



Center for Sustainable Development Studies

Development of a New Approach for International Contribution

Ryo Matsumaru
Theme Coordinator

Since its establishment in 2001, Toyo University's Center for Sustainable Development Studies (hereinafter "CeSDeS") has been committed in research programs on various themes, including "Eco-friendly Development" and "Endogenous Development". Currently, CeSDeS is promoting a research program under the theme: "Development of International Contribution Methods for Asia and Africa in the Era of Globalization".

The International Contribution Group, one of the three research groups in CeSDeS, is implementing researches and practices to seek ideal approaches of international contribution, aimed to support of the achievement of the Sustainable Development Goals (SDGs).

To date, various development techniques have been employed in developing countries, and the eco-friendly development mechanisms and the approach focused on endogenous development proposed by CeSDeS are the one of those approaches. Over the years, the international community has taken various development initiatives including the effort to achieve the Millennium Development Goals, which preceded the SDGs. Despite these efforts, however, many countries and regions in the world still have a long way to go before reaching their development goals. In this context, the members of the group are now trying to develop new approaches of international contribution.

"What is the ideal approach of international contribution to achieve the SDGs?"

Unfortunately, I have not found the right answer to this question. Yet, I can state that as the first step toward this goal, we should promote practical application of the outcomes of our research at CeSDeS in a developing

society.

Through the review of our research outcomes, I have found a few key phrases repeatedly used in our papers such as "effective use of regional resources", "environmental consciousness and eco-friendly development", "human resource development" and "endogenous initiatives". All these phrases represent very common concepts in the context of regional development in developing countries, and this indicates that it is the vital importance for international contribution to do such obvious things properly.

I believe that the international community has been taking the initiative by putting these obvious ideas into practice. However, I also believe that it is essential to integrate individual initiatives and take a comprehensive approach to regional development to enhance the outcomes of these past initiatives and to create synergy. Since we have brought researchers together from diverse disciplines, taking advantage of this diversity, we are planning to implement a comprehensive regional program to address multiple issues represented by the several key phrases that I have just mentioned.

In addition to the academic research activities, our group is also focus on the practical application of our research outcome to the ground. To do so, from this year, we are planning to start a new project in the one of the developing country to create a recycling-oriented society at a major tourist destination which is located near the lake that is suffering from serious water pollution. To address social and environment problems around the lake, our project plan to provide environmental education, along with scientific data, to residents who are living

around the lake and its basin. Through this educational program, the residents might be encouraged to change their daily behaviors and to restore clean water. Ultimately, we intend to establish a recycling system that utilizes local

resources. Preparations for the project will begin this year, and the project is planned to start on a full scale in the year 2018.

The Signing Ceremony and the International Symposium “Development and Environment in Africa — Human Resource Development on Technology and Society —”

*Elli Sugita
Researcher*



The Signing Ceremony of the Academic Exchange Agreement

On November 11, 2016, Jomo Kenyatta University of Agriculture and Technology (JKUAT) in Kenya and Toyo University signed an academic exchange agreement in Inoue Enryo Hall, Toyo University. Following the signing ceremony, the Center for Sustainable Development Studies, Toyo University, held the international symposium “Development and Environment in Africa — Human Resource Development of Technology and Society—” in the same venue. This symposium was co-organized by the Center for Academic Research Promotion, Toyo University, and the Graduate School of Regional Development Studies, Toyo University, and supported by the Japan International Cooperation Agency (JICA) and the External Representation Office for Asia, African Development Bank.

JKUAT, located in a suburb of Nairobi, Kenya, has grown into a general university with an enrollment of more than 30,000 since JICA began offering assistance in establishing it in 1977. This was the first time for Toyo University to enter into an inter-university academic exchange agreement with a university in Africa. In the signing ceremony, Dr. Romanus Odhiambo Otieno, Professor and Deputy Vice Chancellor, JKUAT, and Dr. Hidetoshi Kitawaki,

Professor, Vice-president, and Director of the Center for Sustainable Development Studies, Toyo University, signed the academic exchange agreement.

In this year’s international symposium, focusing on the theme of Africa with the aim of promoting this new academic exchange agreement, speeches were delivered by five leading experts in “development and environment in Africa.” In the final part of the symposium, active exchange of questions and answers between the audience and the speakers helped further deepen the discussion. A total of more than 800 people, including Toyo University students, attended the symposium. Many students from Africa studying at Toyo University or other universities were also in the audience.

An outline of the speeches is as follows:

1) Opening Remarks by Mr. Tadashi Yokoyama, Head, External Representation Office for Asia, African Development Bank

Mr. Yokoyama gave a detailed explanation about the current economic situation in Africa, including the fact that the past decade’s continued economic growth of more than 5% on average has been supported by improvements in the governance and environment for business investment, as well as by economic and political stability. However, he continued that Africa certainly still faces many challenges, so the African Development Bank Group focuses its effort on five development challenges called the High-Fives: Light up and power Africa, Feed Africa, Industrialize Africa, Integrate Africa, and Improve the quality of life for the people of Africa. Mr. Yokoyama explained that, for these purposes, the African Development Bank Group has played an active role in human resource development and in increasing people’s technical levels.



International symposium

2) “The Role of PAU (Pan African University) and JKUAT in Human Resource Development in Africa” by Dr. Romanus Odhiambo Otieno, Professor and Deputy Vice Chancellor, JKUAT

Dr. Odhiambo spoke on the history of JKUAT’s development and its current education and research area. His presentation suggested that JKUAT, as a general university with schools specializing not only in agriculture and engineering but also in IT and human resource development, would be able to cooperate with Toyo University in various fields in the subsequent process of partnership building. He also explained that, in the Pan African University (PAU) program aiming to promote higher education in Africa as a whole, JKUAT as the program’s eastern hub occupies a key role in fostering industrial human resources in the field of scientific and technological innovation in Africa.

3) “Human Resource Development in Africa” by Mr. Masaaki Kato, Senior Special Advisor, JICA

Mr. Kato started his speech by outlining the Sixth Tokyo International Conference on African Development (TICAD VI) in August 2016. His explanation of the achievements of this year’s TICAD, which was held in Kenya, outside Japan for the first time, taught the audience, and students in particular, valuable lessons. Subsequently, Mr. Kato introduced the audience to JICA’s initiatives in human resource development in Africa, which was also a focus at TICAD VI. He explained that JICA’s long-term support for JKUAT has been a successful case in its assistance in human resource development in Africa, and that JICA now offers assistance to PAU, mentioned above. He added the explanation that research aid through the Science and Technology Research Partnership for Sustainable Development

(SATREPS) and support for international students from Africa through the African Business Education Initiative for Youth (ABE Initiative) are also included in JICA’s initiatives in human resource development in Africa.

4) “Agriculture and Technology for Africa” by Dr. Patrick Home, Associate Professor, School of Biosystems and Environmental Engineering, JKUAT

Dr. Home clearly illustrated the vulnerability of agricultural and food security in African environments with data and maps, emphasizing that overcoming such current conditions requires technological innovation suitable for African environments. He also explained JKUAT’s initiatives to develop technologies useful for the grassroots, and methods of information sharing, drawing some examples.

5) “Private Sector-led Economic Development in Africa” by Dr. Koichi Sakamoto, Researcher at the Center for Sustainable Development Studies, and Professor and Dean of the Faculty of Regional Development Studies, Toyo University

After outlining the macro economy of Africa, Dr. Sakamoto described the uneven economic situation in Africa. He stated that, while some countries suffer from sluggish economic growth, others, including Nigeria and South Africa, have succeeded in growing economically, with Kenya and Ethiopia projected to grow by 6% to 7% annually between 2017 and 2021. He also mentioned the rise of investments in Africa, including China’s increasing investments in the continent. Dr. Sakamoto also introduced to the audience some cases of Japanese companies’ operations in Africa. His speech enhanced our understanding about the recent growth of relationships between Japan and Africa.

As seen above, it can be said that this international symposium provided valuable suggestions about various perspectives and possibilities for further development of relationships between Africa and Japan, and between JKUAT and Toyo University. We hope that this symposium serves as a springboard for our more active engagement in research activities, practical international contribution activities in the field, and human resource development. In conclusion, we would like to express our heartfelt gratitude to the organizations co-organizing or supporting this symposium, speakers, and attendees.

International Workshop “Toward International Collaborative Research between JKUAT and TOYO”

*Norihisa Shima
Theme Coordinator*



Presentation from Prof. Home

The Center for Sustainable Development Studies, Toyo University, hosted the international workshop “Toward International Collaborative Research between JKUAT and TOYO” at Hakusan Campus on November 14, 2016. This workshop aimed to discuss the possibility of collaborative research as the first practical step in the partnership between the Center and JKUAT (Jomo Kenyatta University of Agriculture and Technology), after the MOU that had been signed by these two parties. Prof. Patrick G. Home from JKUAT was invited to have discussions with researchers from the Center.

After the opening remarks by Prof. Hidetoshi Kitawaki, Director of the Center, Prof. Home introduced the research activities by JKUAT. He explained that JKUAT, under their research theme “Science, Technology, Innovation and Entrepreneurship for Economic Development,” pursues research in 10 focused sub-themes including the research interests by the Center. Prof. Home also described the university’s rank among other Kenyan universities as well as institutional framework of JKUAT, including its organizational structure and research funds. In addition, he highlighted some specific research cases.

Three researchers from the Center—Prof. Shingo Hanada, Prof. Norihisa Shima, and Prof. Elli Sugita—then presented their research interests, “A Concept Mapping of Education Diplomacy,”(Hanada) “Water × Micro-topography × Settlement,”(Shima) and “How did better access to water change people’s life in 15 years?”(Sugita), to explore the possibility to share the research interest of the Center and JKUAT.

This international workshop marked the first step toward collaborative research between the Center and JKUAT, deciding to launch a joint field study in Kenya at the end of February 2017.

Study on the invigoration of agriculture and farming villages through integrated development of the primary, secondary and tertiary industries

*Liu Limin
Visiting Researcher*



In January 2016, the Chinese government announced the “Guiding Opinion on the Promotion of Integrated Development of the Primary, Secondary and Tertiary Industries in Farming Villages,” aiming to reduce the urban-rural gap in the country by enhancing the efficiency of agriculture, increasing farmers’ incomes, and

invigorating farming regions. Revitalization and invigoration of agriculture and farming villages henceforth require promoting the “integrated development of the primary, secondary and tertiary industries,” which will contribute to more vigorous farming villages. For that purpose, it is important to facilitate the expansion of local businesses and the creation of new industries through various measures, such as effectively using the existing resources of farming villages, including agricultural products,

combining the production, processing and sales of agricultural products, and integrating the primary, secondary and tertiary industries. This initiative aims to combine various “resources” of farming villages with “industries” such as food processing, tourism and IT industries, to create new additional value in farming regions, resulting in increased local employment and higher and more stable incomes.

In China, various efforts for the integrated development of the primary, secondary and tertiary industries are in progress around the country. Specific cases of such efforts I have seen during fieldwork include 1) processing and sales of local agricultural, forestry and fishery products, for example: development and sales of foods made with local specialties, and sales of agricultural products at direct-sale stores, 2) green tourism featuring local landscapes, traditional culture and other local attractions, as well as farmers’ restaurants and tourist homes, and farming village experience, 3) development of new products and materials through technological innovation,

collaboration between the agricultural, commercial and manufacturing sectors, and other measures, and 4) encouragement of new industries through collaboration between different industries and fields (for example: online sales of specialty products in deprived areas).

This study, focusing on Central and Southeastern Coastal China, explores the process and current condition of the “integration of the primary, secondary and tertiary industries” and various forms of industrial integration. This study aims to enhance cooperation between the agricultural, forestry and fishery industries and other industries such as commerce and manufacturing, as the key industries of each relevant region, and utilize the synergy to invigorate regional societies. I hope to analyze specific cases of collaboration between the agricultural, commercial and manufacturing sectors in farming regions in China, and explore the types of collaboration between the agricultural and other related sectors, government measures to encourage collaboration between the agricultural, commercial and manufacturing sectors, and other relevant topics.

Study on Water Shortage Problems and Their Impacts on the Household Livelihoods of Arable and Livestock Farmers in Inner Mongolia, China

Qiqige
Visiting Researcher



I have conducted a study on water shortage problems and their impacts on the household livelihoods of arable and livestock farmers in Inner Mongolia, a dry region located in the northern part of China.

While attracting worldwide attention for its rapid economic growth, China is experiencing various growing pains, including increased water usage and contamination of the water environment. Farming areas in the Inner Mongolia Autonomous Region (hereinafter “Inner Mongolia”), in particular, face the devastating impacts of excessive use of agricultural water on the ecological environment, such as the fall of water levels, interrupted river flows, and the disappearance of inland waters. These water problems have adversely affected arable and livestock

farming and the farmers’ household livelihoods, and are viewed as major issues to be urgently solved, which otherwise would interrupt the sustainable economic and social development of farming areas in Inner Mongolia. While such water problems have occurred in many places around the world, including the Aral Sea, it is expected that Inner Mongolia, where these water problems have had impacts on relatively small areas, can provide a good example of practical solutions.

My goal is to reveal the causes of the water shortage problems in Inner Mongolia through this study. I hope to examine why water shortage problems have occurred in farming areas in Inner Mongolia, what impacts water shortage have had on arable and livestock farming and the farmers’ household livelihoods, what measures the local government has taken against these problems, and what appropriate and sustainable measures local people can take.

Pond Protection in the Coastal Areas of Bangladesh

*Md. Mafizur Rahman
Visiting Researcher*



The project titled 'Pond Protection in the Coast' seeks to enable low-income community in two sub-districts in salinity affected coastal areas of Bangladesh to protect and manage their drinking-water sources. The project focused

on nine small reservoirs/ponds in water scarce areas in Mongla and Rampal sub-districts under Bagerhat district to protect these reservoirs from climate-induced and man-made hazards through implementation of low-cost technology, from which approximately 8,000 poor villagers got benefited and are having access to drinking-water throughout the year. In addition, as a part of capacity building, 80 users of these ponds, and 25 local government officials and NGO staffs were trained on how to protect and manage scarce drinking-water sources in coastal areas through workshops, so that they gain the technical know-how required for working in coastal areas of Bangladesh. Fresh water ponds and rainwater are the main sources of drinking water in the salinity affected coastal areas in Bangladesh. Though rainwater is the most preferred option during rainy period (4-6 months), low income communities are dependent on pond water to fulfill their daily needs

during dry period (6-8 months). But due to salinity intrusion, cyclone and man-made hazards like shrimp cultivation, the number of sweet water ponds are reducing every year. To address this issues, the project titled aims at preserving these sweet water ponds by creating community awareness as well as implementing low cost technology. The major activities that were carried out during the first phase were field visits to the project area, focus group discussion (FGD) with pond users, water quality testing of pond water, selection of ten ponds, and preparation of IEC Materials. During this phase of the project, pond protection works were given priority. Protective measures that are required to protect the nine selected ponds that were selected in the first phase based on water quality testing results and FGDs were undertaken in collaboration with local communities. Apart from pond protection works, water quality testing of pond water and design and printing of various materials were carried out by project team during this phase. In addition, a final workshop was organized at The American Center, Dhaka where participants were both professionals and students. Moreover, the impact of the pond protection works for the selected nine ponds was monitored continuously through field visits and water quality testing in the last phase of the project.

Reference



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