university OBs and Japanese groups in Japan will be the foundation of ties between Japan and Ghana.

Some returnees are contacting professors individually for joint research paper publication and joint research. From now on, joint research may be planned based on the information shared among people in charge of JICA projects and returnees.

There have already been requests made by Japanese companies in Ghana or those considering the business expansion there for regularly exchanging opinions with repatriated ex-JDS fellows working in the mainstay of the government to get the latest information in the government. When there are such requests or inquiries in the future, we will introduce repatriated ex-JDS fellows that can become resources persons or contact persons.

In addition, we participated in festivals such as the Japan Week led by the Embassy of Japan in Ghana every year by providing a stand booth for repatriated JDS fellows this year. Since such events lead to reaffirming the ties of the repatriated JDS fellows with Japan and contributing to the cultural exchange between the two countries, we would like to continue our participation on an annual basis in the future. JETRO Nigeria Office is joint administering Ghana and they attend the Japanese companies association meeting in Ghana from time to time. In the future, it may be better to share the returnees information with them and let Japanese companies not only in Ghana but in entire West Africa, to take advantage of it.

(3) Selection activities

1) Strengthening of mathematics abilities and measures against the plagiarism before enrollment

Three out of the four host universities set a mathematical test to applicants. It had broad contents from the rudimentary subjects at the junior high school level including arithmetic calculations, square root, and primary/ secondary equations to the senior high-school level applications such as differential calculus, extreme values, logarithms, and matrices.

As result of point rating, the percentage of questions answered correctly was about 25%, and there were found occasionally to be a number of applicants that could not even understand the mathematics at the junior high school level. This trend was especially pronounced among the applicants in the health sector. Some of the applicants in the agricultural sector were found sporadically to commit the cheating, which was already reported to the universities. It was decided that the treatment of the applicants who had behaved dishonestly was left to the discretion of the universities.

This year the tendency is that the applicants in the economic sector have the lowest marks, but the knowledge of mathematics is indispensable for economics as the science that systematically elucidates a variety of economic phenomena while using a mathematical theory. Therefore, it is desirable to acquire academic abilities to keep up with tuitions by using the time such as the orientation period before and after going to Japan to learn the minimum required mathematics.

In addition, the events have been found occasionally so far that some foreign students in Japan plagiarized theses or term papers from the Internet, etc., complained by the host universities. It is considered that they have a fewer feeling of guilt against these actions than the Japanese students. We should repeatedly inform the JDS fellow Fellows that the cheating or plagiarism is absolutely prohibited after going to Japan, or otherwise they may be expelled from the universities and return home without acquiring a degree in some cases.

2) Consideration of online application

According to the interview survey results in the field, online application is common to many of the scholarship programs by other donors in recent years, and there was someone stating an opinion that the JDS program accepting only paper documents was outdated. There are some applicants that come to the project office all the way from a long distance to submit their application documents every year in Ghana where a postal mailing system has not yet been well developed. Consideration of the adoption of online application is desired to save such time and efforts. However, it is desirable to continue to receive paper-based application forms as well even in such a case, because the Internet environment is unstable in Ghana.

(4) Institutional challenges

1) Establishment of the doctoral program

The requests have been heard from all the related parties including target organizations, Ghanaian Fellows, and university teachers for establishing the doctoral courses. There are currently many cases in Ghana where people become civil servants after acquiring a master's degree in advance, and so scholarships for acquiring the master's degree appear less attractive to them. Some of the repatriated Ghanaian alumni are considering their studies in Australia with its scholarships because they desire to go on to the doctoral course in Japan but it does not come true. The general worldwide trend is that final academic backgrounds are valued most in people's careers. For this reason, the implication of studying in Japan would be less significant when a doctoral degree is acquired in another country, even if a master's degree is acquired at a university in Japan.

In addition, some of the target organizations oblige the staff to hold a doctoral degree to be assigned to certain posts, and thus it is considered beneficial to open the door to the doctoral program in the JDS program as well.

As far as the interviews to target organizations are concerned, it is said that they would gain much greater voices and influences in the organization by obtaining a doctoral degree, although there is no written stipulation that a doctoral degree be required for staff members' promotion according to our interview results. In addition, many of the positions at the level of directors or above in the center of policy making are virtually occupied by Ph.D. holders at some of the target organizations. Indeed, OC members from the Ministry of Health and GHS are directors, both of whom are doctoral degree holders. In addition, it was decided that Professor Ebenezer Oduro Owusu, a former government-sponsored student acquiring a master's degree at Kochi University and a doctoral degree at Ehime University, would be installed as Vice President at the University of Ghana in August 2016. While the only alumni of the University of Oxford have so far been appointed to this position, the Embassy of Japan in Ghana has a great expectation for him. However, when considering the establishment of doctoral programs in the JDS program in the future, there is a need for considerations through scrutinizing target organizations' needs, career paths, and their consistency with the development issues.

2) Consistency with other international student programs of JICA

There are several universities among the host universities that accept foreign students within other foreign student programs such as the ABE initiative or the PEACE in addition to the JDS program, but they manifested their confusions because such programs have somewhat different systems despite the programs all under the JICA. Specifically, depending on the programs, the following matters are not yet unified: (1) the presence or absence of special programs and a clerical rule when there is the a special program; 2) presence or absence of a research student system; 3) presence or absence of the spring enrollment; 4) whether or not it is possible to match research plans by getting in mutual contact between teaching staff and applicants at the stage of application; 5) whether or not the cost of a temporary return to the foreign student is allowed to drive a car. The universities note that the occurrence of differences in systems and rules becomes a complicated and confusing problem when viewed from them, and it is desirable to unify them as much as possible in the future.

3) Selection of universities consistent with the development issues in Ghana

The JDS program also adopts a public offering system for universities, and proposals submitted by universities are first narrowed down through examinations, and then selected ultimately by the Operating Committee in Ghana. There were the cases found at some of the universities selected in this manner in the past where their course contents were not exactly consistent with the development issues. For this reason, we have heard of the demand from target organizations, applicants, and so on that universities more consistent with the development issues in Ghana be selected. It is considered essential to carefully review and discuss whether a course content to be offered by a university would match human resource development needs of a target organization at the stage where its proposal comes out.

When activities outside regular programs are planned and implemented such as special programs at universities, it is never possible to see and hear relevant things in Ghana; one idea would be to allow Ghanaian students to visit advanced sites in various fields in Japan and experience the internship (for example, the internship at an electric power company and at the farm, visit to a hospital and its facilities, etc.). Knowing the Japanese cases is considered to contribute to improving their analytical abilities by exploring solutions in comparison with the cases in their own country.

4) A need for Japanese education prior to the enrollment

Japanese language education before the enrollment has not yet been budgeted in the current JDS program, and Japanese language training is only implemented by the agents before and after JDS Fellows' come to Japan to a minor extent on their own account. Because all university lectures are given in English, the Fellows do not feel it inconvenient to be ignorant of Japanese in their academic life. However, many of the JDS Fellows live alone at apartment houses, and we have heard of Ghanaian students' comments that they cannot make any communications with ordinary Japanese people if they cannot have any Japanese conversations and achieve simple reading and writing in their daily life, which is very inconvenient for them. There were some foreign students that caused troubles with neighboring residents due to the fact that they could not understand the Japanese language as a factor, although it is not a Ghanaian Fellow. There are also some universities that implement a lecture on the Japanese language as an elective course, but the actual situation is that foreign students cannot spend time to spare in learning the Japanese language because they are busy at taking compulsory courses in many cases. Some of the foreign students subscribe to a Japanese language course held by a volunteer organization during a long vacation in which they can spare time relatively more freely. However, we have often heard of the comment from Ghanaian Fellows staying in Japan and repatriated Ghanaian alumni that they would like to acquire basic conversation and reading/writing skills to some extent before the university admission at which full-swing university life begins in Japan, if possible.

3-5 Consistency of the JDS Program with the Development Issues and the Country Assistance Policy

(1) Development strategies in Ghana and the positioning of the target areas of the JDS program/the development issues in Japan's assistance policy for Ghana

The JDS program in Ghana is intended to improve administrative capabilities of government administrative officers and their organizations, comprised of its components: 1) support for

strengthening capacities for administering economic policies; 2) improvement of basic living environment; 3) rice production and agriculture development support; 4) energy development support.

GSGDA II as the current national development plan consider the "governance of transparency and high accountability reflecting more citizens' voices (transparent, responsive and accountable governance)" as one of the key issues.

On the other hand, as described above in Section 1-2, Japan set a content to boost the medium-term development plan of the Government of Ghana in formulating a country assistance plan for Ghana in 2006. Its basic policy was determined to be the "promotion of dynamic economic growth from which people benefit broadly," and its priority areas were to be "agriculture (rice cultivation)", "economic infrastructure (electricity and transport)," "health and science/mathematics education," and "capacity development of GoG in administrative and financial management." Out of them the strengthening of administrative and financial capabilities is positioned as the underlying area to promote the achievement of other development issues. The development of human resources to lead the improvement of administrative and financial capabilities is also to be supported from the viewpoint of ensuring the sustainability and self-reliant development of outcomes of cooperation in each development issue.

The JDS program intended for the capacity building of government administrative officers and their target organizations is said to conform to national policies in Ghana and the Japan's policy for assistance to Ghana.

(2) Relevance of the selected areas

Because the development of human resources that can formulate and implement policies suitable for further sustainable development of Ghana in all of the four areas, the selected areas are believed to have high relevance.

1) Support for economic policies

The Government of Ghana set the "macroeconomic stability" as one of the most important issues in GSGDA II. The budget deficit reached an average of 11.5% of GDP during 2012 - 2013, rebuilding of the fiscal balance has become a pressing issue. Also, impacts of the inflation due to the expansionary fiscal policy and rapid decline of the exchange rate on the economy are serious and efforts are required for rapid fiscal consolidation. In this context, the development of human resources engaged in medium- and long-term financial reform at related organizations mainly including the MOF is considered to have a high cooperation significance, which also leads to the benefit of the entire Government of Ghana.

2) Support for the health policy

It is anticipated in Ghana that it would be difficult to achieve MDG4 (reduce infant mortality) and MDG 5 (improve maternal health) as the millennium development goals in the health sector within 2015, and personnel management of government administrative officers, logistic management (equipment and drugs), facility management, financial management (fund management for service delivery), and capacity building for planning, evaluation and monitoring are said to be essential in order to overcome these challenges. In accordance with the "Health Sector Medium-Term Development Plan (2014-2017)" by the Ministry of Health, the maternal and child health is positioned as a key issue. However, the situations is that personnel management of government administrative officers, logistic management (equipment and drugs), facility management, financial management (fund management for service delivery), and capacity building for planning, evaluation and monitoring are essential to implement these policies properly. Thus the support for enhancing the capabilities of monitoring and evaluating policies through the training of health-related young administrative officers is believed to be significant as it can contribute to achieving MDG4 and MDG5, and it is consistent with the sector development plan.

3) Support for the agricultural policy

GSGDA II includes the "agricultural modernization and sustainable natural resource management" as a key issue for which the improvement of agricultural productivity, job creation, the strengthening of competitiveness by adding values to agricultural products, including rice and their integration into domestic and international markets, irrigation development, access to agricultural credits, and sustainable environmental management are said to be important. Japan has the intention to contribute to promoting the agricultural intensification and commercialization through developing production infrastructures and distribution systems in addition to the support contributing to the improvement of small-scale farmers' productivity and profitability and strengthening extension systems with an emphasis on rice cultivation that there is expertise in Japan. Therefore it is considered significant to develop a large number of young personnel resources engaged in agricultural policies and having the knowledge and vision of developing agriculture in a sustainable manner.

4) Support for the energy policy

The country's energy demand has increased due to the national economic growth and the improvement of people's livelihoods, and thus the country has been recently hit by chronic power shortages. GSGDA II (2014 - 2017) states that the current power generation capacity of 2,845 MW will not be able to keep up with the demand for electricity that is increasing at a pace of 10 - 15% annually, and the power transmission and distribution equipment is also lacking in terms of both quantity and quality. Moreover, there still remain significant

disparities between urban and rural areas, and so the Government of Ghana sets the highest priority on the sufficient power supply for all industries and households. Based on these circumstances, the enhancement of generation capacities and the improvement of electrification rates, rural electrification, repair and enhancement of power transmission and distribution equipment, optimal regulation of electricity charges and the like have become pressing issues, and thus the development of human resources to promote the formulation, verification, and revision of resources and energy policies is considered to become an urgent task.

(3) Relevance as seen from the human resource development needs of the target organizations

The results of interviews on human resource development needs faced by each target organization in the situation checking survey were discussed in Section 3-3. Many of the organizations pointed out the shortage of personnel resources and lack of capacities in the area of monitoring and evaluation of policy formulation and implementation processes, and thus the program is believed to meet their needs in the sense of developing human resources for the purpose of improving government administrators' administrative capabilities. In addition, human resource development over a longer period for two years rather than in the short term would allow students to acquire the expertise as well as information gathering and analysis capabilities, logical presentation skills, systematic thesis writing techniques and the like, and it is considered to meet the needs in the sense of developing human resources for the purpose of improving government officials' administrative capacities.

(4) Conclusions about the relevance

As a result of discussing various points described above, it can be determined that the implementation of the JDS program in Ghana is of high relevance. The improvement of capabilities of individual young government administrators involved in formulating and implementing policies and target organizations to which they belong, which the program aims at, is consistent with the overall goal of Ghana and the Japan's priority assistance areas, and so the program is of very high relevance to them. In addition, knowing changes in policies and their cases in Japan that recovered from post-war poverty and joined the ranks of developing countries by undergoing the industrialization quickly after that unlike other developed countries could provide Ghanaian students with lessons in making policies in Ghana in the future. In addition, considering that all of the selected economic, health, agricultural, and energy sectors represent the mainstay of the national development plan in Ghana and also the Japan's priority assistance areas, the program is judged to contribute to developing human resources that can formulate and implement appropriate policies in each sector. Then as a result of making interviews with the target organizations in the situation checking survey on their human resource development needs,

the gist of the JDS program that aims at improving government administrators' administrative capabilities is considered to meet the other party's demand.

3-6 Conclusions

As described above, it is expected in this program that the development of capabilities of not only individual government administrators but also target organizations for formulating policies and managing programs is enhanced, contributing to the resolution of development issues in each country, and to the future strengthening of partnerships between the two countries through building human networks. This program is judged to be of high relevance as it matches the national development policy of Ghana and the Japan's policy, the selection of its areas is also adequate, and it meets the target organizations' human resource development needs. In addition, the Ghanaian side understands the physical and financial burdens and also the role of the Ghana government in this program. However, as mentioned in "3-4 challenges and recommendations," it is believed that the program can be implemented more smoothly and effectively if the following points are improved and developed for future activities:

- Recruitment activities
 - Adoption of the public offering system
 - Implementation of proactive public relations activities in the regions
 - Collaboration with other JICA projects
- Collaboration with repatriated Ghanaian alumni
 - Collaboration with repatriated Ghanaian alumni in recruitment activities and other onsite activities of the JDS program
 - Collaboration with Japanese interested parties in Ghana and repatriated Ghanaian alumni
- Selection activities
 - Strengthening of mathematics abilities and measures against the plagiarism before mathematics the university admission
- Institutional challenges
 - Consideration of the establishment of doctoral courses based on further needs surveys
 - Consistency with other foreign student programs of JICA
 - Selection of universities consistent with the development issues of Ghana
 - A need for Japanese language education before the admission

ANNEXES

Name	Affiliation/Manager	Role				
Government team members						
Hiroshi Sumiyoshi	Deputy Director, JICA Ghana Office	Team leader				
Taro Kakehashi	JICA Ghana Office	Cooperation planning				
Consultant						
Yoko Iizuka Japan Development Service, Co. Ltd., Director		Chief/ human resource development plan				
Yoshiko Oi	Japan Development Service, Co., Ltd. Consultant, Consulting Division	Deputy Chief/ training plan				
Hitomi Yamamoto Japan Development Service, Co., Ltd. Consulting Division		Recruitment/ selection 1				
Sachiko Tochigi	Japan Development Service Co., Ltd. Consultant, Consulting Division	Recruitment/ selection 2				

Annex 1. List of Team Members for the Preparatory Survey for Cooperation

	Survey in Ghana	in Japan	Accepting Universities
2015	(Embassy/ Selection		
Feb.	(OC/JICA office) Exchange opinions on tentative target issues and target organizations		
Apr.		April • Request survey of accepting universities	► April~May Submission of proposals for JDS program
July	• Examine proposals from universities by ODA Task of Japan	July • Contract private consultant for survey • Examine proposals from universities	
Sep.	Sep. [Agreement on the program framework] (OC/JICA Survey Team) Agreement on - the program framework and implementation structure - JDS program,component		
	target organizations maximum number of participants accepting universities and each number of participants recruitment and selection method September~October Recruitment of 1st batch (JFY2016) [Selection] Ist screening by application document	September • Inform universities result of proposal	September • Receive notification letter
Nov.	[Selection/Discussion with Universities] • 2nd screening by technical interview with university • faculty • Health examination • Discussion on the draft of Basic Plan for	<i>November</i> • Report the budget to Ministry of Foreign Affairs.	
Jan. 2016	each sub-program [Selection] · Final screening by OC · Agreement on final candidates [Agreement with recipient country] (OC/Survey Team)	January Prepare dispatching faculty Prepare the draft of Basic Plan and draft of Final Report	 <u>Ist screening</u> by application documents, and inform the results. Dispatch faculty for interview for <u>2nd</u> screening Discussion with recipient country
Feb.	Agreement on the final Basic Plan and draft of Final Report		
Mar.	_	February~March • Procedure for university entrance • Prepare the Final Report	Procedure for university entrance
Apr.			
May	May of 2016 ~ • Exchange of Note (E/N) • Grant Agreement (G/A) • Contract with Client and Japanese Agent	End of April • Decision on budget and fellows number by Japanese government	
Jul.			
Aug.	Orientation for Pre-Depauture	August · Fellows will Arrive in Japan	► September
Sep.		Briefing/Orientation	• Entrance to university

Annex 2. A Flow Diagram of the Planning Survey for the JDS Program

Date/time	Person met		
August 17 (Mon)	Mr. Yoshikazu Tamura, Chairman, Association of Japanese Companies in Ghana		
15:00-16:00			
August 18 (Tue)	JICA Ghana Office:		
8:30-10:00	Mr. Hiroshi Sumiyoshi (Senior Representative)		
	Mr. Taro Kakehashi (Assistant Resident Representative)		
16:00-17:00	MOF:		
	Mr. Azu Sam Aziakor, Director, General Administration		
	Mr. James Kofi Gabianu, Director, Human Resource		
	Ms. Gloria McCarthy, Assistant Director		
August 19 (Wed)	MOF:		
10:00-11:00	Mr. Awua Peasah, Director, ERM-Bilateral		
15:00-16:00	NDPC:		
	Mr. Isaac K. Asiamah, Deputy Director, PPME		
August 20 (Thu)	GHS:		
10:00-11:00	Dr. Margaret M. Chebere, Director, Human Resource Directorate		
	Mr. Francis Victor Ekey, Deputy Director, Human Resource Directorate		
14:00-15:00	Embassy of Ghana in Japan:		
	Ms. Seena Kitami (Researcher/Advisor)		
August 21 (Fri)	MOH:		
8:30-9:30	Mr. Emmanuel A. Odame, Deputy Director, PPME		
10:00-11:00	MOFA:		
	Mr. Kwadwo Owsu Adu, Director, Human Resource Directorate		
	Mr. Richard K. Annobil, Human Resource Directorate		
	Mr. Phillip Osei-Nikyumah, Human Resource Directorate		
August 24 (Mon)	Holding of the Operating Committee		
14:00-15:00			
August 25 (Tue)	Ministry of Petroleum:		
9:00-10:00	Mr. Azuma Robert, Director, Human Resource		
	Ministry of Power:		
	Mr. Solomon Asoalla, Chief Director, Human Resource		
	Ms. Elizabeth Amanququ, Acting Director, Human Resource		
10:30-11:30	MOH:		
	Mr. Alexander Yaw Arph, Director, Human Resource		
14:00-15:00	ECG:		
	Mr. Lawrence Osei-Kuffour, Director, Human Resource		
August 26 (Wed)	GRIDCO:		
10:00-11:00	Wg. Cdr. (Rtd) Samuel Allote, Director, Human Resource		
14:00-15:00	MOTI:		
15 00 16 00	Mr. William Kartey, Director, Human Resource		
15:00-16:00	ECG:		
	Mr. Lawrence Osei-Kuffour, Director, Human Resource		
	Ms. Flora Colerangle, Divisional Manager, Manpower Planning and Training		
August 27 (Thu)	GSS (Alumnae of Kobe University):		
9:00-10:00	Mr. Abraham Bosu		
10:00-11:00	MOF (Alumnae of Kobe University):		
A	Mr. Desmond Avemegah		
August 28 (Fri)	BOG (Alumnae of Kobe University):		
9:00-10:00	Mr. Kwadwo Amponsah Tabi		
10:00-11:00	GHS (Alumnae of IUJ):		
	Mr. Elvis Duffour		

Annex 3. List of Interviewed Persons in the Preparatory Survey for Cooperation

Annex 4. Minutes of Discussion (M/D)

MINUTES OF DISCUSSIONS

ON THE PREPARATORY SURVEY OF THE JAPANESE GRANT AID FOR HUMAN RESOURCE DEVELOPMENT SCHOLARSHIP TO THE REPUBLIC OF GHANA

In response to a request from the Government of the Republic of Ghana (hereinafter referred to as "Ghana"), Japan International Cooperation Agency (hereinafter referred to as "JICA") decided to conduct a Preparatory Survey in respect of "Japanese Grant Aid for Human Resource Development Scholarship" (hereinafter referred to as "the JDS Program") to be implemented in Ghana.

In view of the above, JICA dispatched a Preparatory Survey Team (hereinafter referred to as "the Team") headed by Hiroshi SUMIYOSHI, Senior Representative, JICA Ghana Office, to Accra.

The Team held a series of discussions with the relevant officials of Ghana. The both parties confirmed the design of the JDS Program and the related items attached hereto.

Accra, August 24th, 2015

Hiroshi SUMIYOSHI Leader Preparatory Survey Team Japan International Cooperation Agency

Mr. Kwadwo Awua-Peasah Director External Resource Mobilization-Bilateral (ERM-B) The Ministry of Finance The Republic of Ghana

Attachment

I. Operation of Preparatory Survey and JDS Program

1. The JDS Operational Committee and Implementing Organizations

Both parties agreed that the JDS Operational Committee (hereinafter referred to as "O/C") consists of the organization as following.

Ghanaian Side

- The Ministry of Finance (hereinafter referred to as "MOF")

- Ministry of Health
- Ghana Health Service

Japanese Side

- The Embassy of Japan

- JICA Ghana Office

Both parties confirmed that "MOF" should take the role as implementing organization.

2. Working Space

Both parties confirmed that Ghanaian party continues providing a working space for a consultant during the survey and for an agent which implements the JDS Program.

II. Design of the JDS Program

1. Maximum Number of JDS Participants

The total number of JDS participants for the first batch in Japanese fiscal year 2016, shall be ten (10) and this number would indicate the maximum number per batch for four batches, from Japanese fiscal year 2016 to 2019.

2. JDS Sub-Program and Component

Based on the discussion held between the both parties, target priority area as Sub-Program and target development issues as Component are identified as below. Sub-Program 3/Component 3 and Sub-Program 4/Component 4 which were added from Japanese fiscal year 2015 shall remain unchanged.

Priority Area as Sub-Program 1 :

-Improvement of administrative capacities and institutional development Development Issues as Component 1 :

- Support for strengthening capacities for administering economic policies

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Priority Area as Sub-Program 2 :

- Revitalization of rural areas

Development Issues as Component 2 :

- Improvement of basic living environment (Support for strengthening capacities for implementing health policies)

Priority Area as Sub-Program 3 :

- Agriculture/Rural Development

Development Issues as Component 3 :

- Rice Production and Agriculture Development Support

Priority Area as Sub-Program 4 :

- Natural Resources and Energy Policy

Development Issues as Component 4 :

- Energy Development Support

3. Target Organizations

Based on the discussion held between the both parties, the target organizations were identified as ANNEX 2 "Design of JDS Program for Four Batches".

4. Accepting Universities and Supposed Numbers of JDS Participants per University

Based on the discussion held between the both parties, it was agreed that the educational programs of the following universities are suitable to the development issue in Ghana. Universities and slots for Sub-Program 3/Component 3 and Sub-Program 4/ Component 4 were added from Japanese fiscal year 2015 and shall remain unchanged.

(1) Development Issue as Component 1:

Support for strengthening capacities for administering economic policies

University: Kobe University (2 slots)

(2) Development Issue as Component 2 :

Improvement of basic living environment (Support for strengthening capacities for implementing health policies)

University: Nagasaki University (3 slots)

(3) Development Issue as Component 3 :

Rice Production and Agriculture Development Support

University: University of Tsukuba (3 slots)

(4) Development Issue as Component 4 :

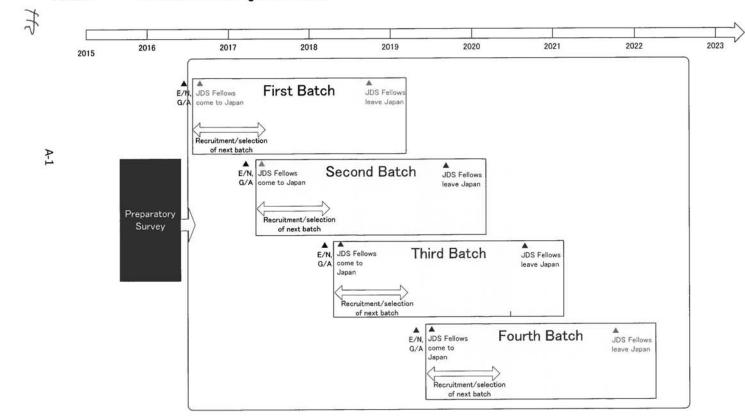
Energy Development Support

University: Tohoku University (2 slots)

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Annex 1 Flowchart of JDS Program for Ghana

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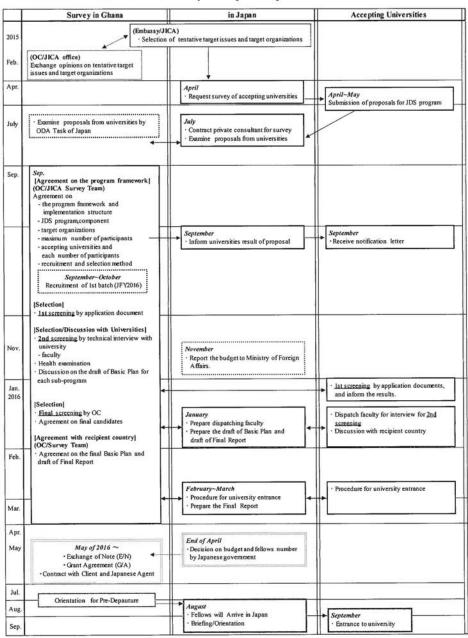
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Annex 2 Design of JDS Program for Four Batches

Sub-Program (JDS Priority Areas)	Component (Development Issue)	Presumed Fields of Study	Target Organizations	University	Slot
I. Improvement of administrative capacities and institutional development	1-1. Support for strengthening capacities for administering economic policies	<u>Presumed Fields of Study:</u> - Economic Policy - Financial Policy - Fiscal Management	-Ministry of Finance (MOF) -National Development Planning Commission (NDPC) - Ministry of Foreign Affairs and Regional Integration (MFA) - Ministry of Trade and Industry (MoTI) - Ghana Investment Promotion Center (GIPC) -Ghana Statistical Service (GSS) -Bank of Ghana (BOG)	Graduate School of International Cooperation Studies, Kobe University	2
2. Revitalization of tural areas	2-1. Improvement of basic living environment (Support for strengthening capacities for implementing health policies)	Possible Fields of Study: - Mother and Child Health - Community Health - Health policy formulation, monitoring and evaluation	-Minisry of Health (MOH) - Agencies including Ghana Health Service (GHS)	School of Tropical Medicine and Global Health, Nagasaki University	3
3. Agriculture/ Rural Development	3-1. Rice Production and Agriculture Development Support	Possible Fields of Study: - Agricultural products marketing policy - Administration of agricultural engineering and agricultural mechanization/management of agricultural engineering services - Developmment of infrastructure for rice production, post harvest management of rice including quality control and processing	-Ministry of Food and Agriculture (MOFA) - Agencies Including Ghana Irrigation Development Authority (GIDA)	Graduate School of Life and Environmental Sciences, University of Tsukuba	3
4. Natural Resources and Energy Policy	4-1. Energy Development Support	Possible Fields of Study: - Natural resources policies - Energy policies (oil and gas) - Energy policies (electricity) or energy engineering (electricity)	Ministry of Power Ministry of Petroleum Ghana National Petroleum Corporation (GNPC) Ghana National Gas Company (GNGC) Volta River Authority (VRA) Ghana GRID Company (GRIDCO) Electricity Company of Ghana (ECG) Northern Electricity Distribution Company (NEDCO)	Graduate School of International Cultural Studies, International Post- Graduate Program in Human Security, Tohoku University	2

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Annex 3 Flowchart of the Preparatory Survey for JDS

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Subprogram	Component	Supervisory	Target organization	University	Proposed number of Fellows to be accepted in 4 batches						
(Priority area)	(development issue)	agency			1st	2nd	3rd	4th	Total		
Improvement of administrative capacities and institutional development	Support for strengthening capacities for administering economic policies		Ministry of Finance (MOF), National Development and Planning Commission (NDPC), Ministry of Foreign Affairs and Regional Integration (MFA), Ministry of Trade and Industry (MOTI), Ghana Investment Promotion Centre (GIPC), Ghana Statistical Service (GSS), Bank of Ghana (BOG)	Graduate School of International Cooperation Studies, Kobe University	2	2	2	2	8		
Revitalization of rural areas	Improvement of basic living environment	Ministry of	Ministry of Health (MOH), Ghana Health Service (GHS) and other agencies	School of Tropical Medicine and Global Health, Nagasaki University	3	3	3	3	12		
Agriculture/ rural development	Rice production and agriculture development support	Finance (MOF)	Ministry of Food and Agriculture (MOFA), Ghana Irrigation Development Authority (GIDA), and other agencies	Graduate School of Life and Environmental Sciences, University of Tsukuba	3	3	3	3	12		
Natural resources and energy policy	Energy development support		Ministry of Power (MoPower), Ministry of Petroleum (MoPetroleum), Ghana National Petroleum Corporation (GNPC), Ghana National Gas Company (GNGC), Volta River Authority (VRA), Ghana GRID Company (GRIDCO), Electricity Company of Ghana (ECG), Northern Electricity Distribution Company (NEDCO)	Graduate School of International Cultural Studies, International Post-Graduate Program in Human Security, Tohoku University	2	2	2	2	8		
			Total		10	10	10	10	40		

Annex 5. The Number of Accepted Ghanaian Fellows in 4 Batches for each Priority Area/ Development Issue

Annex 6. A Basic Plan for the Priority Areas

<u>The Project for Human Resource Development Scholarship (JDS)</u> <u>Basic Plan for the Target Priority Area</u>

Basic Information of Target Priority Area (Sub-Program)

- 1. Country: Ghana
- 2. Target Priority (Sub-Program) Area: Improvement of administrative capacities and institutional development
- 3. Operating Committee: Ministry of Finance and Economic Planning (MOF), Ministry of Health (MOH), Ghana Health Service (GHS), Embassy of Japan, and JICA Ghana Office

Itemized Table 1

1. Outline of Sub-Program / Component

(1) **Basic Information**

- 1. Target Priority (Sub-Program) Area: Improvement of administrative capacities and institutional development
- 2. Component: Support for strengthening capacities for administering economic policies
- 3. Managing Organization: Ministry of Finance and Economic Planning (MOF)
- 4. Target Organization: MOF, National Development Planning Commission (NDPC), Ghana Statistical Service (GSS), the Bank of Ghana (BoG), Ministry of Trade and Industry (MOTI), Ministry of Foreign Affairs and Regional Integration (MFA), and Ghana Investment Promotion Centre (GIPC)

(2) Background and Needs (Position of JDS in Development Plan of Ghana)

Currently, stable economic growth is expected in Ghana in the short run due to the international prices of gold and cacao beans that are its major exports (sources of foreign currency revenues) which remain high and the start of oil production in the second half of 2010 as major factors. On the other hand, financial challenges are still large due to problems such as the deficits in the fiscal balance arising from government arrears by the former regime and the excess of government current expenditures. In addition, the method of calculating GDP per capita was changed in 2010 as well, by which Ghana entered the middle income level as it was revised upward from about 650 US dollars (2009) to about 1,100 US dollars (2010), but the enlarged gap between the rich and the poor is still considered to be a serious problem. In this context, the macroeconomic stability is also listed as one of the most important issues in the second Ghana Shared Growth and Development Agenda (GSGDAII), and urgent efforts are required for fiscal consolidation there; however, there is a current situation in which officers with sufficient capabilities are not assigned to related institutions, including the Ministry of Finance.

While the IMF also points out that the public spending is vulnerable, additionally, Japan is implementing a project to improve the overall financial management in the aspects of budget planning, implementation, and monitoring of one ministry (the Ministry of Food and Agriculture) in view of the importance of such public financial management. In conjunction with it, developing human resources that engage in mediumand long-term fiscal reforms in related organizations including the Ministry of Finance has the high cooperation significance as it will lead to providing the entire Government of Ghana with its benefits. Furthermore, since the improvement of the debt sustainability of the Government of Ghana will affect contents of the medium- and long-term assistance to Ghana for Japan scheduled to initiate a yen loan program in the future, there is a high need for its cooperation from such a viewpoint.

(3) Japan's ODA Policy and Achievement (including the JDS Program)

The Government of Ghana sets forth the promotion of economic growth for developing the entire country without segregating geographical, social or economic hierarchies as a large goal of the medium-term development. In order to help achieve such a development goal of the Government of Ghana, the Government of Japan positions the following four areas as priority areas, while encouraging self-help efforts and stable economic operation management in Ghana: (1) Agriculture (rice farming); (2) economic infrastructures (electric power supply and transportation); (3) public health and science/ mathematics education; and (4) strengthening the capabilities of administrative and financial operations. This development issue: "Support for strengthening capacities for administering economic policies" becomes a target subject at the first phase of the JDS program in Ghana, for which ten persons have ever been accepted at a host university.

2. Cooperation Framework

(1) **Project Objective**

The project objective is to strengthen the Ghanaian government's administrative capacity through providing opportunities to the young capable government employees who are expected to play leadership roles and who will contribute to the socio-economic development of the country, to obtain Master's degree. It also aims to create a human network, which will eventually strengthen the bilateral relationship/ partnership between Japan and Ghana.

(2) **Project Design**

1) Overall Goal

Administrative officials' capacities in government organizations/ related ministries and agencies dealing with development issues are improved for policy planning, program management and the like.

2) Project Purpose:

The project aims to foster younger administrative officials and others expected to be involved in social and economic development in Ghana and play a crucial role in it in the future through acquiring a (master's) degree at graduate universities in Japan. In addition, it is to contribute to the strengthening of a future partnership between both countries through building a human network.

(3) Verifiable Indicators

- The proportion of repatriated Ghanaian JDS Fellows that acquired a master's degree;
- Repatriated Ghanaian JDS Fellows' capacities (research ability, policy formulation capacity, policy implementation capacity, and administration capacity) are improved as compared to those before they study in Japan;
- Repatriated Ghanaian JDS Fellows return to their offices and are assigned to the department where they can take advantage of the knowledge, technologies and networks of contacts they acquire during their studies in Japan;
- The knowledge, technologies and networks of contacts that they obtain in Japan are utilized for their services after returning home.

(4) Number of JDS Participants and Accepting University

Graduate School of International Cooperation Studies, Kobe University: 2 participants / year total 8 participants / 4 years

(5) Activity

Goal	Content/means of goal achievement
During the study in Japan	
During the study in Japan Ghanaian JDS Fellows acquire advanced expertise to ensure their understanding of current circumstances and encountered challenges to the development and poverty reduction in Ghana well and propose, formulate, and implement appropriate economic policies in response to them. Allow Ghanaian JDS Fellows to discuss resolutions to the issues through thesis writing and complete their academic dissertations.	 Ghanaian JDS Fellows learn the basics of economics (macroeconomics, microeconomics, and econometrics), and drawing on it, acquire the knowledge required for the "macro-economic management" such as financial administration, money and banking, and trading; Ghanaian JDS Fellows acquire the knowledge in the applied field of economics useful for formulating and implementing specific economic policies such as human resources development, poverty reduction, and development of small and medium enterprises; Ghanaian JDS Fellows' abilities of analyzing policy issues and proposing policies are improved. This will be done through the empirical analysis based on data obtained through basic statistics, social surveys, quantity analysis, etc.; Ghanaian JDS Fellows learn the areas associated with the issues such as political science, international relations, international laws, legislation, etc., broadly to understand effects and roles of the political environment, approaches to the governance, and legal systems on the economy; and Ghanaian JDS Fellows' understanding of economic operation. Ghanaian JDS Fellows' understanding of economic such as proposing international learning international development cooperation.
Implementation of special programs	· Invite experts familiar with related areas of expertise and
	 invite experts familiar with related areas of expertise and practitioners in international organizations and national aid agencies as visiting professors or lecturers to help Ghanaian JDS Fellows deepen their knowledge of economic development including macroeconomic operations in other regions; Deepen the knowledge of how specifically economic policies are implemented on site through study visits to administrative and financial organizations in Japan; Receive English proofreading and thesis guidance by professional instructors; and Receive the research guidance and support for research life by a tutor, TA, etc.

(6)-1 Inputs from the Japanese Side

- 1) Expenses for activities of the Special Program provided by the accepting university before, during and after studying in Japan (e.g. preparatory instructions including local activities, special lectures and workshops, follow-up activities after returning home)
- 2) Expenses for studying in Japan (e.g. travel expenses, scholarships while staying in Japan, examination fees, tuition fees, etc.)
- 3) Expenses for support during the stay in Japan (e.g. monitoring, daily life support, etc.)

(6)-2 Input Duration and the Number of JDS Participants

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1 batch2 participants × 4 years = 8participantsFrom the year 2016 (Until 2018) : 2 participantsFrom the year 2017 (Until 2019) : 2 participantsFrom the year 2018 (Until 2020) : 2 participantsFrom the year 2019 (Until 2021) : 2 participants
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(7) Inputs from the Ghanaian Side

- 1) Participate in the discussion meeting with professors from accepting universities.
- 2) Dispatch of JDS participants
- 3) Follow-up activities (e.g. providing opportunities for JDS returned participants to share/ disseminate the knowledge they acquired in Japan at their organizations and/or other target organizations)

(8) Qualifications (Tentative)

1) Occupation:

- More than 3 years of work experience in the specialized areas
- 2) Others
 - Nationality: Must be citizens of Ghana
 - Age: Between 22 and 39 years old (inclusive) as of April 1, in the year of dispatch
 - Must not be serving in the military
 - Applicants must have a good understanding of the objectives of the JDS Program and after their return, should have a strong willingness to work for the development of Ghana.
 - Persons who are; currently receiving, planning, or who have previously acquired, a master's degree after studying abroad on a scholarship awarded by other foreign assistances are ineligible.
 - Applicants must be in good health, both mentally and physically.
 - · Persons must have proficiency in English, sufficiently fluent for studying in Japan.

The Project for Human Resource Development Scholarship (JDS)

Basic Plan for the Target Priority Area

Basic Information of Target Priority Area (Sub-Program)

- 1. Country: Ghana
- 2. Target Priority (Sub-Program) Area: Revitalization of rural areas
- 3. Operating Committee: Ministry of Finance (MOF), Ministry of Health (MOH), Ghana Health Service (GHS), Embassy of Japan, and JICA Ghana Office

Itemized Table 1

1. Outline of Sub-Program / Component

(1) **Basic Information**

- 1. Target Priority (Sub-Program) Area: Revitalization of rural areas
- 2. Component: Improvement of basic living environment (Support for strengthening capacities for implementing health policies)
- 3. Implementing Organization: Ministry of Finance (MOF)
- 4. Target Organization: Ministry of Health (MOH), and agencies including Ghana Health Service (GHS)

(2) Background and Needs (Position of JDS in Development Plan of Ghana)

While it is anticipated to be difficult to achieve MDG4 (Reduce child mortality) and MDG5 (Improve maternal health) in this country, the biggest challenge in the health sector is the improvement of maternal and child health (MCH). The health of mothers and children is positioned as a priority issue in the "Ghana Health Sector Medium-Term Development Plan (2014 - 2017)" by the Ministry of Health in Ghana, and the health sector there (donors, the government) formulated the Millennium Development Goal Acceleration Framework (MAF) and the "Joint Action Plan (JAP) (showing the country's efforts for MDG4/5) led by the Government of Ghana in a way to coincide with the MDG Summit in September 2010, considering the recent status of the progress of maternal and child health (in particular the delay of achievements in the maternal mortality rate). Building on it, the government promotes (a) the improvement of family planning, (b) an increase in delivery assistance by health care workers, and (c) the improvement of emergency obstetric and neonatal care as priority intervention methods in this country, and thus JICA is supporting the improvement of maternal and child health through implementing the "Program for Strengthening of Maternal and Child Health System in Upper West Region" mainly with the "Improvement of Maternal and Neonatal Health Services utilizing CHPS (Community Health Planning and Services) system in the Upper West Region." On the other hand, there is a situation where capacity building is essential for administrative officers' personnel management, management of logistics (equipment and medicine), management of facilities, financial management (fund management for service delivery), and preparing a planning table or monitoring as an overall level raising measure in order to properly implement these interventions.

(3) Japan's ODA Policy and Achievement (including the JDS Program)

The Government of Ghana sets forth the promotion of economic growth for developing the entire country without segregating geographical, social or economic hierarchies as a large goal of the medium-term development. In order to help achieve such a development goal of the Government of Ghana, the Government of Japan positions the following four areas as priority areas, while encouraging self-help efforts and stable economic operation management in Ghana: (1) Agriculture (rice farming); (2) economic infrastructures (electric power supply and transportation); (3) public health and science/ mathematics education; and (4) strengthening the capabilities of administrative and financial operations. This development issue: "Improvement of basic living environment (Support for strengthening capacities for implementing health policies)" becomes a target subject at the first phase of the JDS program in Ghana, for which ten persons have ever been accepted at a host university.

2. Cooperation Framework

(1) **Project Objective**

The project objective is to strengthen the Ghanaian government's administrative capacity through providing opportunities to the young capable government employees who are expected to play leadership roles and who will contribute to the socio-economic development of the country, to obtain Master's degree. It also aims to create a human network, which will eventually strengthen the bilateral relationship/ partnership between Japan and Ghana.

(2) **Project Design**

- Overall Goal Administrative officials' capacities in government organizations/related ministries and agencies dealing with development issues are improved for policy planning, program management and the like.
- 2) Project Purpose:

The project aims to foster younger administrative officials and others expected to be involved in social and economic development in Ghana and play a crucial role in it in the future through acquiring a (master's) degree at graduate universities in Japan. In addition, it is to contribute to the strengthening of a future partnership between both countries through building a human network.

(3) Verifiable Indicators

- The proportion of repatriated Ghanaian JDS Fellows that acquired a master's degree;
- Repatriated Ghanaian JDS Fellows' capacities (research ability, policy formulation capacity, policy implementation capacity, and administration capacity) are improved as compared to those before they study in Japan;
- Repatriated Ghanaian JDS Fellows return to their offices and are assigned to the department where they can take advantage of the knowledge, technologies and networks of contacts they acquire during their studies in Japan;
- The knowledge, technologies and networks of contacts that they obtain in Japan are utilized for their services after returning home.

(4) Number of JDS Participants and Accepting University

School of Tropical Medicine and Global Health, Nagasaki University: 3 participants / year total 12 participants / 4 years

(5) Activity

Goal(s)	Content(s) and means to achieve goal(s)
While studying in Japan	
Acquire practical abilities required for global health practitioners (staff of international organizations, etc.) in the field of international health/global health.	 Provide Ghanaian Fellows with general subjects to acquire the basic knowledge required for practitioners and researchers regarding international health/global health during the first quarter of the first year. In the MPH course, a field trip will be carried out for two to three weeks during the period after the second quarter of the first year. Provide Ghanaian Fellows with applied subjects essential for experts related to international health during the second quarter of the first year and after. MPH students will participate in short-term field exposure in their first year and long-term hands-on training in their second year to build practical problem-solving abilities, depending on their expertise.
Consider solutions to the issues through preparation of their theses, and complete their dissertations. Participate in special program(s)	 In thesis writing, research supervisors will provide support for a selection of thesis topics and literature review. At the hands-on training site selected by the student, supervision of training, thesis writing, and presentations will be offered. Provide Ghanaian Fellows with the opportunity to learn through problem-based learning (PBL) together with Japanese and international students in other courses, etc. They will attend lectures held by worldclass researchers and professors at global health seminars Participate in supplementary classes by native speakers to improve English abilities. Participate in supplementary classes to ensure basic understanding of statistics and epidemiology.

(6)-1 Inputs from the Japanese Side

- 1) Expenses for activities of the Special Program provided by the accepting university before, during and after studying in Japan (e.g. preparatory instructions including local activities, special lectures and workshops, follow-up activities after returning home)
- 2) Expenses for studying in Japan (e.g. travel expenses, scholarships while staying in Japan, examination fees, tuition fees, etc.)
- 3) Expenses for support during the stay in Japan (e.g. monitoring, daily life support, etc.)

(6)-2 Input Duration and the Number of JDS Participants

1 batch 3 participants \times 4 years = 12 participants From the year 2016 (Until 2018) : 3 participants From the year 2018 (Until 2020) : 3 participants F

From the year 2017 (Until 2019) : 3 participants From the year 2019 (Until 2021) : 3 participants

(7) Inputs from the Ghanaian Side

- 1) Participate in the discussion meeting with professors from accepting universities.
- 2) Dispatch of JDS participants
- 3) Follow-up activities (e.g. providing opportunities for JDS returned participants to share/ disseminate the knowledge they acquired in Japan at their organizations and/or other target organizations)

(8) Qualifications (Tentative)

- 1) Occupation:
 - More than 3 years of work experience in the specialized areas
- 2) Others
 - Nationality: Must be citizens of Ghana
 - Age: Between 22 and 39 years old (inclusive) as of April 1, in the year of dispatch
 - Must not be serving in the military
 - Applicants must have a good understanding of the objectives of the JDS Program and after their return, should have a strong willingness to work for the development of Ghana.
 - Persons who are; currently receiving, planning, or who have previously acquired, a master's degree after studying abroad on a scholarship awarded by other foreign assistances are ineligible.
 - · Applicants must be in good health, both mentally and physically.
 - · Persons must have proficiency in English, sufficiently fluent for studying in Japan.

The Project for Human Resource Development Scholarship (JDS)

Basic Plan for the Target Priority Area

Basic Information of Target Priority Area (Sub-Program)

- 1. Country: Ghana
- 2. Target Priority (Sub-Program) Area: Agriculture/Rural Development
- 3. Operating Committee: Ministry of Finance (MOF), Ministry of Health (MOH), Ghana Health Service (GHS), Embassy of Japan, and JICA Ghana Office

Itemized Table 1

1. Outline of Sub-Program / Component

(1) **Basic Information**

- 1. Target Priority (Sub-Program) Area: Agriculture/Rural Development
- 2. Component: Rice production and agriculture development support
- 3. Implementing Organization: Ministry of Finance (MOF)
- 4. Target Organization: Ministry of Food and Agriculture (MOFA), and agencies including Ghana Irrigation Development Authority (GIDA)

(2) Background and Needs (Position of JDS in Development Plan of Ghana)

Agriculture in Ghana is a key industry, accounting for 22.7% of the GDP (2012) and 20% of the foreign currency earnings (2011). 90% of those engaged in farming are small farmers with owned land of 2 ha or less. Coupled with the slow progress of mechanization due to dependence on rainfalls and difficult access to credit, the agricultural productivity is unstable, making this sector highly fragile. Since 1988, Japan has been consistently providing ODA to this sector using various schemes to promote sustainable irrigated farming. Such Japanese ODA with the Ghana Irrigation Development Authority (GIDA) acting as the counterpart organization has greatly contributed to the organizational as well as human resources development in the irrigation sector in Ghana. In 2009, Project for Sustainable Development of Rain-Fed Lowland Rice Production targeting Central and Northern regions of Ghana commenced to assist the improvement of rice productivity by smallholder farmers operating in a rain-fed lowland environment. The implementation of the second phase of the project is planned which is aimed at expanding the positive outcomes of this project to other parts of Ghana after its completion in December, 2014.

Under these circumstances, JICA's assistance for the agricultural sector in Ghana for the coming years is planned to assist agricultural infrastructure supporting modern production system and agricultural mechanization, in addition to improvement of the rice quality, consolidation of the value chain, strengthening linkage between farmers and the private sector and promotion of commercial farming. Such a prospect suggests that the fresh development of human resources equipped with expertise in these areas will be truly important in the coming years.

(3) Japan's ODA Policy and Achievement (including the JDS Program)

The Government of Ghana sets forth the promotion of economic growth for developing the entire country without segregating geographical, social or economic hierarchies as a large goal of the medium-term development. In order to help achieve such a development goal of the Government of Ghana, the Government of Japan positions the following four areas as priority areas, while encouraging self-help efforts and stable economic operation management in Ghana: (1) Agriculture (rice farming); (2) economic infrastructures (electric power supply and transportation); (3) public health and science/ mathematics education; and (4) strengthening the capabilities of administrative and financial operations. This development issue: "Rice production and agriculture development support" becomes a target subject from the 4th batch of the first phase of the JDS program in Ghana, for which three persons have ever been accepted at a host university.

2. Cooperation Framework

(1) **Project Objective**

The project objective is to strengthen the Ghanaian government's administrative capacity through providing opportunities to the young capable government employees who are expected to play leadership roles and who will contribute to the socio-economic development of the country, to obtain Master's degree. It also aims to create a human network, which will eventually strengthen the bilateral relationship/ partnership between Japan and Ghana.

(2) **Project Design**

- Overall Goal Administrative officials' capacities in government organizations/related ministries and agencies dealing with development issues are improved for policy planning, program management and the like.
- 2) Project Purpose:

The project aims to foster younger administrative officials and others expected to be involved in social and economic development in Ghana and play a crucial role in it in the future through acquiring a (master's) degree at graduate universities in Japan. In addition, it is to contribute to the strengthening of a future partnership between both countries through building a human network.

(3) Verifiable Indicators

- The proportion of repatriated Ghanaian JDS Fellows that acquired a master's degree;
- Repatriated Ghanaian JDS Fellows' capacities (research ability, policy formulation capacity, policy implementation capacity, and administration capacity) are improved as compared to those before they study in Japan;
- Repatriated Ghanaian JDS Fellows return to their offices and are assigned to the department where they can take advantage of the knowledge, technologies and networks of contacts they acquire during their studies in Japan;
- The knowledge, technologies and networks of contacts that they obtain in Japan are utilized for their services after returning home.

(4) Number of JDS Participants and Accepting University

Graduate School of Life and Environmental Sciences, University of Tsukuba: 3 participants / year total 12 participants / 4 years

(5) Activity

Goal	Content/means of goal achievement
1) Before coming to Japan	
Make preliminary preparations so that Fellows can smoothly start their learning and researches after coming to Japan.	 The selected JDS Fellows by the Operating Committee in Ghana will identify their desired prospective supervisors; based on this, the SUSTEP Committee will arrange a supervisor for each Fellow; When supervisors are determined, if necessary, they will instruct the Fellows to do preparatory studies, for example, on basic mathematics, statistics, data collection and analysis; and Provide pre-admission information and seminars through the Internet, etc.
2) During the study in Japan	
 The expertise about solving agricultural problems is deepened through research and analysis; and The Fellows can acquire independent task-analysis and problem-solving abilities through the master's programs. As a result, they can make contributions as immediate administrative workforce after returning home. 	 The SUSTEP Program will hold a special seminar on the current state of studies on rice development in collaboration with an institute in Tsukuba (e.g., Japan International Research Center for Agricultural Sciences); The Program will arrange special visits to farms or related activities to find the current situations of rice farming and other types of agriculture in Japan; Training will be provided at a farm in Ibaraki Prefecture to initiate drills on rice farming, upland farming and dairy husbandry. The Fellows will acquire expertise knowledge, survey and analysis techniques on agricultural technologies and policies corresponding to JDS Fellows' individual needs; The Fellows will participate in domestic and international internships that the SUSTEP Program and the Master's Program in Environmental Sciences organize in order to understand existing problems in rural areas, agriculture and regional developments; the Fellows then refine problem analysis and resolution capabilities by exploring solution options to these problems through comparison with cases they know in Ghana; and The SUSTEP Program will hold annual JDS international seminars that meet Fellows' development issues by inviting experts from renowened universities or research institutes in Japan and overseas. The lecture contents aim to induce the Fellows to analyze problems in Ghana more comprehensively. Also, in the first year, the Fellows will present about their development issues in Ghana. By getting comments on their presentations from the guest experts, the Fellows will heighten their awareness of agriculture and rural development in Ghana that will lead to developing their problem solving abilities.

Allow the Ghanaian Fellows to discuss	• JDS Fellows will acquire the knowledge essential for writing a master's
	thesis through the guidance, coursework and seminars provided by
resolutions to the issues	supervisors, including literature search methods and citation styles;
through writing up their	The Fellows will make presentations regularly at their laboratory
theses to complete their	seminars and incorporate comments from supervisors and peers to
academic dissertations.	improve and develop their master's thesis studies;
	• The Fellows will participate in the presentation conferences for all
	students in the Master's Program at the end of the first and second years
	and receive comments from other students and professors;
	• The Fellows will continuously enrol in thesis seminar courses for two
	years and make several presentations on thesis topics;
	• At the second-year JDS international seminar, the Fellows will present
	their thesis research topics for improvement by incorporating external
	opinions from invited lecturers; and
	• Each Fellow will have two sub-supervisors in his/her thesis guidance
	committee; and after incorporating their comments, he/she will defend
	the thesis and comple it.
Building a human network	• The Fellows will build an international network in areas related to
Building a numan network	
	rural/regional development, and agriculture through attending,
	presenting at and participating in international seminars, academic
	meetings, training and other events. After returning to Ghana, the
	Fellows will continue to exchange information through the network and
	contribute to solving problems in Ghana; and
	• The Fellows will build a human network among SUSTEP students from
	many countries and strengthen friendship with them through barbecue
	parties and other events.
3) After repatriation	
Utilization of study	• The SUSTEP Program will carry out follow-up activities with Ghanaian
results	graduates by conducting long-term monitoring (through questionnaire
	surveys, etc.) so that it can self-evaluate the effectiveness and outcome
	of its special program and for further improvement; and
	• The Program will introduce the status of graduates' works and
	accomplishment at a website and other means, and facilitate their
	networking with current Ghanaian Fellows.
L	6

(6)-1 Inputs from the Japanese Side

- 1) Expenses for activities of the Special Program provided by the accepting university before, during and after studying in Japan (e.g. preparatory instructions including local activities, special lectures and workshops, follow-up activities after returning home)
- 2) Expenses for studying in Japan (e.g. travel expenses, scholarships while staying in Japan, examination fees, tuition fees, etc.)
- 3) Expenses for support during the stay in Japan (e.g. monitoring, daily life support, etc.)

(6)-2 Input Duration and the Number of JDS Participants

1 batch 3 participants \times 4 years = 12 participants From the year 2016 (Until 2018) : 3 participants From the year 2018 (Until 2020) : 3 participants

From the year 2017 (Until 2019) : 3 participants From the year 2019 (Until 2021) : 3 participants

(7) Inputs from the Ghanaian Side

- 1) Participate in the discussion meeting with professors from accepting universities.
- 2) Dispatch of JDS participants
- 3) Follow-up activities (e.g. providing opportunities for JDS returned participants to share/disseminate the knowledge they acquired in Japan at their organizations and/or other target organizations)

(8) Qualifications (Tentative)

- 1) Occupation:
 - More than 3 years of work experience in the specialized areas
- 2) Others
 - Nationality: Must be citizens of Ghana
 - Age: Between 22 and 39 years old (inclusive) as of April 1, in the year of dispatch
 - Must not be serving in the military
 - Applicants must have a good understanding of the objectives of the JDS Program and after their return, should have a strong willingness to work for the development of Ghana.
 - Persons who are; currently receiving, planning, or who have previously acquired, a master's degree after studying abroad on a scholarship awarded by other foreign assistances are ineligible.
 - · Applicants must be in good health, both mentally and physically.
 - · Persons must have proficiency in English, sufficiently fluent for studying in Japan.

The Project for Human Resource Development Scholarship (JDS)

Basic Plan for the Target Priority Area

Basic Information of Target Priority Area (Sub-Program)

- 1. Country: Ghana
- 2. Target Priority (Sub-Program) Area: Natural resources and energy policy
- 3. Operating Committee: Ministry of Finance (MOF), Ministry of Health (MOH), Ghana Health Service (GHS), Embassy of Japan, and JICA Ghana Office

Itemized Table 1

1. Outline of Sub-Program / Component

(1) **Basic Information**

- 1. Target Priority (Sub-Program) Area: Natural resources and energy policy
- 2. Component: Energy development support
- 3. Implementing Organization: Ministry of Finance (MOF)
- 4. Target Organization: Ministry of Power, Ministry of Petroleum, Ghana National Petroleum Corporation (GNPC), Ghana National Gas Company (GNGC), Volta River Authority (VRA), Ghana GRID Company (GRIDCO), Electricity Company of Ghana (ECG), and Northern Electricity Distribution Company (NEDCO)

(2) Background and Needs (Position of JDS in Development Plan of Ghana)

There have been increasing expectation regarding earnings of the natural resources sector in Ghana because of its mineral deposits (gold and bauxite, etc.) and the commencement of oil and gas production in recent years. While some neighbouring countries are already benefitting from the production of natural resources, especially Nigeria with rich oil resources, it is essential for Ghana to carefully consider the possible impacts of new oil production on government finance and the national economy. To minimise the negative impacts of earnings from the production of natural resources which are typically evidenced in the form of the Dutch disease, the likely impacts of new earnings on the national economy must be analysed in detail and the relevant national policies must be formulated in a flexible manner.

In the energy sector (especially the electricity sector) of Ghana, the growth of the national economy and improvement of the standard of living have increased the overall energy demand to the extent that conventional hydropower generation which has long been the primary electricity supply source can no longer meet the demand. The formulation and implementation of the most appropriate energy policy for Ghana, incorporating power generation using locally produced gas and an initiative to pool electric power with other countries in the region is necessary. Meanwhile, the development of highly capable human resources in the electricity sector is urgently necessary in the light of the progressive segregation of power generation, transmission and distribution operations.

Under these circumstances, the development of human resources capable of the formulation, verification and revision of natural resources and energy policies is required and the JDS Programme will meet this challenge.

(3) Japan's ODA Policy and Achievement (including the JDS Program)

The Government of Ghana sets forth the promotion of economic growth for developing the entire country without segregating geographical, social or economic hierarchies as a large goal of the medium-term development. In order to help achieve such a development goal of the Government of Ghana, the Government of Japan positions the following four areas as priority areas, while encouraging self-help efforts and stable economic operation management in Ghana: (1) Agriculture (rice farming); (2) economic infrastructures (electric power supply and transportation); (3) public health and science/ mathematics education; and (4) strengthening the capabilities of administrative and financial operations. This development issue: "Energy development support" becomes a target subject from the 4th batch of the first phase of the JDS program in Ghana, for which two persons have ever been accepted at a host university.

2. Cooperation Framework

(1) **Project Objective**

The project objective is to strengthen the Ghanaian government's administrative capacity through providing opportunities to the young capable government employees who are expected to play leadership roles and who will contribute to the socio-economic development of the country, to obtain Master's degree. It also aims to create a human network, which will eventually strengthen the bilateral relationship/ partnership between Japan and Ghana.

(2) **Project Design**

- Overall Goal Administrative officials' capacities in government organizations/related ministries and agencies dealing with development issues are improved for policy planning, program management and the like.
- 2) Project Purpose:

The project aims to foster younger administrative officials and others expected to be involved in social and economic development in Ghana and play a crucial role in it in the future through acquiring a (master's) degree at graduate universities in Japan. In addition, it is to contribute to the strengthening of a future partnership between both countries through building a human network.

(3) Verifiable Indicators

- The proportion of repatriated Ghanaian JDS Fellows that acquired a master's degree;
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- Repatriated Ghanaian JDS Fellows return to their offices and are assigned to the department where they can take advantage of the knowledge, technologies and networks of contacts they acquire during their studies in Japan;
- The knowledge, technologies and networks of contacts that they obtain in Japan are utilized for their services after returning home.

(4) Number of JDS Participants and Accepting University

Graduate School of International Cultural Studies, International Post-Graduate Program in Human Security, Tohoku University:

2 participants / year total 8 participants / 4 years

(5) Activity

Goal(s)	Content(s) and means to achieve goal(s)
While studying in Japan	
Carry out education and research on the issues of resources, environment, and human security with the aim of sustainable development of countries and regions.	 <u>Carry out education and research on "environments and resources."</u> In this course, education is provided mainly on resource, environmental and sociological issues, where, JDS Fellows learn human-security approaches and conduct research that leads to the sustainable national and regional development in the future; Current thesis topics include industrial development policies, economic policies, geopolitics, disaster science, sustainable resource use, effective utilization of untapped resources, social inequality caused by resource development, mining companies' CSRs (Corporate Social Responsibilities), and utilization of domestic resources in industrial development. Research methods include techniques such as ecological footprint, life cycle assessment, system dynamics, multiple regression analysis, and risk-benefit analysis, where analyses are made with data collected from UN agencies or national bureaus of statistics or by through field surveys.
Provide guidance on policy making to promote the effective utilization of mineral and energy resources which is effective for social development.	 Based on the analysis of reasons why human development indices remain low under the current circumstances though countries are blessed with abundant mineral resources, policy making is discussed and advised with the viewpoints of the deterrence of environmental degradation caused by resource development, improvement of the society segmented by the mining industry, issues of resource-dependent economy, and effective use of national resources.
Implementation of special program(s)	 Special lectures & discussions by invited experts that focuses on the problems of the countries where JDS fellows s are from Guidance and lecture to improve JDS fellows' skill of academic writing and academic presentation in English Support for responding to call for papers of International conferences and journals Internship in related international and Japanese institutions Volunteer activities in the lands of Great East Japan Earthquake Inter-Graduate School joint seminar in which students will be given an opportunity to receive advices from advisors of other Graduate Schools

(6)-1 Inputs from the Japanese Side

- 1) Expenses for activities of the Special Program provided by the accepting university before, during and after studying in Japan (e.g. preparatory instructions including local activities, special lectures and workshops, follow-up activities after returning home)
- 2) Expenses for studying in Japan (e.g. travel expenses, scholarships while staying in Japan, examination fees, tuition fees, etc.)
- 3) Expenses for support during the stay in Japan (e.g. monitoring, daily life support, etc.)

(6)-2 Input Duration and the Number of JDS Participants

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1 batch2 participants × 4 years = 8participantsFrom the year 2016 (Until 2018) : 2 participantsFrom the year 2017 (Until 2019) : 2 participantsFrom the year 2018 (Until 2020) : 2 participantsFrom the year 2019 (Until 2021) : 2 participants
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(7) Inputs from the Ghanaian Side

- 1) Participate in the discussion meeting with professors from accepting universities.
- 2) Dispatch of JDS participants
- 3) Follow-up activities (e.g. providing opportunities for JDS returned participants to share/ disseminate the knowledge they acquired in Japan at their organizations and/or other target organizations)

(8) Qualifications (Tentative)

1) Occupation:

- More than 3 years of work experience in the specialized areas
- 2) Others
 - Nationality: Must be citizens of Ghana
 - Age: Between 22 and 39 years old (inclusive) as of April 1, in the year of dispatch
 - Must not be serving in the military
 - Applicants must have a good understanding of the objectives of the JDS Program and after their return, should have a strong willingness to work for the development of Ghana.
 - Persons who are; currently receiving, planning, or who have previously acquired, a master's degree after studying abroad on a scholarship awarded by other foreign assistances are ineligible.
 - Applicants must be in good health, both mentally and physically.
 - · Persons must have proficiency in English, sufficiently fluent for studying in Japan.

Annex 7. Responses to the Supplementary Survey of Repatriated Ghanaian Alumni, Ghanaian Fellows Staying in Japan and their Supervisors

(1) Alumni's responses

Questionnaire

- 1. Your skill improvement as the result of participation in JDS Program.
 - 1-(1) Did your technical skill change before and after participating JDS Program compare?

1-(1)-i Y=Yes / N=No / NC=No change 1-(1)-ii And if "yes", in what aspect and how? 1-(1)-iii If "no", why?

1-(2) Did your attitude toward work (i.e. discipline, moral, sense of responsibility, and passion) change before/ after participating JDS Program and why?"

1-(2)-i Y=Yes / N=No / NC=No change1-(2)-ii And if "yes", in what aspect and how?1-(2)-iii If "no", why?

- 2. Academic work in Japan
 - 1-(1) As a result of participation in JDS Program, do you think you acquired enough knowledge which can be utilized in your work?

2-(1)-i Y=Yes / N=No / NC=No change
2-(1)-ii And if "yes", in what aspect and how?
2-(1)-iii If "no", why?

2-(2) Do you think the content of your academic research appropriate in order to tackle the development issue (i.e. the regional development, correction of regional disparity, measure of poverty alleviation and regional autonomy) in your country?

2-(2)-i Y=Yes / N=No / O=Others 2-(2)-ii And why?

- 2-(3) Did you have good communication with your professor(s)?
 - 2-(3)-i Y=Yes / N=No / O=Others
 - 2-(3)-ii And why?
- 2-(4) What kind of trouble in terms of academic work, if any, did you encounter throughout academic life?

2-(4)-i (answer)2-(4)-ii And why?2-(4)-iii How did you solve the problem?

2-(5) Was the support from your university in terms of academic work enough and why? In what way do they need to improve?

2-(5)-i 2-(5)-ii

2-(6) Do you have any advice in terms of academic work for future JDS Program Participants?

- 3. Daily life in Japan
 - 3-(1) How was your daily life in Japan?
 - 3-(1)-i 1=Enjoyable / 2=Notenjoyable / 3=Others 3-(1)-ii And why?
 - 3-(2) What kind of trouble in terms of daily life, if any, did you have during JDS Program?
 - 3-(3) Was the support from university in terms of daily life enough?
 - 3-(3) -i 1=Enough / 2=Not enough / 3=Others 3-(3) -ii And why?
 - 3-(3) -iii In what way do they need improvement?
 - 3-(4) Do you have any advice in terms of daily life in Japan for future JDS Program Participants?
- 4. Support and coordination by the Agent
 - 4-(1) Do you think the support and coordination by the Agent before and during your stay in Japan satisfying?
 - 4-(1)-i 1=Satisfying / 2=Not satisfying / 3=Others
 - 4-(1)-ii In what way do they need improvement?
- 5. Capacity improvement of your organization as a result of sending JDS Participants to Japan.
 - 5-(1) Did you diffuse your knowledge you acquired in Japan to your colleagues?
 - 5-(1)-i Y=Yes / N=No / O=Others
 - 5-(1)-ii If the answer is yes, how?
 - 5-(2) Do you think the capacity of your organization improved as a result of sending you to Japan?

5-(2)-i Y=Yes / N=No / O=Others 5-(2)-ii And why?

- 5-(3) Did you return to the same organization you had previously worked for after returning to Sri Lanka?
 - 5-(3)-i Y=Yes / N=No / O=Others
 - 5-(3)-ii If the answer is yes, did the work condition (ex salary, allowance, and job title) change?
 - 5-(3)-iii When you returned to the same organization, was there any drastic change in its organizational structure? Y=Yes / N=No
 - 5-(3)-iv If it was the case, was there any problem for you to adapt to the new structure or work environment?
- 5-(4) Have you been adopting the knowledge and skill you acquired in Japan to your current work?

5-(4)-i Y=Yes / N=No / O=Others

- 5-(4)-ii If not, is there any limitation?
- 6. Network in Japan
 - 6-(1) Do you still keep contact with those you got acquainted with in Japan? Y=Yes / N=No
 - 6-(2) If the answer is "yes" in 6.(1), who do you still keep contact? (multiple answers)
 - 6-(2)-i professor

6-(2)-ii university friends6-(2)-iii business person6-(2)-iv others

- 6-(3) How are you going to utilize the network you have acquired in Japan (ex network with professors, friends, and business person) in your current work?
- 7. Scholarship by other country
 - 7-(1) Is there any scholarship offer to your organization by foreign assistance other than JDS Program which offer master's degree or higher? Y=Yes / N=No
 - 7-(2) If the answer is "yes" in 7 (1), what do you think is the benefit of this scholarship compared to JDS?
- 8. Others

Do you have any opinion and/or advice to JDS program or its participants-to-be?

					1-(1) Did your technical skill change	e before and a	fter participati	ng JDS Program compare?			, moral, sense of responsibility, and pass g JDS Program and why?	sion)			
No.	Batch		Name of repatriated alumni	1-(1)-i		1-(1)-ii			1-(1)-iii	1-(2)-i		1-(2)-ii	i	1-(2)-iii	
1	First	IUJ	Stella Lartey	Y	I am currently able to properly condu (Both technically and theoretically) and					Y	Much more discipline than I used	l to be and v	ery time conscious.		
2	First	IUJ	Elvis Duffour	Y	Through the taught courses and res knowledge and skill learnt in my area			ell equipped to apply the		Y	I believe I have improved on my self discipline especially in the area of time management as a result of my training.				
3	First	Kobe	Kwadwo Tabi Amponsah	Y	My knowledge and skills on the use now have the capability of engaging in					Y	My attitude towards work has also improved tremendously after the program. This is because I feel more responsible and I think I have become more disciplined in terms of time management.				
4	First	Kobe	Desmond Avemegah	Y						Y					
5	First	Kobe	Abraham Bosu	Y								rces to back	ny work and analysis of situation. I try all results and arguments. I have also ilities at work.		
6	Second	IUJ	Agyei Agyeman	Y	Yes. As health information manage	Yes. As health information manager, my way of work will definitely enhance such as analyzing health bio data, generating reports for action. This would be enhanced given the Y Time management and response or through field trip to Japanese or							h exposure to Japanese work culture, d community participation surely lead		
7	Second	IUJ	Mark Bigool	Y	IUJ policy making in health and public data management/analysis. Data mana	As my duty is a faculty management, supervision of coworker will enhance because I learned in							ned diligence, discipline, commitment,		
8	Second	IUJ	Erica Kuma	Y	In terms of knowledge, yes. But in ter	ms of technic	al skill as a tea	icher, no		Y	time management.				
9	Second	IUJ	Esther Kporwofe	Y		My background is in health but I studied public management at IUJ. So now, not only health sector, but I have broader knowledge in public sector.									
10	Second	Kobe	Braimah Umuhera	Y	program and this helps me to make mo skills that I can easily apply in diffe locations. Above all, the program has h	This is because I have acquired knowledge in the field of Economics and ICT through the JDS program and this helps me to make more informed decisions than before. Also I have acquired skills that I can easily apply in different work settings as well as in different geographic locations. Above all, the program has helped me to view life in a better prospective; hence, I am better at solving problems and handling day-to-day decisions than before.					One of the many important thin positive attitude (commitment) to		ant in Japan is time management and Another thing is being sincere.		
		2-(1) As			am, do you think you acquired enough ilized in your work?			2-(2) Do you think the content of your academic research appropriate in order to tackle the development issue (i.e. the regional development, correction of regional disparty, measure of poverty alleviation and regional autonomy) in your country?					2-(3) Did you have good communication with your professor(s)?		
No.	2-(1)-i			2-(1)-ii		2-(1)-iii	2-(2)-i			2-(2)-ii		2-(3)-i	2-(3)-ii		
1	Y		analysis of both econ- ery positive action plans t		developmental challenges. Able to hem.		Y	My research indicated the fact that the Child Survival in the three Northern Regions of Ghana is very low. To this effect major poverty alleviation programs find the need to give a keen attention to the Northern Regions and government with his DPs are working towards alleviation poverty in these areas.				Y	They were always there when I needed the especially on my project work. I am ver grateful to them.		
2	Y	relationsh	*		y rules governing my employment ecially given the fact that I am in a		Y					Y	The channels of communication feedback to prospective applicants open and I believe there was a lev field accorded to all applicants.	were very	
3	Y	Conseque			yed as well as my writing skills. approved as a result of the additional		Y	Issues related to debt have b so the content of my researc			lopment of Ghana's economy and	Y	We had a good working relationsh still keep in touch from time to time.	ip and we	
4	Y						Y					Y			
5		After the studies, I now appreciate the economic indicators that Ghana Statistical Service produce.					Y	My research looked at how poverty is distributed across the population and how to tackle it. It is very relevant to the nation in the sense that, it did not only measure poverty but it went further to identify ways to alleviate poverty across regions and socio-economic groups of the population.				Y	Most professors I met showed interest in my		
6	Y	resources formulatio	I acquired in Japan such as on and implementation, con	human rela	has been affected. I will utilize the tions, networking, development policy effectiveness, and team support. , such as poverty alleviation policy,		Y	Yes, my thesis dealt with targeting rural disparity and income inequality and it is appropriate topic.				Y	IUJ had office hour, class room contact with professors, emergency contact, and dean hour which we can interact informally with faculty members. Professors gave knowledge and assisted me in		
7	Y	policy an	• ·		such as poverty aneviation policy, Policy formulation analysis, human		Y	My research topic dealt wi problem and analyze them,			will be able to formulate public licy in relation to health.	Y	all regards (data analysis and future plans) which was helpful.		

8	Y	Especially knowledge on organizational networking b	between hospitals and schools.		Y		g ability with universities and hospitals to train nurses.	s, which my thesis deal, is	Y			
9		Public sector health policy formulation, impl Organizational networking.	ementation, and evaluation.		Y	My resear	to train nurses. the topic has got to do with organizationane performance of regional hospital in Ghana		Y			
10	Y	I have acquired enough knowledge especially in the i utilise very well in my work. My organisation responsible the economic activities of the country (e have acquired ithrough the JDS pgram will be need the My research on remittances which is a poverty relate the major issues in the global community now and poverty reduction by smoothing income of household	has an Economic division conomy) and the knowledge I here. d issue. Remittances are one of said to have played a role in		Y	My research on remittances which is a poverty related issue. Remittances are one of the major issues in the global community now and said to have played a role in poverty reduction by smoothing income of households.				Aside every Tuesday which is a seminar day that I do interact with my supervisor regarding academic or research work, He is always available in his office to advice or assist me on academic issues.		
	2-(4) What kind of trouble in terms of academic work, in	f any, did you encounter through	out academic lif	ie?	2-(5) V	Vas the support from your university in terms and why? In what way do they need		2-(6) D	o you have any advice in terms of academic work for future JDS Program Participants?		
No.		2-(4)-i		2-(4)-ii	2-(4)-iii	2-(5)-i	2-(5)-ii	to improve:		2(6)		
1	None			- () -	- ()	Y			that of m be challe	nese attitude to work is very different compared to ost countries and therefore the course are likely to nging. One needs to fully focus and work hard. challenging, it is possible.		
2	None					Y	I think support is enough					
3	I had it very grades.	smooth although I had to put in a lot of effort to con-	ne out with exceptionally good			Y	I would wish that time series analysis is a since that is what is mostly used at the Ba		They mus	st study hard.		
4	None					Y						
5	None					Y	The university provided the best environment for studies through the provision of relevant courses, competent professors, well-resourced library and computer room. The university assigned a Japanese student to each foreign student to help and guide us on campus life and translation of Japanese documents.			Study hard, learn the culture and language of the Japanese.		
6	I didn't get any research fund to make presentation at the conference in Turkey and so I lost opportunity. I wish such fund should be increased in future.					Neutral.	IUJ provides the best academic contents. I limited.	However their research fund is		is excellent. However cost of living is increasing in students need compensation.		
7	At first, lack	s of math knowledge was a problem. But later I solve	d.			Y	Not only my supervisors but also other pro-	ofessors as well.	Study ma	th in advance. Increase fund for field survey.		
8	At first, aca	demic work was tough, but I overcame				Y	IUJ has library facility, wonderful professors, and TA. I managed to receive distinction award. Just 11 people applied for that award this year.			d.		
9	Initially I ha	d no knowledge about economics, but now I'm okay				Y	So many resources such as professors, TAs, and libraries.			Health related courses are not enough at IUJ. Area of public health is needed.		
10	I have never	r encounted any trouble regarding academic work					The support from the university regarding academic work is satisfactorily in that the university aside the normal tution, it organises seminars for students. The lectures are delivered by top profile personalities from organisations susch as World Bnak, UNESCO and other companies are organisations within Japan which is very useful for students.			Future students should develop their skills in Mathematics (have good knowledge in Mathematics) before coming to Japan since Mathematics is the foundation for most of the courses offerd by the graduate schools particularly, for those who want to study Economics.		
		3-(1) How was your daily life in Japan?	3-(2) What kind of trouble in te if any, did you have during J		е,	3-(3)) Was the support from university in terms o	f daily life enough?	3.	(4) Do you have any advice in terms of daily life in Japan for future JDS Program Participants?		
No.	3-(1)-i	3-(1)-ii	3(2)		3-((3) -i	3-(3) -ii	3-(3) -iii		3(4)		
1	Enjoyable	It was a balance of academic and social life and so I enjoyed every bit of it.	Challenges with the school from the onset but I adjust eve		En	ough			Buc	lget properly and spend wisely.		
2	Enjoyable											
3	Enjoyable I enjoyed the different culture and the people Initially I had problems wi		Initially I had problems with t weather but I soon got over the		En	ough	I was given a tutor at school to help with my day to day life over the two year period and they all did a good job.			y should learn the language as it helps with active daily living.		
4	Enjoyable				En	ough						
5	Enjoyable	Enjoyable Japanese are very friendly people. There are exciting places and events to attend every week. Japan gave me the opportunity to develop other talents such as doing voluntary works.			Enough				Fine	d time to study Japanese language.		
6	New experience so colorful life and very Communication. Even			-	time and always were helpful. We were			Students should learn Japanese before they come.				
7	Enjoyable	especially second year.	No trouble. I made lots of frier	nds.	En	ough	Lots of field trip and seminar.		Acc	cept and respect other culture		

8	Enjoyable	Good	No	trouble. I never went to hospital.	Enou	ստի				During sno	w season ea	t well, eat health food, and study hard	
9	Enjoyable	It was all about study. Field trip took out pressure.		trouble.	Enou							t and time allocation is necessary.	
10	Lijojuot	Japan is a safe country. Crime rate in Japan is very small compared to Ghana and that is what I find very exciting	No	serious trouble at all except language ier; however, it is manageable.			The university gives orientaion to newly admitted students regarding daily life in the univerty and Japan in general. Aside that, the university especially my graduate school has students council which sees to the welfare of students. There are other commuttees in the graduate school that give advice to students and direct them on what to do if they face problem regarding daily life (be it psychological or academic work)	The university can establish programmes that connect international students with domestic students which can help create social relationship among them. Student clubs (academic clubs) for instance can help build relationships with students of similar cultures or from own country.		Futture particular for the second sec	ure participants must be law abiding people, s and regulations, respectful, hardworking Ild have positive attitude towards studies.		
		ou think the support and coordination by the ore and during your stay in Japan satisfying?	5-	(1) Did you diffuse your knowledge you acq in Japan to your colleagues?	uired		you think the capacity of your organization yed as a result of sending you to Japan?			e same orgai after returni	nization you had previously worked		
No.	4-(1)-i		5-(1)-i	5-(1)-ii		5-(2)-i			5-(3)-ii	unter return	5-(3)-iii 5-(3)-iv		
1	Satisfying	They really served as very helpful managers.	Y	I disseminated my research work and have teaching some of colleagues some of th learnt.		Y	I am now relocated to the Head office of the MoH to work in the are of Policy. The MoH has difficulties in getting staff for the Policy analysis area	5-(3)-i Y	Same organization but office.	different	Y	Note that there was a change but not extremely drastic. Sure because I have to now drive 4 hours in total (In and out) to worki each day. Previously, I will only drive 1.5 hours in total time in and out of work.	
2	Satisfying	Personally I can't think of any negative experience. Rather I commend the JDS team in Japan for their immense support during the entire duration of the Program.	Y	I use the data analysis method in m making.	y decision	Y		N	I am seconded to NGO.		N		
3	Satisfying	If possible the stipend should be increased to reflect the increasing cost of living in Japan.	Y	I shared my experiences both in the classroom and outside the classroom with my colleagues at work a well as the results of my thesis.		Y	The knowledge acquired is being put to good use but a lot more could be done.	Y	My job title improved and this went with an improvement in salary and allowances.		N		
4	Satisfying		Y			Y		Y			Y		
5	Satisfying		Y	I am always sharing my new knowledge through discussions about work.		Y	My organization can count on me to provide economic analysis. I have gained a lot of knowledge through reading which has boosted my confidence in any environment I find myself.	Y	My salary, allowances changed but I have be more responsibilities office.	een given	Y		
6	Satisfying	Excellent.	Y	I'm team player with patience so I will colleague.	I teach my	Y	I will tell them for improvement with patience and will make change in them.	Y	I will. However, I'm about the location.	not sure			
7	Satisfying	Encouragement through frequent monitoring motivated me. Please increase field work and seminar fee.	Y	I used to conduct seminar and in-service Ghana. My basic skills acquired in . improve the quality which will cl organization in good way.	Japan will	Y	I will pass my knowledge and experience to my colleague and it will make big impact of my organization.		Yes, but I don't know w will assign me.	vhere they			
8	Satisfying	Satisfying.	Y			Y	I gained enough knowledge to impact colleague in terms of team play and networking.		I cannot tell. Minister wi	ill decide.			
9	Satisfying	Very much. But increase fund for research trip.	Y			Y	as public manager, I will teach ones how to focus in your work and together develop country as a nation.		I don't know. I de minister.	epend on			
10		They are doing extremely well. However, they can improve. For instance, JDS participants should be tought the Japanese language very well before coming to Japan or the duration can be extended so that participants can learn the japanese language while in Japan within the first 3-6 months before they starting their academic work. This will make their daily life more confortable or enjoyable as language barrier is the main problem.		By doing prsentation periodically to knowledge i have acquired in Japan. Al my daily interaction with colleagues, i ca information with them	so through		I have acquired enough knowledge and new ideas and when they are put into practice, the capacity of the orginasation will improve. Again sharing the knowledge and ideas with my collegues will help strength or improve the capacity of my organisation.						

	5-(4) Ha	ve you been adopting the knowledge and sk in Japan to your current work?	ill you acquired	6-(1) Do you still keep contact with those you got acquainted with in Japan?	6-(2) If the ar	iswer is "yes" i	n 6.(1), who	do you still keep contact? (multiple answers)	6-(3) How are you going to utilize the network you have acquired in Japan (ex network with professors, friends, and business person) in your current work?			
No.	5-(4)-i	5-(4)-ii		6-(1)	6-(2)-i	6-(2)-ii	6-(2)-iii	6-(2)iv	6-(3)			
1	Y	Deeper understanding, refresher courses ar skill development is necessary from time to		Y	1	1	1		To facilitate my work in Ghana and around the world.			
2	Y			Y	1	1						
3	Y			Y	1	1		Friends I made outside the university.	I keep in touch with my professor once in a while as well as some of the friends I made. I also intend publishing some papers with my professor and other professors who supported me throughout the course.			
4	Y			Y	1	1						
5	Y	Y I am currently in the National Accounts Section whi demands I apply the economics I studied directly.		Y		1	1	We share ideas about work and new opportunities				
6				Y	1	1	1	In IUJ, I was a start up member of entrepreneurship club. I have network with friends, professors, and business persons I will be connected through email and FB.	Through skype and FB.			
7				Y	1	1	1	Contact professors for advice. I also got to know business persons at TERUMO during my field trip. They are interested in Ghanaian market and want to share information with me.				
8				Y	1	1	1	Friends, professors, and business people.	When I need information of Japan and also when someone needs information of Ghana. So sharing of information and interaction.			
9				Y	1		1	Colleagues and professors.	Sharing of information about country.			
10									By keeping contact with them after graduation and through this I can always learn/share new ideas with them which can help in my daily activities at work.			
	organiza	Is there any scholarship offer to your tion by foreign assistance other than JDS n which offer master's degree or higher?	7-(2) If the an	swer is "yes" in 7 (1), what do you think is t	he benefit of this sc	holarship comp	ared to JDS	?	8			
No.		7-(1)		7-(2)				8				
1		Y	I do not know b	ecause I have not taken one yet.					Hard work and diligence in necessary at all times.			
2		Y						self.	Thank you very much to Japanese government and JDS program. Now I am quiet confidence about my self.			
3		Y	They give schol	larships up to the PhD level which JDS does	not do.			To JDS, I appeal to them to include schol them to study hard and apply it meaningful	arships for PhD as well. For the participants, I humbly appeal to y to the development of Ghana.			
4		Y										
5		Ν						other masters courses which are available a				
6		N	I only know JD						ship payment auto adjusted to inflation/deflation.			
7		Y		e program for health sector called British (e institutions at Volta Region. They just waiv				Study math/stats before you come. Send a officers, health economics may not be appre-	students to universities other than IUJ because for health sector opriate topic to study.			
8		Y	Many such as U	JK scholarship. Most target particular institut	tion unlike JDS.			effect. However the objective is not straig aims to develop future policy makers. Stu	f Ghanaian. It is masters level which is good as it has immediate ht forward to me. The focus should be individual ministries if it udents who were initially hospital workers/school teachers, after line ministries for policy formulation. However this may not be s they will lack good human resources.			
9		Y		h there's master level scholarship. (for nurse y. Japan is also developed country and sense			because it h		know anything about JDS. So they need to have training session			
10		N										

(2) Responses of Ghanaian Fellows staying in Japan

Questionnaire

- 1. Your skill improvement as the result of participation in JDS Program.
 - 1-(1) Do you think your technical skill change before and after participating JDS Program compare?
 - 1-(1)-i Y=Yes / N=No / NC=No change 1-(1)-ii And if "yes", in what aspect and how? 1-(1)-iii If "no", why?
 - 1-(2) Do your attitude toward work (i.e. discipline, moral, sense of responsibility, and passion) will change before/ after participating JDS Program compared and why?"
 - 1-(2)-i Y=Yes /N= No 1-(2)-ii And if "yes", in what aspect and how? 1-(2)-iii If "no", why?
 - 1-(3) What do you think is the advantage for you to learn in Japan/ and in your university?

1-(3)-i In Japan 1-(3)-ii In university

- 2. Academic work in Japan
 - 2-(1) As a result of participation in JDS Program, do you think you will acquire enough knowledge which can be utilized in your work?
 - 2-(1)-i Y=Yes / N=No / NC=No change
 - 2-(1)-ii And if "yes", in what aspect and how?
 - 2-(1)-iii If "no", why?
 - 2-(2) Do you think the content of your academic research appropriate in order to tackle the development issue (i.e. the regional development, correction of regional disparity, measure of poverty alleviation and regional autonomy) in your country?"

2-(2)-i Y=Yes / N=No / O=Others 2-(2)-ii And why?

2-(3) Do you have good communication with your professor(s)?

2-(3)-i Y=Yes / N=No / O=Others

- 2-(3)-ii And why?
- 2-(4) What kind of trouble in terms of academic work, if any, have you encounter throughout academic life?

2-(4)-i (answer)

2-(4)-ii And why?

- 2-(4)-iii How did you solve the problem?
- 2-(5) Has the support from your university in terms of academic work been enough and why? In what way do they need to improve?

2-(5)-i Y=Yes / N=No / NC=No change

2-(5)-ii And why?

- 2-(6) Do you have any advice in terms of academic work for future JDS Program Participants?
- 3. Daily life in Japan
 - 3-(1) How is your daily life in Japan?

3-(1)-i 1=Enjoyable / 2=Notenjoyable / 3=Others 3-(1)-ii And why?

- 3-(2) What kind of trouble in terms of daily life, if any, have you encountered in terms of daily life?
- 3-(3) Has the support from university in terms of daily life been enough?

3-(3) -i 1=Enough / 2=Not enough / 3=Others
3-(3) -ii And why?
3-(3) -iii In what way do they need improvement?

- 3-(4) Do you have any advice in terms of daily life in Japan for future JDS Program Participants?
- 4. Support and coordination by the Agent
 - 4-(1) Do you think the support and coordination by the Agent before and during your stay in Japan satisfying?
 - 4-(1)-i 1=Satisfying / 2=Not satisfying / 3= Others
 - 4-(1)-ii In what way do they need improvement?
- 5. Capacity improvement of your organization as a result of sending JDS Participants to Japan.
 - 5-(1) Do you have intention to diffuse your knowledge you acquired in Japan to your colleagues?
 - 5-(1)-i Y=Yes / N=No / O=Others 5-(1)-ii If the answer is yes, how?
 - 5-(2) Do you think the capacity of your organization will improve as a result of sending you to Japan?
 - 5-(2)-i Y=Yes / N=No / O=Others 5-(2)-ii And why?
- 6. Others
 - 6-(1) How are you going to utilize the network you have acquired in Japan in your work (ex. Network with professors, friends, and Business person)?

			1-(1) E	Do you think your technical skill change befor partcipating JDS Program compare?	e and after		1-(2) Do your attitude toward work(i.e. discipline, moral responsibility, and passion) will change before/ after par JDS Program compared and why?		1-(3) Wha	nt do you think is th in Japan/ and in	e advantage for you to learn your university?
No.	Assigned university	Name of respondent	1-(1)-i	1-(1)-ii	1-(1)-iii	1-(2)-i	1-(2)-ii	1-(2)-iii	1-(3)-i		1-(3)-ii
1	Kobe	Michael Chagli	Y	My economic ability has improved.	-	Y		-	Empowerment in Jap great impact on me.	an have had a	The experience of the professors have had a great impact on me.
2	Kobe	Lawrence Kutsienyo	Y	I have deepened my understanding of economic policies especially in the area of economic development. I have also acquired analytical skills that would enable analyze economic issues and devise appropriate strategies.	-	Y	I feel a strong sense of duty to contribute in my capacity in solving the developmental and economic challenges facing my country. Time consciousness, hardwork and determination are key attributes that I have acquired on the JDS Programme.	-	I have learnt many Japanese culture that I in any other country. F work, time consciousn service and care for na best thing I have lib volunteerism. Japan developed country and such a country is highly	could never find or instance, hard less, orderliness, ture. Perhaps the earnt so far is is a very education from	Apart from the immense knowledge I have acquired, my interactions with international students from different parts of the world have enabled me appropriate many different cultures. I now find myself in a vast network of international friends that I consider to be an asset in future. Many of these students are also from government institutions where they are playing key roles. I believe we can share many ideas in future. The teaching method at University is very pragmatic, bringing real life cases to the class for discussion. The combination of term papaers, research, homework and exams have helped reinforce concepts introduced in class.
3	Kobe	Papa Kwasi Asamoah	Y	I acquired economics knowledge. In Ghana my major was computer science. By learning economics and economic policies I can utilize the knowledge into my work at BoG.	-	Y	I think the discipline, passion toward work, and sense or responsibility are great which Ghanaian have to learn.	-	 Can learn from knowledge of Professor Professors are high an can learn discipline, responsibility toward learn Japanese unique overcame many dif other developed count learn neatness and clean 	or (skill level of d kind); 2. One , passion, and work; 3. Can culture; 4. Japan ficulties unlike ries, and 5. Can	Study at Kobe University covers necessary area for the Bank. My research topic (financial development) has direct link to my work.
				rogram, do you think you will acquire be utilized in your work?		the develo	think the content of your academic research appropriat prinent issue (i.e. the regional development, correction of sure of poverty alleviation and regional autonomy) in yo	regional dis		o you have good co	ommunication with your professor(s)?
No.	2-(1)-i	2-(1)-ii		2-(1)-iii		2-(2)-i	2-(2)-ii		2-(3)-i	*comment	2-(3)-ii
1	Y	My knowledge has improve		-		Y	Microfinance is a major poverty alleviation tool.		Y		
2	Y	because tuition is focused o developing countries use developing immense anal problem-solving skills. I team-building skills becaus and discussions I regular believe by the end of t	I acquire enough knowledge focused on real life issues that trtries usually face. I am ense analytical, research and skills. I will also acquire ills because of the group work I regularly participate in. I end of the programme, my Is and report writing skills moreoved greatly.				the global pital base ned. The ttral bank Y stable and zation of		My professors have an open door policy which permit me to see him anytime that I have something to discuss with him and I can actually do this without prior notice. We meet at least once a week in our seminal session and there are no barriers to open and transparent communication.		
3	Y			-		Y			Y		

	2-(4) What	kind of trouble	in terms of academic work, if any, hav academic life?	e you encounte	r throughout	2-(5) Has		y in terms of academic work been enough and o they need to improve?	why?			lvice in terms of academic work Program Participants?
No.	2-((4)-i	2-(4)-ii	2-(4)-iii	2-(5)-i	*comment	2-(5)-ii				2-(6)
1	Academic w demanding.	vork is very		By working l	narder.	Y			They mus	t be ready wo	ork hard.	
2	problem. A sometimes ge	have had no cademic life et stressful but ted to happen		I take a res stressed out.	st when I am	n Y		The professors are eager to teach and e concepts and they encourage your particip We sometimes have sessions with the Ter Assistance to discuss questions and problem may arise in the course of our study state-of-the-art computing systems and libra useful for research and private studies.	action. Inching Future JE Is that They mu The discipline	on. Future JDS Programme participants must be ready and determined to we They must also have the tenacity and the right mental attitude to sur discipline.		
3	-	o understand s in some	due to less mathematics knowledge	with the help	knowledge of colleagues hing assistants	, Y		they are providing teaching assistants and f also every time prepared to help	faculty Better to improve the mathematical background			ackground
	2-(6) Do		vice in terms of academic work for fu Program Participants?	ture JDS			3-(1) How is yo	ur daily life in Japan?		3-(2		f trouble in terms of daily life, if any, countered in terms of daily life?
No.			2-(6)		3-(1)-i			3-(1)-ii				3-(2)
1	They must be	ready work har	d.		Enjoyable	But a little la	anguage barrier.			All mails I	received are v	vritten in Japanese.
2	Enjoyable					be a barrier b	is convenient and safe to live in Japan. You can go about your daily life without restriction. Language can sometimes e a barrier but you can always find someone to help you. People are generally friendly and willing to help. There are any interesting places where you can visit to learn more about Japanese and their culture.			There are no troubles so far.		
3	Better to improve the mathematical background Enjoyable				Enjoyable			banese is the major issue. I wanted to learn Japanes na and katakana before enrolling university.	e intensively before	I go to hos eyesight.	spital regularly	y because of eye fatigue and my worsened
			3-(3) Has the support from un	niversity in term	s of daily life l	been enough?		3-(4) Do you have any advice in terms of daily life in Japan for future JDS Program Participants? 4-(1) Do you think the support and coordination before and during your stay in Japan satis 1.Satisfying/2.Not satisfying/3.Othe			ing your stay in Japan satisfying?	
No.	3-(3) - i			3-(3) - i i			3-(3) -iii	3-(4)	4-(1)-i	*comment	4-(1)-ii	
1	Enough		Because my fellow Japan	ese students he	p with my ma	ils. I r	need more time to learn Japanese	. They should learn basic Japanese.		Satisfying		-
2	Enough		I usually do not seek su few occasions that I con they always willing to su and would always follow okay.	sulted the Aca apport and advi	demic Affairs se. They are e	Office, efficient		Japanese. You easily feel welcome with speak Japanese. Learning Japanese is	ily life can be more enjoyable if you can speak 'ou easily feel welcome with the least effort to nese. Learning Japanese is however difficult Satisfying time constraints and academic work, so			-
3	Enough		Support from university i	n terms of daily	life is enough	I		1. Since the course work is hard, it is important to know the content of course work and seminar in some extent in advance, 2. Since your academic advisor is helpful it is necessary to ask question actively and willing to learn.		-		
	5-(1)	5-(1) Do youhave intention to diffuse your knowledge you acquired in Japan to your colleagues?			5-(2) Do you	u think the capacity of your organ of sending you to J	nization will improve as a result				rk you have acquired in Japan in your work friends, and Business person)?	
No.	5-(1)-i	*comment	5-(1)-ii		5-(2)-i					1)		
1	Y	Demonstrating my acquired knowledge in my work. Y Efficiency per worker will increase. I intend to explore the networks further on business lines.										
2	2 Y Knowledge would be transferred through on-job Y training and presentations.			output. As I share my knowledge and experience in Japan, it should lead to the general capacity building in my organization especially, the			end to keep my relationships with my network very active, and leverage on them in ing support or direction when the need arise. For instance, I may want to know about ies and systems adopted in other countries and compare with the case of my country entify caps.					
3	Y		I will share my experiences and known decision making process in various off		Y			does not have economist at all. If I go back economics, it is good for my division.				is in different subject areas and I get my then I have such opportunity I help them.

(3) Responses of the first-batch Ghanaian Fellows' offices

Question items

Technical expertise and thinking ability (10 grades)

- 1. Professional knowledge and skills to deal with development issues
- 2. Problem solving ability
- 3. Logical thinking skill
- 4. Judgment skill
- 5. Self-Discipline and control
- 6. Sense of moral and ethics
- 7. Sense of responsibility
- 8. Enthusiasm toward work

Results of aggregation of responded questionnaires

No	Organization	Subordinate/		Que	stions	(10-g	rade e	evalua	tion)		Comment
INO	Organization	repatriated alumni	1	2	3	4	5	6	7	8	Comment
1	PAU/ PPME, Ministry of Health	First-batch Fellow at the International University of Japan	8	7	9	8	9	8	9	8	 She has demonstrated the skills to work independently in a creative manner. Well disciplined and humble. Her work ethics remain resolute. Eager to work at anytime.
2	Bank of Ghana	First-batch Fellow at Kobe University	9	9	9	8	9	9	10	9	
3	Ghana Statistical Service	First-batch Fellow at Kobe University	8	7	8	8	7	7	8	8	 Contributed greatly in the discrision of about issues in planning unit of district. Was able to manage his previous office as district stats officer efficiently. Not quick tempered. Followed strictly the ethincs of GSS. Motivated other colleagues to the attainment of organizational goals.
4	Ministry of Finance	First-batch Fellow at Kobe University	7	8	7	7	9	10	8	8	

Country	Organisation	Programme	Purpose	Duration	Degree	Eligibility	Value of Awards	Number of Wards	Reference/URL	Application Process
Australia	Government of Australia	Australia Awards	Promoting development in Africa through educational and training	2 years (Master's), 4 years (PhD)	Master's Degree in Agriculture and Food Security, Extractives, Public Policy	Be a minimum of 18 years of age at the time of application, not be current serving military personnel, not be applying another Australia Awards, Having worked a certain number of years in an appropriate sector, be able to satisfy the admission requirements of the institution at which the awards to be undertaken, English proficiency (IELTS 6.5, TOEFL pb 580, ib92), BA holders and being employed in a field of relevant to their country's national development priorities. The application: Application from women are strongly encouraged.	Full tuition fees, health insurance for basic medical and hospital care, return air travel, a one off establishment allowance on arrival (A\$5,000), contribution to living expanses (app. A\$30,000/year), introductory academic program, supplementary academic support, fieldwork allowance (NO support provided for dependents.)	Not Specified	http://www.australiaawards.g ov.au/Pages/default.aspx http://dfat.gov.au/about-us/pu blications/Documents/africa.p df http://dfat.gov.au/about-us/pu blications/Documents/aus-aw ards-scholarships-policy-han dbook-january-2015.pdf	Apply online or send by mail to the representative (GRM International Pty Ltd) in South Africa or in Kenya.
Belgium	Government of Flanders	Government of Flanders Master Mind Scholarship for International Students	Aims to promote the internationalization of the Flemish Higher Education.	2 years	Master's Degree	Be a register full-time student at a higher education institution, have a high standard of academic performance, meet the language requirement set by the University.	max. EUR 7500 per academic year, (Host Institution can ask the applicants for a tuition fee of max EUR 100 per year)	35	http://www.studyinflanders.b e/en/scholarship-programmes /master-mind-scholarships/	Application needs to be submitted through the Flemish host institution, in consultation with the home institution of the applicant.
Canada	The Government of Canada	Canadian Government Doctoral Research Scholarship	Aims to stimulate the interest of foreign students to undertake or pursue doctoral studies in Quebec and financially support the best foreign applicants wishing to carry out a doctorate in natural sciences, mathematical sciences and engineering.	up to 36 months	Doctoral research at Quebec University (Natural Science, Mathematics and Engineering)	 Must have been preselected by a Québec university no later than 23 September 2015. Must not have already received a scholarship for foreign students Ministry of Education, Higher Education and Research (MEESR) or Quebec granting agencies. Should not be a Canadian citizen or permanent resident of Canada. Must not have applied for permanent residence under the Canadian immigration laws. 	Max. USD 20,000/year.		http://scholarship-positions.c om/canadian-government-doc toral-research-scholarships-in ternational-students-canada-2 01415/2013/07/23/	After pre-selected by the University of Quebec, applicants apply online.
Canada	The Government of Canada	Canadian Queen Elizabeth II Diamond Jubilee Scholarship	Aim to activate a dynamic community of young global leaders across the Commonwealth to create lasting impacts both at home and abroad through inter-cultural exchanges encompassing international education, discovery and inquiry, and professional experiences.		Master's Degree, PhD	Be pursuing academic credit at a Canadian university towards their master's or doctorate degree be 35 years of age or under at time of application be a non-Canadian Commonwealth country citizen. Anyone who has applied for Canadian citizenship or for permanent residency is not eligible. agree to return to their home country meet the Canadian university's language requirements participate in community engagement activities in Canada	Academic expenses (tuition, supplies, research an conference expenses), Living Expenses (food, accommodation, health insurance and installation allowance), Travel Expenses (return airfare and visa costs). As part of their projects all scholars are required to participate in local leadership and community engagement activities and to form a dynamic network of Queen Elizabeth Scholars.		http://www.aucc.ca/wp-conte nt/uploads/2014/06/program- backgrounder-March5.pdf	
Canada	The Government of Canada	Banting Postdoctoral Fellowship	The program provides fund to the very best postdoctoral applicants, both nationally and internationally, who will positively contribute to the country's economic, social and research-based growth.	2 years	Research in Health, Natural Science, Engineering, Social Science, Humanities	Must fulfill all degree requirements for a PhD, or PhD equivalent, Must not hold a tenured faculty position.	\$70,000/year	70 /year	http://banting.fellowships-bo urses.gc.ca/home-accueil-eng .html	Online application
Canada	The Government of Canada	Vanier Canada Graduate Scholarships (Vanier CGS)	To strengthen Canada's ability to attract and retain world-class doctoral students and establish Canada as a global center of excellence in research and higher learning.	3 years	PhD	Be pursuing the first doctoral degree (or combined MA/PhD or MD/PhD), Not have completed more than 20 months of doctoral studies in the time of application.	\$50,000/y	up to 167/year	http://vanier.gc.ca/en/home-a ccueil.html	Candidate must be nominated by the university at which they want to study.
China	Chinese Government	Chinese Government Scholarships Bilateral Program for International Students		undergradu ate 4-7 years, Master's 2-5 years, PhD 3-6 years	Undergraduate, Master's, PhD	Be a citizen of a country other than China, Be a high school graduate under the age of 25 when applying for undergraduate programs, Be a BA holder under the age 35 when applying for master's program, Be a master's degree holder under the age 40 when applying for doctoral program.	Full Scholarship covers: tuition waiver, accommodation, stipend, medical insurance		http://www.csc.edu.cn/studyi nchina/scholarshipdetailen.as px?cid=97&id=3157	Apply to a dispatching authorities for overseas study in your country

Annex 8. List of Scholarships for a Master's Degree in Ghana

Country	Organisation	Programme	Purpose	Duration	Degree	Eligibility	Value of Awards	Number of Wards	Reference/URL	Application Process
Denmark	Danish Government	Denmark Government Scholarship for Non-EU Students			Master's Degree	Non EU/EEA students, Enrolled in a full higher education programme	full/partial tuition fee waivers and grants covering the living costs.		http://studyindenmark.dk/stud y-options/tuition-fees-scholar ships/tuition-fees-and-scholar ships	Administrated by the Danish institutions of higher education
Denmark	Ministry of Foreign Affairs of Denmark / Danida Fellowship Centre (DFC)	BSU (Building Stronger Universities) Scholarship	Aim to provide talented students from South partner universities with the opportunity to obtain a master's degree from a Danish university in order to contribute to the development of their countries.	2 years	Master's Degree in Environment and Climate, Growth and Employment, Human Health, Stability, Democracy and Rights	University of Ghana and Kwame Nkrumah University of Science and Technology		39 /year	http://dfcentre.com/courses-st udies/degree-studies/master-s cholarship-programme/	
European Commission	EC EACEA (Education, Audiovisual and Culture Executive Agency)	The Erasmus Mundus Scholarships (Category A)	Erasmus Mundus is a cooperation and mobility programme in the field of higher education for. the enhancement of quality in European higher education; the promotion of the European Union as a center of excellence in learning around the world; the promotion of intercultural understanding through cooperation with third countries as well as for the development of third countries in the field of higher education.	1-2 years	Master's, PhD	Non EU students	full-time scholarship/fellowship that cover monthly allowance, participation costs (tuition fees), raveling and insurance cost.		http://eacea.ec.europa.eu/eras mus_mundus/programme/doc uments/2014/em_programme guide_nov2013_en.pdf	
France	French Ministry of Foreign Affairs/ French Embassy in Ghana	Split-cost Scholarship Programmes For Masters ad PhDs		Masters: 2 stay of 12 months (24 months) PhD: 3 times of 6 months for over 3 years period	Master's Degree in Agriculture & food industry, Biology, Chemistry, Environment & earth sciences, Languages & literature, Management, finance and business Mathematics, Physics Health sciences Economics & political science Humanities & social studies	40 years maximum, BA in certain field (see web in detail), French proficiency is not a necessary condition, but Level A2 of DELF is recommended.	The Embassy provides: free visas, university registration fee, health insurance, a return flight for each stay. The Ghanaian partner provides: a monthly allowance of at least EUR760 for student's whole stay	2 for Master's 8 for PhD	http://www.ambafrance-gh.or g/Scholarship-programmes-2 015-2016 http://campusbourses.campus france.org/fria/bourse/#/progr am?siteroot=http:%2F%2Fw ww.campusfrance.org%2Fen &id=549	Application to be sent to the Cultural Service of French Embassy in Ghana
France	French Ministry of Foreign Affairs and International Development	Eiffel Scholarship in France for International Students	To enable French higher education establishments to attract top foreign students to enroll in their master's and PhD courses. It helps to shape the future foreign decision-makers of the private and public sectors, in priority areas of study, and encourages applications from emerging countries at master's level, and from emerging and industrialized countries at PhD level.	12 to 36 months	Master's and PhD in engineering science, science, management, law and political science	Non-French nationality, not older than 30 (master's) and not older than 35 years old, no application is accepted for any student who applied previously, language skills need to meet the requirement of the relevant course of study.	Allowance of EUR1,181 for master's, EUR1400 for PhD course, return trip, social security, accommodation allowance. (NOTE: Tuition fees are NOT covered by the Eiffel Programme.)		http://www.campusfrance.org /sites/default/files/vademecu m_eiffel_2015_eng.pdf	Application to be submitted to French Higher Education Institutions.
Greece	Government of Greece	Hellenic Scholarship for Foreign Students from Developing Countries	The creation of executives, capable to contribute, in the future, to the development of their country of origin.		Undergraduate and postgraduate at the Greek Higher Academic and Technological Institution	Be not younger than 18 years old, hold a lyceum graduate or equivalent certificate of a secondary education institution	EUR600/mth as scholarship allowance, EUR1000 as relocation fee, Free meals in the university and provision of educational material, Tuition fee, medical insurance, EUR1000 on successful completion of studies upon the scholar's returning to their home country.		http://www.scholars4dev.com /4139/hellenic-scholarship-pr ogramme-for-foreign-student s-from-developing-countries/	Application to be submitted to the Greek Diplomatic Authorities

Country	Organisation	Programme	Purpose	Duration	Degree	Eligibility	Value of Awards	Number of Wards	Reference/URL	Application Process
South Africa/ Germany	South African -German Centre for Development Research (DRD-SA)	DRD Scholarships for Sub-Saharan Africans	To pursue development-related Master's or PhD studies in University of Western Cape South Africa or University Bochum, Germany		Master's Degree in Development Studies/ Public Administration or PhD	Should be from Sub-Saharan Africa, have outstanding academic records (at least 70% for the last degree), Should apply within 3 years of having completed their previous degree, The previous study should be related to Development Studies or Public Administration, TOEFL, work or/and voluntary experience in the field of interest, women are encouraged to apply,	Monthly allowances of EUR650 for Master's candidates and EUR900 for PhD candidates. Mobility scholarships are available for Master' students each year.	Limited	http://www.drd-sa.org/index. php/scholarships-in-develop ment-studies.html	
Germany	German Academic Exchange Service (DAAD), German Federal Foreign Office	DAAD Masters Scholarship for Public Policy and Good Governance (PPGG)	Supporting future leaders from Africa, Latin-America, South-Asia, Southeast-Asia and the Middle-East who want to promote democracy and social justice in their home countries.	2 years	Master's Degree in Public Policy and Good Governance	Qualified graduate with a first university degree (BA or equivalent), who in the future want to actively contribute to the social and economic development of their home countries. The university degree should have been obtained during the six years before the application for the scholarship. Not have been in Germany for more than 15 months at the time of application. Knowledge of English (and German), political and social engagement, a convincing description of the subject-related and personal motivation for the study project in Germany and the expected benefit when returning to the home country.	Tuition Fees, Monthly scholarship rate of EUR750, health insurance, grants on appropriate travel allowance and study research subsidy, allowances for spouse and children where applicable.	Not Specified	https://www.daad.de/medien/ deutschland/stipendien/formu lare/ppgg_bilanzbroschuere.p df https://www.daad.de/medien/ deutschland/stipendien/formu lare/ppgg-announcement.pdf	Application to be sent to the respective university, not DAAD.
Germany	German Academic Exchange Service (DAAD)	DAAD Scholarship in Germany for Development Related Postgraduate Course	Well-trained local experts, who are networked with international partners, play an important part in the sustainable development of their countries. They are the best guarantee for a better future with less poverty, more education and health for all.	12-24 months	Development related Master's course	Works either for a public authority or a state or private company in a developing country, Have a BA degree (usually 4 year course) in related subject should have been completed no longer than six years previously, Completed an academic degree with far above average results (upper third) and at least 2 years' professional experience. Language skills requirement depend on the subject. For courses in English IELTS 6 certificate or TOEFL minimum 550 pb, 213 cb,80 ib. Proven development-related motivation and expected to take on social responsibility and initiate and support processes of change in their personal and professional environment after their training/scholarship.	EUR 750/mth for graduates or EUR 1000/mth for doctoral candidates, health insurance, travel allowance, study and research subsidy, accommodation subsidies	Limited	https://www.daad.de http://www.scholars4dev.com /1002/daad-scholarships-for- postgraduate-courses-with-sp ecial-relevance-to-developing -countries/	Application to be sent to the respective university, not DAAD.
Germany	German Academic Exchange Service (DAAD)	Government Scholarship Ghana (MoE)	The DAAD promotes the internationalization efforts at German institutions of higher education. The aim is to provide young people in Germany and abroad the opportunity to gain international academic and research experience.	up to 42 months	PhD at a German University	BA/BSc 2nd class upper division and MA/MSc, Should have taken their final examinations no longer than six years before the time of application, Be employed at a Ghanaian university	Co-funded EUR1000/mth, Health insurance, appropriate travel allowance, a maximum of two periods of field research in the home country, Preparatory language courses in Accra and in Germany. NO research funds are paid.	Not Specified	https://www.daad.de/deutschl and/stipendium/datenbank/en /21148-scholarship-database/ ?origim=145&status=4&subje ctGrps=&daad=&q=&page=1 &detail=10000051#vorausset zungen	Application to be sent to the scholarship secretariat in Accra, Ghana.
Germany	German National Research Centre for Aeronautics (DLR) and German Academic Exchange Service (DAAD)	DLR-DAAD Research Fellowships		36 months (PhD), 6 to 24 months (Postdoctor al), 1 to 3 months (Senior Scientists)	PhD in Aeronautics, Space, Transportation and Energy	Doctoral students: Have completed their studies/research with a university degree, Post doctoral students: have completed their studies with PhD, Senior scientists: must be working in higher education or at a research institute, Have excellent knowledge of English (TOEFL 550/217), Have completed their last degree in the last six years, Not be a German nationality.	For PhD Students: EUR 1365/mth, plus allowance for materials of EUR102, Travel allowance, Health insurance, family allowances. For Postdoctoral students, EUR2000/mth		https://www.daad.de/deutschl and/stipendium/datenbank/de /15370-dlr-daad-research-fell owships-in-the-fields-of-spac e-aeronautics-energy-and-tra nsportation-research/	Application to be sent to DAAD Regional Office or Head Office in Bonn. Application by email is not accepted.
Italy	Italian Government	Italian Government Scholarships for Foreign Students		3 months, 6 months, 9 months,	BA, Master's Course, PhD Courses	Education qualification according to the chosen institution, knowledge of Italian language (must possess a certificate of intermediate level in Italian), 19 to 34 years old, Students enrolled in a year exceeding the legal duration of the course of study are not eligible.	Tuition fees, health insurance, (airfare is not granted)		http://www.esteri.it/mae/en/m inistero/servizi/stranieri/oppo rtunita/borsestudio_stranieri.h tml?LANG=EN	Detailed Info can be requested to the Italian Embassy or Italian Cultural Institute
Japan/ World Bank	Government of Japan/ World Bank	Joint Japan World Bank Graduate Scholarship (JJ/WBGSP)	Scholars are expected to return home to contribute to the development of their country.	2 years	Master's Degree at JJ/WBGSP preferred university	Be a national of World Bank member country, Not be a dual citizen of any industrialized country, Holds a BA, Have at least 3 years of development-related experience since earning a BA, Have been unconditionally accepted to enroll in the upcoming academic year in one of the JJ/WBGSP university master's program.	Travel costs, tuition fees, medical insurance, a monthly subsistence allowance		http://web.worldbank.org/W BSITF/EXTERNAL/WB/E XTWBISP/EXTJWBGSP/ 0,contentMDK:20285740~m enuPK:556575~pagePK:6416 8445~piPK:64168309~iteSit ePK:551644,00.html	Parallel application to JJ/WBGSP Secretariat and the University

Country	Organisation	Programme	Purpose	Duration	Degree	Eligibility	Value of Awards	Number of Wards	Reference/URL	Application Process
Korea	KOICA/ Korean Government	KOICA Scholarship Program for International Students	it aims to contribute to the long-term development needs of KOICA's partner countries to promote growth and stability.	2 years	Master's degree	 Be a government official, an employee in the public sector, or a researcher in a state institute working in his/her home country with a bachelor's degree or higher. Be nominated by his or her government. Have sufficient command of both spoken & written English to take classes conducted entirely in English and to write academic reports and a thesis in English. Have a positive attitude and a strong will to get adjusted to a multicultural environment and to understand the hosting country's culture. Have good moral characteristics to endure student life on campus. Be in good health, both physically and mentally, to undergo the program. Pregnancy is regarded as a disqualifying condition for participating in this program. Having tuberculosis or any kind of contagious disease is regarded as a disqualifying condition for participation in this program. Have not previously received a scholarship or participated in a scholarship program, including a KOICA Scholarship Program, from the Korean government. 	 Air travel fare: Economy class, round-trip airfare via the most direct route to and from Korea Full tuition fees Accommodation (mainly the dornitory of a training institute) Living allowance Meals Textbooks and materials Study visits, field trips, etc. during the program A medical checkup after entry into the program Overseas traveler's health insurance: Expenses for medical treatments and hospital care due to diseases or accidents within the scope and limit of insurance coverage. 		http://training.koica.go.kr	There are two rounds for each selection: the document review and the telephone interview (an "essay test" may be included in some cases). After being nominated by his/her government, the applicant should submit the application package to the KOICA office or the Embassy of Korea in his/her country. KOICA Headquarters receives applications only through diplomatic channels, which means that one cannot send application documents directly to KOICA Headquarters or universities.
Malaysia	Government of Malaysia	Malaysia International Scholarships (MIS)	Aims to support Malaysian Government's effort to attract, motivate and retain talented human capital from abroad.	2-3 years depending on the course	Master's Degree, PhD	Not be more than 40 years (postgraduate) and 45 years (post doctoral) of age during application, Have a minimum of Second Class Upper (Honors) or CGPA of 3.5/4.0 at BA, English proficiency with minimum score of IELTS 6.5 / TOEFL 580,	Airfare, tuition fees, monthly maintenance allowance, annual grant for books and internal travel, medical insurance, Installation and termination grant, thesis allowances, visa.	Not Specified	https://biasiswa.moe.gov.my/ INTER/index.php	Online application through Ministry of Higher Education's website.
Netherlands	Dutch Ministry of Foreign Affairs	Migration Management Diploma Programme (MMDP)	The programme aims to build capacity of those working in the field of migration but is also available to those who would like to upgrade their knowledge in the field.	3 months	Migration Management Diploma at UNU-MERIT and MDSoG.	Have at least 3 years' experience in the field of migration and asylum.		6 /year	http://www.merit.unu.edu/trai ning/migration-management- diploma-programme/	Register on line, and send application by email to Maastricht University
Netherlands	Dutch Ministry of Foreign Affairs	Netherlands Fellowship Programme (NFP) for Developing Countries' Students	NFP promote capacity building within organizations in 51 countries by providing fellowships for training and education for professionals. The Programme aims to help increase both the number and the competencies of skilled staff at a wide range of government and non-government organizations.	2 years Master's (up to 3 years PhD)	Master's Degree, PhD		Supplement the salary that the fellow should continue to receive during the study period. Allowance to contribute the costs of living, tuition fees, visas, travel, insurance and thesis research.		https://www.studyinholland.n l/scholarships/scholarships-ad ministered-by-nuffic/netherla nds-fellowship-programmes	Apply directly with a Dutch higher education institution of your choice.
New Zealand	New Zealand Government	New Zealand International Doctoral Research Scholarship		3 years	PhD at a New Zealand University	Hold minimum equivalent GPA of 3.6/4.0 or an A to A+ average in your most recent or highest post graduate tertiary qualification, must conduct you PhD study in New Zealand (not from a distance), must meet the requirement for direct entry into a PhD programme at a New Zealand University, including language proficiency.	tuition fees, associated student levies for 3 years, annual living stipend of NZ\$25,000 or NZ\$2508.33 per month for 36months, a medical insurance covered up to NZ\$600 annually for 3 years.	Not Specified	http://www.enz.govt.nz/our-s ervices/scholarships/nzidrs	Parallel application to Education New Zealand, and the University
Norway	Government of Norway	Norwegian Quota Scholarship Scheme		up to 4 years	Master's Degree, PhD	Secondary school certificates or minimum two years of higher education from their home country, English proficiency	40% of the total amount of money is given as a grant and 60% as a loan. (But the loan portion is waived when the student returns to their home country.)	Not Specified	http://siu.no/eng/Programme- information/Development-co operation/Quota-Scheme	Application to be sent to the International Office at the Norwegian Institution where you intend to study.
Singapore	Government of Singapore	Singapore International Graduate Awards (SINGA)	To enhance the close educational ties between countries and will bring young talents even closer together.	up to 4 years	PhD in Science and Engineering	Open to all international students, graduates with a passion for research and excellent academic results, good skills in written and spoken English, Good reports from academic referees.	Full tuition fees, monthly stipend, settlement allowance and airfare grant	240/year	https://www.a-star.edu.sg/sin ga-award/	Online application

Country	Organisation	Programme	Purpose	Duration	Degree	Eligibility	Value of Awards	Number of Wards	Reference/URL	Application Process
Switzerland	UNU/Univ. of Geneva	UNU Fellowship	To enhance the capacity of individuals and institutions in developing countries.	1 year	Postgraduate research on International Organization MBA	mid-career professionals from developing countries, who would be expected to apply and disseminate their newly acquired knowledge and skills in promoting the socio-economic development of their own and other developing countries.	Tuition fee (no other expenses)	1/year	http://iomba.ch/financial-aid- scholarships/	Application directly to the university (IOMBA).
Switzerland	Swiss Government (Federal Commission for Foreign Students FCS)	Swiss Government Excellence Scholarships for Foreign Scholars and Artists		?	PhD (full-time)	Not more than 35 years old (Other eligibilities depends on applicants' nationality.)	A monthly payment, exemption of tuition fees, health insurance, air fare, special lodging allowance,		http://www.sbfi.admin.ch/the men/01366/01380/02175/ind ex.html?lang=en	Application through the Swiss diplomatic representation in your country.
Taiwan	Government of Taiwan / MoE	Taiwan Government Scholarship for International Students	Aims to encourage outstanding international students (excluding students from Mainland China, Hong Kong and Macau) to undertake degree studies in Taiwan so as to familiarize themselves with the academic environment in Taiwan and promote communication, understanding and friendship between Taiwan and countries around the world.	4 years (undergradu ate), 2 years (Master's), 4 years (PhD)	BA, Master's Degree, PhD	High-school diploma or post secondary degree with an excellent academic record. Not being registered at any university in Taiwan, Not have been a recipient of the Taiwan Scholarship for over total of five years,	Tuition fees and other costs up to NDT40,000, Subsistence allowance NDT15,000/month		http://edu.law.moe.gov.tw/En gLawContent.aspx?Type=E& id=122	Application to be sent to the university of their choice for admission AND to the nearest Taiwan Embassy or Representative Office in their home country.
Turkey	Turkish Government	Turkey Scholarship for International Studies		depend on the course	BA, Master's, PhD in Univ. of Turkey	For Undergraduate: Be have graduated or are likely to graduate from a secondary education institution, be under the age of 21, have at least 70% of cumulative grade point average, diploma grade, national exam or international exam score. For Postgraduate students: BA holder, under age 30 and under 35 for doctorate programmes, have at least 75% cumulative grade average or diploma grade.	monthly stipend (600TL for undergraduate, 850 TL for master and 1200 TL for PhD), full tuition fee, free 1 year Turkish language course, free accommodation, return airfare, health insurance		http://www.turkiyeburslari.go v.tr/index.php/en/haberler/72 0-2015-turkiye-burslari-basv urulari-basliyor-en	Online application
UK	DFID/ Commonwealth Scholarship Committion (CSC) in the UK	The Commonwealt h Scholarship and Fellowship Plan (CSFP)	The CSC aims to contribute to the UK's international development aims and wider overseas interests, support excellence in UK higher education, and sustain the principles of the Commonwealth.	12 months' support towards full-time taught Master's course (except MBAs) and 36 months' full-time doctoral course	PhD, Master's Degree (including distance education), Academic Fellowships,	Commonwealth citizens and refugees, permanently resident in a developing Commonwealth country, Hold (by October of the year of enrollment), a first degree of upper second class Honors standard (or above), or a second class degree and a relevant postgraduate qualification (normally Master's degree). The CSC selects candidates on the basis of merit and their potential to contribute to the needs of their home countries.	Airfare, Tuition and examination fees, A personal maintenance allowance, A grant for expanses for approved study travel, A contribution towards field work costs.	300/year	http://escuk.dfid.gov.uk/wp-c ontent/uploads/2011/03/prosp ectus-scholarships-2015.pdf	Application through the nominating agency (university/university body, if applicable) in the home country.
UK	DFID/ UK Universities	The Commonwealt h Shared Scholarship Scheme at UK Universities	It is intended for students from developing countries who would not otherwise be able to afford to undertake Master's level study in the UK, to gain skills and knowledge which will allow them to contribute to the development of their home countries.	1 year	Taught Master's Course only (on the subject related to the development of their home country)	Be Commonwealth citizens or refugees, Be permanently resident in a developing Commonwealth country, Hold a first degree of at least upper second class Honors standard, Not have undertaken studies lasting one year or more in developed country, Be unable themselves, or through their family, to pay to study in the UK.	Full costs of study in UK including approved tuition and examination fees, air fares to and from the UK, maintenance allowance, thesis grants, initial arrival allowance, travel expenses related to study.	Around 200+	http://escuk.dfid.gov.uk/apply /shared-scholarships/info-can didates/	Application to be made through the host UK University.
UK	Government of UK	Chevening Scholarship	Chevening offers a unique opportunity for future leaders, influencers, and decision- makers from all over the world to develop professionally and academically, network extensively, experience UK culture, and build lasting positive relationships with the UK.	l year	Master's Degree	Must: return to your country of citizenship for a minimum of two years after your scholarship has ebded, have an undergraduate degree that will enable you to gain entry to a post graduate programme at a UK university (upper second class 2 : 1honours degree in UK), have at least two years' working experience, have unconditional offer from one of the UK partner universities, IELTS 5.5	Tuition fee, a monthly stipend, Travel costs to and from UK, an arrival allowance, a homeward departure allowance, a thesis grant, a grant for study materials, a study travel allowance, a cost of visa application, travel grant to attend Chevening events in UK.			

Country	Organisation	Programme	Purpose	Duration	Degree	Eligibility	Value of Awards	Number of Wards	Reference/URL	Application Process
USA	Government of USA	Scholar	Mutual understanding between the people of the US and the people of the other countries of the world.	6 months	PhD	A doctoral degree or equivalent professional training or experience at the time of application. Sufficient proficiency in the English language to carry out the project required (TOEFL or IELTS)				Conditions depend on the country. Check with the Embassy of USA
USA	Government of USA		Mutual understanding between the people of the US and the people of the other countries of the world.			Depend on the target country. (Check with Embassy of USA in Accra.)				Conditions depend on the country. Check with the Embassy of USA
World Bank	World Bank	Robert S. McNamara PhD Research Fellowship		6 to 10 months	such as economics, health, education, agriculture, environment, natural resource management or	Be from World Bank member developing countries and currently enrolled in a PhD program for which they have completed all course work and exam requirements, Not be a dual citizen of developed country, Hold Master's Degree, 35 years old or younger, Be accepted as a visiting scholar for a period of 6 to 10 months by a university or research center in a World Bank member country other than your home country.	Max grant is USD25,000. Candidates submit the budget for the fellowship, covering costs related to the research program: tuition, living allowance, basic medical insurance, travel and allowance for the cost of research including books, research materials, software, local field trip.	Not Specified	iteresources.worldbank.org/I NTRSMFP/Resources/Applic ation_Guidelines_V2.pdf	Online application

Annex 9. Number of Ghanaian Recipients of Overseas Scholarships

(GHS)

SCHOLARSHIP PROGRAMS OFFERED TO GHS OTHER THAN JDS (GHS)

Scholarship By Country	Name Of Scholarship, Sponsor	Degree	Masters	PhD
Australia	UTSP President's Scholarship (UTSP),			PhD Public Health
Australia	University of Western Australia scholarship			PhD study in Epidemiology
UK	Dean Scholarship of the School of London School of Commerce		MSc. Accounting & Finance	
Australia	Australia Awards Scholarship - Australian Agency for		Master of Public Health	
	International Development			
UK	Ferguson Scholarship		Msc. Biomedical Sciences	
Ghana	GETFund		MSc. Forensic Science	
Ghana	GETFund		MPH	
Australia	Curtin University, Australia scholarship		MPH	
South Africa	University of KwaZulu – Natal scholarship		MSc in Health Research Ethics	
Australia	Australia Awards for Africa		MPH	
USA	Villanova University scholarship	BSc. Nursing		
EU	European Union scholarship		MSc. Applying Physiotherapy	
India	Institute of Applied Manpower Research, India scholarships		Masters in HR Planning & Dev	
USA	Uni of Southern California scholarship		MSc. Clinical Pharmacy	
Canada	University of Western Ontario scholarship		MSc. Nursing	
USA	Student Financial Services, Harvard T.H. Chan		MPH	
Ghana	GETFund		Fellowship in Obstetrics & Gynaecology	
Ghana	GETFund			PhD in Health Service Management
Ghana	INDEPTH Network		MSc. in Epidemiology	
Australia	UTS President's Scholarship (UTSP			PhD Public Health
UK	Chevening Scholarships -Foreign and Commonwealth Office		MSc. Mental Health Service and Population Research	
Netherlands	Netherlands Fellowship Programmes (NFP)		MSc. Public Health	
India	Government of India scholarship	Post graduate Diploma in Public Health Management		
India	BRAC Institute of Global Health scholarship		MPH	
Netherlands	Netherlands Fellowship Programmes (NFP)		Master's in Health Development /Master's in Public Health	
UK	Africa London Nagasaki Scholarship		MSc. in Epidemiology	
UK	Commonwealth Scholarship under the Commonwealth		MPH	
	Scholarship and Fellowship Plan			
USA	Sommer Scholarship Award for the MPH programme by the		MPH	
Tama al	John Hopkins School of Public Health		Internetional Master's Deema December	
Israel	University of Haifa scholarship		International Master's Degree Program in Child Development in Developing Countries	
UK	Commonwealth Shared Scholarship Scheme, UK		MSc. Advanced Nursing Studies	
Netherlands	Netherlands Fellowship Programmes (NFP)		Master of Business Administration (MBA)	

(MOFA)

Institution	Programme	Sponsor	Male	Female	Total
Kyungpook National University, Korea	Master's degree programme on Food Security and Agricultural Development	KOICA	1	1	2
Yonsei University (Graduate School of Government and Business) Korea	Master's degree programme on Community Development Leadership	KOICA	2	-	2
Yeongnam University, Korea	Master's degree programme on Community Development Leadership	KOICA	-	1	1
Yonsei University (Graduate School of Business) Korea	Rural Society Leadership Development for Global Poverty Reduction	KOICA	1	-	1
Chonnan National University (Graduate School of Government and Business) Korea	Master's degree programme on Community Development Leadership	KOICA	2	-	2
University of Queensland, Australia	Master' degree programme on Agribusiness	Australia	1	-	1
Van Hill Larenstein, Applied Science University, Netherlands	Master's Rural Development and Food Security	Netherlands	-	1	1
University of Western Australa, Australia	Master's Agricultural Science	Australia	1	-	1
Michigan State University	PhD Plant Pathology	University	-	1	1
University of Nottingham Malaysia Campus	PhD Art and Science	University	1	-	1
Konkuk University of Seoul Korea	Master's in Agricultural, Processing and Marketing	KOICA	3	-	3
University of Nenchatel, Switzerland	Master's Programme in Intergrated Crop Management	Switzerland	1	-	1
Charles Sturt University, Australia	Master's of Sustainable Agriculture, Agricusiness,/Rural Management	Australia	1	-	1
University of Queensland, Australia	Master's in Integrated Water Management	Australia	1	-	1
South China Agricultural University	Agricultural Water-Soil Engineering	China	1	-	1
Graduate School of Chinese Academy of Agricultural Science	Crop Cultivation and Farming Systems	China	1	-	1
Total			17	4	21

Annex 10. Methods of Recruitment and Selection of Candidates for First-batch Fellows (Arrival in Japan in FY 2016)

We provided the target organizations with support for recruitment and selection in accordance with the host universities, the number of accepted Fellows, eligibility requirements for application, and schedules that had been agreed during the first Operating Committee meeting on August 24, 2015.

(1) Preparation of materials for Ghanaian Fellows

We prepared 400 copies of the application guideline (guideline), 800 copies of flyers, and 850 copies of posters as the materials for recruitment that were required for the application, distributing them to each target organizations and installing flyers and posters. In addition, we launched a website on the JDS program in Ghana and created an e-mail address dedicated to the inquiries by those who desired to study in Japan to ensure our responses immediately after receiving e-mails from them.

(2) Implementation of explanatory meetings for recruitment

We carried out an explanatory meeting on recruitment for those who desire to study in Japan in FY 2016 at each target organization. An outline and purposes of the JDS program, host universities, eligibility requirements for application, and specific schedules were presented at the explanatory meeting. In addition, we met with responsible persons of the target organizations once again as appropriate after the explanatory meetings to request their encouragement of application. The explanatory meetings took place at 16 organizations in four cities, in which the total number of participants were 339 persons, comprised of 176 persons in Accra, 47 persons in Tamale, 42 persons in Bolgatanga, and 74 persons in Kumasi. By sector, they were comprised of 79 persons in economy, 108 persons in health, 107 persons in agriculture, and 45 persons in energy.

(3) Implementation of an English test (the schedule to be updated)

Since English is the official language, three out of the four host universities exempt applicants from the English test such as TOEFL and IELTS. On the other hand, applicants are scheduled to sit for IELTS at one university conducting the English test on January 23.

(4) Collection of application documents

A total of 103 persons applied for the program, comprised of eight persons in the economic sector, 42 persons in the health sector, 44 persons in the agricultural sector, and nine persons in the energy sector.

(5) Implementation of the mathematics test

The mathematics test was carried out on November 20, 2015 with a total of 61 candidates, and it resulted in the highest score of 18.5 points and the lowest score of one point with an average of

8.1 points on a 32-point scale. The test time had usually been 60 minutes, but it became 90 minutes this year. For the mathematics test, we submitted the results to each host university without setting the pass/fail line. The test results through point rating at the overseas JDS program office in Ghana are as follows:

	All the examinees	Economic sector out of them	Agricultural sector out of them	Energy sector out of them
Number of examinees	61	8	44	9
Highest score	18.5	12.0	18.5	15.5
Lowest score	1.0	3.0	1.0	3.0
Average score	8.3	6.6	8.3	9.8

Result of the sectoral mathematics test

Note: 32-point scale

(6) Document screening by the host universities and its results

We sent the submitted application documents and the results of mathematics test to each host university on November 28, and the document screening was conducted by university teachers until December 16. As for the results of the mathematics test, matters such as whether or not they should be a part of the pass/fail judgment or just for reference were left to the discretion of the universities.

(7) Medical examination

A medical examination was conducted for successful candidates passing the technical interview on March 2nd.

(8) Technical interviews by instructors of the host universities and their results

Technical interviews at Tohoku University during January 30 - February 6, 2006 and at Kobe University, Nagasaki University and the University of Tsukuba during February 10 - 17, and consultations with target organizations were carried out with the following schedule:

Date	Day	Schedule				
Jan 30th	Sat	Departure from Japan				
Jan 31st	Sun	Arrival at Ghana, briefing from JDS Office				
Feb 1st	Mon	Technical interview				
Feb 2nd	Tue	Courtesy call to the embassy of Japan				
Feb 3rd	Wed	Discussion with target organizations				
Feb 4th	Thu	Courtesy call to JICA, depart Accra				
Feb 5th	Fri	-				
Feb 6th	Sat	Arrival at Japan				

Schedule of Tohoku University

Date	Day	Schedule	
Feb 10th	Wed	Departure from Japan	
Feb 11th	Thu	Arrival at Ghana, briefing from JDS Office	
Feb 12th	Fri	Debriefing session of the 2nd batch Fellows	
		Discussion with target organizations	
Feb 13th	Sat	Technical interview	
Feb 14th	Sun	Technical interview	
Feb 15th	Mon	Courtesy call to embassy of Japan	
		Courtesy call to JICA, depart Accra	
Feb 16th	Tue	-	
Feb 17th	Wed	Arrival at Japan	

Schedule of Kobe, Nagasaki, and University of Tsukuba

Appraisal was conducted on a 100-point scale with the examination items: academic backgrounds and learning abilities, groundings to accomplish the study, and the potential for contributing to the development of the country.

(9) Comprehensive interviews by the Operating Committee and their results

A comprehensive interview will be held on March 10, and final candidates and their substitutes for international students are scheduled to be approved during the subsequent Operating Committee.

The following table summarizes the result of selection of first-batch applicants at the second phase until now.

Annex 11. Results of Selecting the First-batch Applicants (scheduled to be updated hereafter)

Subprogram (priority area)	Component (development issue)	University	Effective number of applicants	Number of document screening passers	Number of technical interview passers	Number of comprehensive interview passers (planned)	Number of final passers approved by the Operating Committee (planned)	Planned number of accepted Fellows
Improvement of administrative	Support for strengthening	Graduate School of International						
capacities and institutional development	capacities for administering economic policies	Cooperation Studies, Kobe University	8	5	3	2	2	2
Revitalization of rural areas	Improvement of basic living environment	School of Tropical Medicine and Global Health, Nagasaki University	42	10	4	3	3	3
Agriculture/rural development	Rice production and agriculture	Graduate School of Life and						
Agriculture/furar development	development support	Environmental Sciences, University of Tsukuba	44	9	6	3	3	3
Natural resources and energy policy	Energy development support	Graduate School of International Cultural Studies, International Post-Graduate Program in Human Security, Tohoku University	9	9	5	2	2	2
Total				33	18	10	10	10