TICAD VII Partner Project
Japanese-African University Dialogue
on
Global Sustainable Development

Report of the Meeting

Organized by: Universities South Africa (USAF), South Africa-Japan Universities Forum Secretariat (Tokyo University of Foreign Studies)

Supported by: African Development Bank

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SUMMARY

This is a report of the “Japanese-African University Dialogue on Global Sustainable Development,” a meeting organized jointly by the Universities South Africa (Pretoria, South Africa) and the Tokyo University of Foreign Studies acting as South Africa-Japan Universities (SAJU) Forum Secretariat with the support of the African Development Bank, at Fukutake Learning Theater, Fukutake Hall, the University of Tokyo on 27 August 2019. The meeting, held as a TICAD VII Partner Project, had as its aim to stimulate the public debate and awareness of the critical role the universities should play in promoting Africa-Asia partnership for the pursuit of global sustainable development, and thereby to contribute to strengthening of knowledge exchange, creation and sharing in the TICAD process. Around 50 people from Japanese and African universities participated along with their industry and government partners to share their ideas and experiences.

The dialogue exchanges were conducted through two panel discussions. Panel Discussion 1, on the “Role of Universities for Global Sustainable Development” chaired by Prof. Taikan Oki (Senior Vice Rector, United Nations University), had 6 Japanese and African higher education experts, including four university presidents, as panelists. Panel Discussion 2, on “International University-Industry Collaboration for Africa’s Sustainable Development” chaired by Prof. Francis Petersen (Rector and Vice Chancellor, University of the Free State, South Africa) had three experts each from universities and industry as panelists. The discussions were quite lively with stimulating presentations by the panelists and active participation from the floor with questions and comments. The central focus of the exchanges was on the question of how to promote partnerships between universities in Asia and Africa and between universities and industry. The closing statement by Prof. Ahmed Bawa (CEO, Universities South Africa) echoed the sentiment of the meeting participants when he stressed the importance of mutuality principle for promoting the partnerships.

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1. Background

On 23-24 May 2019, 26 South African and 35 Japanese universities met at the Future Africa Campus of the University of Pretoria (South Africa) for the 4th South Africa-Japan University (SAJU) Forum Conference, entitled “The human being in the 21st century in the context of global changes”. At the end of the conference, its 200 participants, including government and industry representatives as well as university faculty and graduate students, agreed to a ‘Joint Statement’ declaring to work collaboratively for the pursuit of local and global sustainable development and, among other things, to establish synergy between the SAJU initiative and the Framework of the Tokyo International Conference on African Development (TICAD) themes of common importance.

Human capital development for Africa’s sustainable development has been a core concern of the African Development Bank (AfDB). As part of this work, it has since 2012 collaborated with the United Nations University and several African and Japanese universities to promote Africa-Asia knowledge exchange through a project combining graduate education and research, entitled Education for Sustainable Development in Africa (ESDA). The progress of this work has been featured at TICAD V in Yokohama (2013) and TICAD VI in Nairobi (2016), and TICAD VII will hear its results, including more than 50 Master’s students graduated with sustainability training from the partner African universities and 5 jointly published books on African sustainable development.

Both above-mentioned initiatives represent efforts of the higher education institutions to enhance their contribution to the global pursuit of sustainable development through the promotion of Asia-Africa partnership on the one hand and academia-industry-government collaboration on the other. Some of the institutions and individuals involved in both these initiatives have decided to organize a ‘Japanese-African University Dialogue’ as a TICAD VII Partner Project to facilitate a synthetic discussion on the outcome of the two initiatives, focusing on the role of Japanese and African universities for global sustainable development. Its organization has been made possible by the voluntary participation of all the speakers and in kind contribution of the participating institutions plus a partial but critical support of the meeting cost by AfDB.

2. Over-all aim, objectives and ‘hoped-for’ outcome

The main aim of the Japanese-African University Dialogue was to stimulate the public debate and awareness of the critical role the universities should play in promoting Africa-Asia partnership for the pursuit of global sustainable development, and thereby to contribute to strengthening of knowledge exchange, creation and sharing in the TICAD
process.

More specifically, the meeting had the two following objectives:

1. To facilitate an exchange of views and experiences on how universities may engage strategically and practically in support of local and global sustainable development; and

2. To consider in an exploratory fashion the challenges and opportunities for international university-industry collaboration in support of Africa’s sustainable industrialization, with the participation of the African and Japanese private sector.

This meeting was framed as a ‘dialogue’ in order to encourage sharing of views among the participants and appreciation of diversity as well as commonality of viewpoints. No attempt was made to generate any consensus or agreement. There was, therefore, be no explicit ‘collective’ outcome from the meeting (apart from this report containing a summary of discussions and photos of panel sessions for distribution to the participants). The principal outcome, it was hoped, would be individualized learning or reflection. Since the meeting preceded TICAD VII, and as some of the participants in the meeting were to have speaking roles in different TICAD VII sessions and side events, some of the individual learning and reflection might find a wider audience during TICAD VII.

3. Venue and format

**Venue:** Fukutake Learning Theater (B2 Floor, Fukutake Hall), The University of Tokyo

The Japanese-African University Dialogue was held at Fukutake Learning Theater, Fukutake Hall, located in the University of Tokyo, Hongo campus. Fukutake Learning Theater being designed in such a way that it can support learning and creativity through a dialogue, the setting of the Fukutake Learning Theater was deemed suitable to facilitate the dialogue since the panelists were placed at platform position at the bottom and audience at upper place which promoted “dialogue” between speakers and audience as shown in the picture below.
**Audience**: Approximately 50 people participated in the dialogue comprising panelists, general participants and members of the secretariat.

4. **Opening Session**

4.1. **Opening remarks by Professor Taikan Oki**

Opening the TICAD 7 partner project, Prof. Taikan Oki, a special counselor to President, the University of Tokyo, pointed out that he is truly honored to welcome everyone in TICAD 7 but on the project that Japanese and Africa universities dialogue on global sustainable development. Prof. Taikan Oki is a professor at the University of Tokyo, majoring in water, hydrology resources and climate change. The University of Tokyo as a leading platform for research and education, it offers courses in various disciplines in undergraduate and graduate levels. Currently, the university has approximately 27000 students, 4300 students from abroad and 60 from Africa.

The Japanese-African University dialogue event is organized to facilitate the discussions on how partnerships among Japanese and African institutions of higher education can contribute to the pursuit of African and global sustainable development. There are two initiatives that have contributed to today’s TICAD 7 partnership project. Firstly, the Education for Sustainable Development for Africa (ESDA) in collaboration with African Development Bank (AFDB) and other leading universities. The second Initiative is the South African Japan universities (SAJU) in which a conference was held in Pretoria on May 2019. These two initiatives represent the higher education institutions to enhance their contribution to global sustainable development through the promotion of Asia-African partnership and collaboration with academia and governments.

Given the diversity and nature of sustainability development, the role of universities in Africa is to create, exchange and share knowledge which is being transformed as the power to increase relationships with communities, industries, and government. All the stakeholders including both young and older generations should acknowledge and understand the importance of education for sustainable development and support education systems at all levels from primary to tertiary. He concluded that active engagement and productive discussions in the Japanese-African dialogue will contribute to a new perspective, ideas and insights of the bright future of Africa.
4.2. Opening remarks by Dr. Keiko Takei

Dr. Keiko Takei, the chief education analyst, human development department in African Development Bank, Cotevoire noted that together with Prof. Emmanuel Mutisya (a program coordinator, Africa Development Bank) have been working for the Education Program in the department of human capital, a skills development program which leads initiatives on education and skills, health and nutrition and job policy in Africa.

Africa continues to face the challenges of providing education to the drastically growing youthful population. By 2050, Africa will have the largest population of the youth in the world and therefore, Africa education requires expansion in terms of quality, infrastructure and increasing the capacity of teachers to deliver quality training. A given percentage of the youth in Africa lack the necessary education and skills to adapt to the fast-changing world.

The continent continues to face the need to provide new skills for young people that respond effectually to the fast-changing world. With the current poor education outcomes, lack of relevant skills and competences and poor access to decent jobs, the youths are unable to reach their potential and effectively continue the Africa transformation. The AFDB vision is to harness the potential of 1 billion people by building skills and promoting technologies to provide better jobs, ensure equal opportunities and increase work competitiveness.

AFDB recognizes education as one of the fundamental criteria of turning Africa youth into economic developers. As part of humanitarian aid, AFDB supports education and skills in general however higher education in particular as the part of improving quality of life of the people in Africa. The AFDB recognizes that the direct engagement of higher education institutions in delivering high value and critical for success, however the universities need to reform themselves to provide the necessary knowledge and skills through partnering with particularly TICAD VI and industries Japan-Africa partnership brings scholarships funds, African education fund, science, and technology programs all funded by the government of Japan.
5. Panel discussion 1: The Role of Universities for Global Sustainable Development

Chair: Prof. Taikan Oki (Senior Vice-Rector, United Nations University/Professor, University of Tokyo)

The first panel discussion moderated by Prof. Taikan Oki related to the first specific objective of the conference which sought to exchange views and experiences on how universities should engage strategically and practically in support of local and global sustainable development, with a particular focus on the possibility for cooperation and collaboration between Japanese/Asian and African Universities.

The panel discussion 1 panelist included:

1. Prof. Kayoko Hayashi (President, Tokyo University of Foreign Studies)
2. Prof. Tawana Kupe (Vice-Chancellor, University of Pretoria)
3. Prof. Masanori Kasahara (Acting President, Hokkaido University)
4. Dr. Jewette Masinja (School of Mines, University of Zambia)
5. Prof. Peter Mbithi (Chair, ESDA Project, University of Nairobi)
6. Dr. Molapo Qhobela (CEO, National Research Foundation, South Africa)

5.1. Prof. Kayoko Hayashi (President, Tokyo University of Foreign Studies)

Prof. Hayashi gave an overview of the missions and visions of Tokyo University of Foreign studies, how the university plays a role in support of local and global sustainable development.

African Studies is one of the unique parts of Tokyo University of Foreign Studies developed since 1964. Tokyo University of Foreign studies started an African studies center in 2017 for promoting research education and contemporary issues of Africa. It is believed that through this the University contributes to the most fundamental part of global sustainable development. It is clear that humanity is faced by challenges such as climate change, poverty and protection of biodiversity among other issues, and it is impossible for one country to handle all these challenges especially
with people of different cultures and different languages to cooperate to form a partnership.

Prof. Hayashi indicated that maintaining productive relations with people from different cultures is one of the worldwide challenges which hinder efforts to solve serious problems in order to achieve global sustainable development. Through this context, the Tokyo University of Foreign Studies has set two missions to contribute towards global sustainable development: 1) to contribute to the understanding of different cultures through education, research, and networking. In addition, the university focus on a wide range of studies on human and social science that focus on various areas other than Japan. Through foreign exchange programs, the students are able to learn and understand different cultures. 2) To share research with various diverse societies, the key objective being to reach people from different cultures. In conclusion, Prof. Hayashi stated that as the university president, she believes that relationships between the university and the society should be stronger and thus the students encouraged to be involved in a broader social context. A mutual understanding between people from different backgrounds should be enhanced.

5.2. Prof. Tawana Kupe (Vice-Chancellor, University of Pretoria)

Prof. Kupe presented on how to encourage and enhance collaborations and partnerships with other universities in African and Asia for global sustainable development. Prof. Kupe pointed out that the universities attempt depending on their capacities to play a role in sustainable development through the mechanism of collaboration and partnership in which some partnerships already exist in the networks and others can be created through meetings/dialogues.

Furthermore, he noted that the universities need to highlight which sustainable development goals out of the 17 goals are being taught, researched on and the expected impacts. Therefore, a coordinated strategy between Africa and Asia is important to indicate how the universities play a role in sustainable development. The University of Pretoria focuses on research on current challenges affecting both African and Asian continent with an aim to ensure sustainable development.

ESDA as one of the existing partnership between Africa and Japan universities, need to focus on expanding the networks with other Asian universities and also from other continents like Australia to facilitate global sustainable development. Another existing partnership is Alliance for Africa partnership, a collaborative and cross-disciplinary
platform to address current global challenges in a way that is sustainable, effective, and equitable manner created by the Michigan state university in 2016. In South Africa, the University of Pretoria is the only partner and therefore more networks and partnerships should be encouraged in other universities for sustainable development.

Prof. Kupe indicated that the university of Pretoria established a Futures Africa campus, where Africa’s leading scientists and scholars from across the world and from a broad range of disciplines come together to leverage the benefits of transdisciplinary research to address the grand challenges that face Africa and the world. He believes that engagement in different collaborations and partnerships will create new future for Africa and Asia through transdisciplinary knowledge. In conclusion, Prof. Kupe indicated that it is important for the universities to collaborate and partner with governments, industries, policymakers, and other universities to co-create knowledge to ensure the achievement of global sustainable development.

5.3. Prof. Masanori Kasahara (Acting President, Hokkaido University)

Prof. Kasahara gave a presentation on collaboration between the University of Zambia and Hokkaido University. The collaboration between the two universities started in 1982 when Hokkaido University dispatched veterinarians and other experts to the University of Zambia with support from the Japan International Cooperation Agency (JICA). In 1986, the school of veterinary medicine (SVM) was established at the University of Zambia. Subsequently, the Research Center for Zoonosis Control was established at the SVM and an inter-university agreement was signed between the two universities, facilitating researcher exchanges and collaborative activities. Thus far, Hokkaido University and the University of Zambia have collaborated on a project to control zoonosis in which biosafety level 3 (BSL-3) laboratory was developed at the SVM and on a project for the visualization of the impact of chronic/latent chemical hazards and geo-ecological remediation in Zambia.

Prof. Kasahara pointed out that, through inter-university exchange agreements, Hokkaido University has put great effort into the exchange of students and researchers with universities in Zambia, Nigeria and South Africa, among others. In 2018, Hokkaido University received 105 students and 42 researchers from Africa and dispatched 97 researchers to Africa through the inter-university exchange program.

In recognition of Hokkaido University’s contribution to Japan Africa academic
exchanges, the ‘Study in Japan Global Network Project’ for Sub-Saharan Africa was commissioned by the government of Japan in 2014 and again in 2019, in which the number of students from Sub-Saharan Africa is projected to increase by 50% from 2019 to 2023. Since 2014, Hokkaido University has organized “Study in Japan Fairs” and academic exchange workshops in Ethiopia, Ghana, Kenya, Rwanda, South Africa, Tanzania, Uganda, and Zambia. It also established a satellite office in Nairobi in 2019 to extend its “Study in Japan” activities to Eastern and Western Africa. Prof. Kasahara added that, through all these collaborations and partnerships with African universities, Hokkaido University will continue to expand research and education activities in Africa and contribute to the sustainable development goals in Africa.

5.4. Dr. Jewette Masinja (School of Mines, University of Zambia)

Dr. Masinja made a panelist presentation on behalf of Prof. Luke Mumba, Vice Chancellor of the University of Zambia, who could not participate in the meeting for an unforeseeable reason. Dr. Masinja noted that sustainable development is crucial to the future of Africa and the entire planet. Universities are key contributors to achieving sustainable development goals through education, research and innovation. The university-industry partnership contributes to co-creation of knowledge. Since the SDGs can be grouped into 3 broad areas: well-being, the environment and the economy, universities play a central role in all the three. Education anchors all the SDGs whereby the universities play a role in addressing social inequality and power through entrepreneurship training, vocational skills development and open/distance education.

Through curriculum reviews, strategic partnerships such as with ATDC, Hokkaido University and ESDA, the University of Zambia contribute to environmental management. In the 3 broad areas of SDGs: well-being, the environment and the economy, higher education facilitates social mobility and contributes to various ways making people more resilient and able to face various challenges. Through research, universities facilitate innovative solutions to the world’s challenges, such as climate change and global warming. Prof. Masinja noted that research is crucial in understanding the interactions of various SDGs, identifying tradeoffs and mutual reinforcements and developing a balanced approach in pursuing them. Innovative solutions must be developed in collaborative efforts to facilitate economic development by enhancing university-industry partnerships. The global sustainable development must take into account the need to promote and improve on local knowledge and therefore, universities must connect knowledge creation
with practice and thereby address the problems that the immediate society faces.

Universities must drive integration across sustainability goals and have an important role to identify inconsistencies and suggest policies to address all the 17 SDGs and 169 targets. In conclusion Prof. Masinja emphasized that universities must have direct communication channels with governments, and should contribute towards the capacity building of educators to incorporate sustainable development into their respective fields and should ensure that graduates develop skills to understand sustainable development from a transdisciplinary perspective.

5.5. Prof. Peter Mbithi (Chair, ESDA Project, University of Nairobi)

Prof. Mbithi pointed out that universities remain the backbone of global sustainable development. At the heart of sustainable development, the higher education and research in support of the creation of knowledge-based economies in Africa, particularly through the catalyzation of education and skills revolution and active promotion of science, technology, research, and innovation, to build knowledge, human resource capabilities and skills for the African century. As an engine of development, higher education research and education must address Africa’s changing development demands and challenges.

However, the African universities have for decades lagged behind in support of sustainable development. This has been occasioned by the decline in the real value of university budgets, increase in undergraduates’ intakes, increase in academic staff turnover, and research facilities deterioration. Also, with the minimal research output that Africa produces accounting for less than 2% of global publications and international scientific research, and high aging population of professors and trainers with very low generational renewal, mainstreaming of sustainability science research and education should drive the transformation and reformation of our universities. Prof. Mbithi emphasized that more research is needed, and a bigger percent of young scholars in our universities to implement the agenda of sustainability science.

Furthermore, Prof. Mbithi indicated that through the Education for Sustainable development in Africa Program, a number of initiatives have been employed by various stakeholders to strengthen the role of universities, identify horizontal and vertical synergies and integrate global sustainable development frameworks into national development visions. ESDA Program, comprise three Master’s degree programs whose goal is to address some of the most critical sustainable development concerns of our
continent. The ESDA book series is one of the outputs achieved from the ESDA program. The books are primarily outputted from research on rural-urban linkages and sustainable development. In conclusion, Prof. Mbithi pointed out that the ESDA efforts have contributed to curricula reforms, strengthen active participation of young researchers on education and research, and produced research materials crucial in informing sustainable development through increased partnerships among universities, and especially between Japan/Asia and Africa.

5.6. Dr. Molapo Qhobela (CEO, National Research Foundation, South Africa)

   Dr. Qhobela presented on what needs to be done differently from the point of view of the enablers of knowledge generation, namely the funders. He indicated that the National Research Foundation, as an example of a funder, supports universities to undertake research, train students and expand knowledge boundaries. As facilitators they also bring together individuals who are in the business of knowledge. The National Research Foundation, with its counterparts, is integral to SAJU and it strongly believes in bringing the South African university system together with the Japanese systems.

   Dr. Qhobela highlighted two imperatives; never to compromise in the pursuit of quality in anything that is done towards creating greater social, environmental and economic impact. Also, to create impact the university system should address the wicked global problems such as inequality, food insecurity and poverty. He further noted that more consideration should be given on how to develop initiatives that are multisectorial, interinstitutional and multidisciplinary for an integrated approach to issues of sustainability.

   One challenge the enablers face is to embark on and support long-term initiatives to finding the solutions to problems. In conclusion, Dr. Qhobela pointed out that there is a need to take a holistic view in different levels of challenges in order to recognize the way relationships are designed and the value in connecting our continents with each other. Also, he indicated that there is a need to be more creative to ensure inter-African continental collaborations.

5.7. Q & A session with Audience

   In the discussion that followed the panelist presentations, several concerns were raised from the audience which included:
1. Prof. Taikan Oki (Senior Vice-Rector, United Nations University/Professor, University of Tokyo): Since Internships were pointed out to be important for the students, Prof. Oki inquired about the role of the students in sustainable development, especially whether there was a need for more Ph.D. students who are equipped with expertise in special fields or more of generally trained bachelor students.

2. Prof. Xoliswa Mtose (Vice-Chancellor, The University of Zululand): Prof. Mtose argued that the rural universities should not be excluded in the global sustainable development debate, and asked how the rural universities should be positioned in sustainable development framework.

3. Prof. Mari Iizuka (Professor, Doshisha University): Firstly, Prof. Iizuka enquired a bit of elaboration regarding the industry involvement in global sustainable development. Secondly, she asked whether there are other mechanisms being instilled apart from academic collaborations to facilitate innovation.

4. Ms. Zukiswa Nzo (Kezzy Diversity & Inclusion solutions, Toyo University): The question was directed to ESDA/enablers; Ms. Zukiswa indicated that sustainable development could not be achieved if some people were left behind. Given the 17 SDG goals, her question was whether there were any deliberate measures included to ensure that no one would be left behind, particularly people with disabilities, in sustainable development. She further noted that the youth involvement and gender issues were considered but the people with disabilities were often excluded. Inclusion of more diverse community provides more innovate ideas for solving complex problems.

5. Prof. Ahmed Bawa (CEO, Universities South Africa): Prof. Bawa indicated that most of the discussion revolved around international collaboration/knowledge building/capacity building and the university engagement on sustainable development, but wondered to what extent these engagements reflected sustainable development goals.

To address the concerns raised by the audience the following were panelists responses:

Prof. Molapo Qhobela: Addressed the issue of deliberate measures to include the disabled in sustainable development, He depicted that this issue is imperative and it should be taken into consideration as well as the issues of gender and equity of opportunities. Regarding the issue of postgraduates or undergraduates, all should be part of solutions of the wicked problems faced by the globe today and should be considered but then the knowledge system should be developed to facilitate sustainable development.

Prof. Peter Mbithi: Agreeing with Prof. Qhobela regarding the issue of inclusion of the
disabled in sustainable development he indicated that Kenya and Tanzania universities have included deliberate measures since the university education requires that the facility agenda to make sure that all the functions are accessible to the disabled. For the issue of the role of industry in sustainable development, Prof. Mbithi pointed out that the industry plays a role in providing innovation and leadership funds research, at the University of Nairobi he indicated the university catalyze innovation by creating an innovation week whereby people from diverse areas join to shares their innovative ideas.

Dr. Jewette Masinja: Addressing the question regarding the role of students on the sustainable development, Dr. Masinja indicated that the students have designated that the ESDA program and internships have benefited them by gaining new experiences and real job situation. Also, for industry involvement, students are recruited in the system from the mining industry to facilitate change agents inside the industry. Also, the industry incorporated programs whereby the industry speaks and provide information to the students and this has created a bridge to consolidate the situation. Taking into account the marginalized issues especially the gender, the school of mines provide scholarships students and has upgraded the scholarships for female students from 50% to 75%. These have contributed to an increase in the number of female enrolled in the scholarships to more than 50%.

Prof. Masanori Kasahara: Currently Japan has only accepted 1700 African students, therefore, there is a need to increase the number of African students. The Hokkaido University through the offices established in Zambia and Kenya target to exchange more African students in Japan and also send more Japanese students to African universities.

Prof. Tawana Kupe: Prof. Tawana Kupe pointed out that the current fundamental problem is the ownership of SDGs as pointed out by Prof. Bawa. The 17 goals were created to indicate the requirement for Africa, Asia, and other developing nations and to go behold the developed SDGs. SDGs create the vision of the society, therefore, they put into consideration to everyone regardless of their positionality in the society including the poor, women, the disabled and also indigenous people. He further noted that taking the transdisciplinary knowledge and sharing it with other people then it will enable co-creation of the knowledge. Therefore, the universities should think about 3 important things: co-create knowledge, translate the knowledge to the society and also encourage the transdisciplinary approach in order to encourage development of the society.

Prof. Kayoko Hayashi: To work with the African universities to exchange students is somehow challenging for the Japanese universities at this stage, but then to know Africa is so fantastic, therefore, there is need to continue encouraging and creating opportunities in the universities for the Japanese students to go to Africa and also accept more students
from Africa.

5.8. Final remark by the Chair: Prof. Taikan Oki

Given his capacity as the Chair, Prof. Taikan Oki concluded the session by appreciating all the panelists for their informative presentations and responses to the audience comments.

6. Panel Discussion 2: International University-Industry Collaboration for Africa’s Sustainable Development

Chair: Prof. Francis Petersen (Vice-Chancellor, University of Free State)

The second-panel discussion moderated by Prof. Francis Petersen corresponded to the second specific objective of the meeting and examined the challenges and opportunities for international university-industry collaboration in support of Africa’s sustainable industrialization, with the participation of the African and Japanese experts from the private sector as well as universities.

The second-panel discussion panelists included:

1. Prof. Yasunori Baba (Professor, Reitaku University)
2. Prof. Mari Izuka (Professor, Doshisha University)
3. Mr. Clinton Gass (Managing Director, Rooibos Marketing Ltd)
4. Mr. Iwasuke Shimada (Managing Director, Toshiba Africa Ltd)
5. Mr. Yo Murofushi (CEO, And Africa Co., Ltd)
6. Dr. Farai Kapfudzaruwa (University of Pretoria)

6.1. Prof. Yasunori Baba (Professor, Reitaku University)

Based on the experience of the Alliance for Global Sustainability (AGS), he emphasized the importance of mindset to realize fruitful University-Industry Collaboration for society. AGS was established in 1996 by three science and technology universities – ETH Zurich, MIT, The University of Tokyo– and their associated partners
with the aim to develop capacity and new models for integrated research, education and outreach. Having well-structured frame, academic talent and affluent financial resource, it has worked as a pioneer of collaboration between industries and the world’s leading universities in the area of sustainable development.

After two decades since the establishment, AGS has achieved expected outcomes in the research. However, when it comes to the area of outreach, Prof. Baba felt dubious about outcomes. Because of problems in the program management and of moral hazard, he thought AGS didn’t perform well enough for producing visibility of social impact expected by the AGS initiative and receiving a proper acknowledgement from donors. He remarked also that sometimes people in academic concentrated only on achieving individual outcomes under a very competitive environment and unconsciously lacked the mindset to find an intercept between outcomes of science and technology and society.

This gave an implication for Africa to benefit from alliances or partnership projects between industries and universities: it is important that people engaged in a project have the mindset to consider what is good, right and just for everyone. He concluded his part introducing the concept of “Phronesis”. It was a practical wisdom which was explained in Aristotle’s framework, telling leaders to do what is good for their companies and societies.

6.2. Prof. Mari Iizuka (Professor, Doshisha university)

Prof. Iizuka started her speech by explaining the perspective of Japanese big businesses towards SDGs. Currently, not by CSR department but business planning department in a company deals with SDGs issue which means that they try to place SDGs in its main business. This situation shows how serious Japanese businesses are to achieve SDGs. However, the level of understanding of middle managers is still low, and they are struggling to find a way to implement SDGs-related activities in business.

To reply to this challenge, she highlighted the advantage of students learning in Japan in the African Business Education Initiative for Youth (ABE Initiative). According to the result of research, the students in the ABE Initiative are the most strongly willing to promote Japanese business and build a relationship with other countries compared to the students in other scholarship programs funded by the government of Japan. It is because the ABE Initiative has an internship component which makes the students’ mindset more business-oriented than that in the other programs. These students are the
great asset for Japanese industry to expand its business to Africa where students of the ABE Initiative are from.

Small and Medium Enterprises (SMEs) are another asset for Japanese industry. It is well known that the Japanese industry is greatly sustained by SMEs which are not so famous but have advanced skills and technology. They have a huge potential to develop a prototype which adapts reality in Africa.

The Japanese big businesses have shaped policy to develop a platform to contribute to SDGs achievement. Involvement of the human resources from Africa to the platform is so important that Japanese big businesses can be much more aware of the real challenges of Africa. Besides, Prof. Iizuka recommended universities to link the assets which are now scattered by presenting a useful output of research not only for academic purpose but also to industries so that all Japan can find a solution together.

6.3. Mr. Clinton Gass (Managing Director, Rooibos Marketing Ltd)

Mr. Clinton Gass has been doing Rooibos tea business for 21 years in Japan. The market in Japan has become the biggest market for Rooibos tea outside South Africa with about 2,500 tons of consumption. He believed that Japan had a big market potential which would be two or three times bigger than the current volume of sales. However, the rooibos industry faces challenges in production and marketing. The production has been severely affected by natural disaster probably caused by climate change. On the marketing side, one of the constraints is that correct and positive information about Rooibos tea has not been communicated enough to the market.

Knowledge should be transferred between industries and universities not only in Africa but also from Japan to Africa. Japanese academics have done a lot of research about Rooibos tea since the 1980s. Furthermore, significant collaborative research between academic institutions in South Africa and Japan has been funded by the respective governments. Despite that, it doesn’t bring value to the market unfortunately. What happened instead was that the interesting research was done and the results were published in papers, but the interesting findings were not translated to the industry in a useful way.

Mr. Gass gave two suggestions in conclusion. First, it is important to have more engagement of industry and researchers in order to pursue positive and marketable outcomes. Second, research institutions need to better communicate their findings to
industry so that they can make better use of it.

6.4. Mr. Iwasuke Shimada (Managing Director, Toshiba Africa (Pty) Ltd)

Mr. Iwasuke Shimada, a Managing Director of Toshiba Africa (Pty) Ltd, introduced Toshiba group’s business in Africa. Toshiba Corporation, a Japanese leading manufacturing company, established their representative office in South Africa in 1967. Currently there are a corporate subsidiary, Toshiba Africa in South Africa, which covers Sub-Saharan African market, and its branch in Kenya for Eastern African market. There are three more offices of Toshiba Group in South Africa and Tanzania focusing on specialized business activities.

When it comes to the business of Toshiba, people are likely to imagine consumer products such as laptops and TVs. In Africa, however, they focus on the energy and infrastructure industries. Toshiba is engaged in whole value chain supplying equipment of generation, transmission and storage in the energy industry, and also provide products contributing for smart use of energy. All Toshiba group recognize SDGs and they contribute the goals through their business.

Partnerships are key to Toshiba’s business in Africa therefore Toshiba contribute to human resource development. At the offices in Japan, Toshiba host interns from African countries who are studying in Japan through ABE Initiative scholarship program. Additionally in the area of geothermal energy development, concluding Memorandum of Understandings with five African countries, Uganda, Ethiopia, Tanzania, Djibouti and Malawi, Toshiba promote skill development and technology transfer. Lastly, the company works with global group companies and international partners with respective strengths and resources in African countries in their business development.

Toshiba also has Cooperate Social Responsibility (CSR) activities in Africa. With a focus on Science and Technology Education area, Toshiba delivered program for science education and donated study materials to a high school in South Africa. In addition Toshiba’s affiliate organization, Toshiba International Foundation contributed also to human resource development by supporting SAJU seminar and conference. Furthermore, Toshiba Africa offers 6 months internship in which four interns are working part time assisting research, logistics and administration.

In conclusion, Mr. Shimada emphasized that building a partnership with both local and international partners was the first pillar for Toshiba business in Africa. These partnerships would bridge people and businesses between Japan and Africa, enabling
Toshiba to strengthen the network with various stakeholders and increase knowledge exchange and dialogues.

6.5. Mr. Yo Murofushi (CEO, And Africa Co., Ltd)

The company And Africa, which Mr. Yo Murofushi founded in 2017, offers three main services: support for realizing an investment in startups in Africa, direct investment in startups in Africa from And Africa, and consultation to Japanese corporations. All three members of the company have a professional background in a consulting company or software company.

The mission of And Africa is to contribute to job creation in Africa by empowering entrepreneurs and create exponential growth opportunities for Japanese corporations. The company believes that boosting investment into African startups is a key solution to achieve the missions. Specifically, And Africa offered various services in its daily business such as running co-working space and an online matching platform, organizing matching or pitching event and supporting fundraising.

About University-Industry Collaboration, Mr. Murofushi shared his idea of how to make it happen, showing the image of business development process. Upstream phase in the process such as research and prototype production needs support from academic institutions because the risk there is still high and technical verification is required. However, once the prototype is developed, support from the private sector such as incubators and local venture capitals will be essential to verify the feasibility and then realize mass production with their financial backup. Then, at the most matured stage of business which is expansion phase, hands-on support from investors will be required to make sure the sustainability of the business.

Lastly, in the presentation, Mr. Murofushi expressed his expectation from universities from business perspective taking an example of support done by his company for an agritech company in Africa. In order for the agritech company to have a solid technical foundation of the product, it seeks for scientific grounds which university can give by conducting scientific research. This is exactly the domain where universities can show up with their strength.
6.6. Dr. Farai Kapfudzaruwa (University of Pretoria)

In his presentation, Dr. Farai Kapfudzaruwa focused on the role of business school because it can work as an interface of universities and businesses. However, business schools in Africa often operate alone due to competition among them. A key question here is how business schools can respond to the needs in society. Without sharing their resources and experience, business schools cannot solve the problem.

For example, the Gordon Institute of Business Science (GIBS) in the University of Pretoria, provides executive education for innovation, strategic thinking and so on. The program is offered in a short period of time so that executives can join it. This is small but effective effort of business schools to involve key business person in the academic field and then let them connect academics to industry.

In order to create innovation in society, social entrepreneurship is put a strong focus in Africa. Business schools can contribute also to this point if they act collectively to address the issues in a society. Furthermore, if business schools such as the one in the University of Cape Town, the University of Victoria and the University of Nairobi interfere with each other, they can create more opportunity to improve the way to teach, learn and bring the impact to society.

Prof. Kapfudzaruwa stated that now, the continent of Asia and Africa were the area where people were exposed the most to challenges related to sustainable development. At the same time, these continents have the fastest growing young population which can function as advantage factor for development. What is also advantageous for these continents is that Japanese businesses are now strongly keen to take part in sustainable development from the perspective of corporate responsibility. This situation creates concrete opportunities for business schools in Africa to work with institutions in Asia and co-create knowledge needed in Africa.

6.7. Q & A session with Audience

The discussion followed the panelist presentations with several concerns raised from the audience, including the following:

1. Mr. Robert Massimo Alfonsi (PhD student, University of Tokyo): Given that people will move more and more from rural to urban areas for hunting jobs, it should be considered how the partnership between academia, government and industry can
make reverse migration happen. He asked if co-creation of start-ups in rural areas by academia and industry would facilitate the reverse migration and wondered what people could learn from the experience of Japan in this respect.

2. **Prof. Tawana Kupe (Vice-Chancellor, University of Pretoria):** He stated that SMEs accounted for a major portion of companies in Africa. However, the current economic growth in Africa came from big companies which were usually multinational companies. Additionally, business schools in Africa provided education to big companies. His question was how business schools in Africa could reposition their education towards SMEs and how co-creation of knowledge by universities and industry could be made to take place.

3. **Dr. Emmanuel Mutisya (Program Coordinator, African Development Bank):** He introduced the scholarship program which was offered by AfDB with the fund from Japan for the purpose of skills enhancement and human resources development in Africa. This program aimed also to strengthen partnerships between universities in Africa and Japan, and with the private sector in Japan. Especially for the private sector, the program prepared an opportunity to work with African universities so that they could co-create new knowledge. Taking advantage of the opportunity, he expected that the existing partnership would advance more.

4. **Prof. Takahiro Morio (Professor, University of Tsukuba):** Taking into consideration the fact that the current young generation was a digital native and also Africa was a hub of start-ups, he remarked that business landscape in Africa was highly affinitive for digital business from the perspective of the young people. Based on this situation, he suggested that it was crucial to involve young people in collaboration between university and industry not only as a participant but also a planner of collaborative activities.

5. **Mr. Nicolas du Bois (And Africa, University of Tokyo foundX):** His first question was what African countries could learn from historical development experience in Japan. He mentioned that people in Japan could go directly to work just after graduating from high schools because of the strong linkage between high school and private company. He believed that secondary education in Africa should be improved to support people at the bottom. For his second question, he mentioned that the presence of China in Africa was more striking than that of Japan in terms of the number of students going to study in the respective countries, the volume of investment and so on. Given the fact, he questioned how Japan could position itself in the framework of Asia-Africa collaboration in comparison to the lively activities of China in Africa.

6. **Professor (un-identified):** Is there any example of University-Industry collaboration which resulted in innovation and start-up in Africa?

7. **Ms. Zukiswa Nzo (Kezzy Diversity & Inclusion solutions, Toyo University):** She noted
that Corporate Social Responsibility is one of the methods for private companies to achieve social impact. However, the impact of the CSR initiative was not always mentioned while the companies presented the progress. Her question was how could companies and universities work together to monitor and evaluate the social impact brought about by the CSR initiative, and analyze if the impact was led by the use of information from any research?

To address the concerns raised by the audience the following were panelists’ responses:

**Dr. Kapfudzaruwa** pointed out first that there was no single definition of startup and incubation. Rather, there are various types of entrepreneurs so as social entrepreneurs and the stage of business development depends also on each entrepreneur. It means that necessary support to entrepreneurs should be also various. Based on this understanding, one key message to the business schools is that they are capable to support entrepreneurs at different stages. They can guide and navigate entrepreneurs by reviewing entrepreneurs’ stage of development and sharing their appropriate knowledge to scale up their businesses so that they can give a bigger impact to society.

**Mr. Murofushi** addressed the question of what to learn from the experience of Japan for sustainable development in Africa. He put emphasis on the role of local banks in a rural area in Japan. The local banks have supported companies which were doing business in the same area by connecting them to the market and key persons and resources. As he observed that startups in Africa were under a similar business environment as that in Japan, the financial institutions focusing on a rural area will be essential for businesses in Africa. University-originated ventures will also need this kind of financial providers.

**Mr. Shimada** was willing to interact more with other private companies or universities both in Africa and in Japan because Toshiba didn’t have much communication with other private companies in Africa but it would get more important. To do so, he invited the audience to the Toshiba booth in the TICAD VII exhibition site at Yokohama so that Toshiba could exchange business information and possibly a chance of business together.

**Mr. Gass** stated that it would be the key if agricultural technology could be transferred from Japan to Africa to think about the possibility of rural development in Africa. It is often small farmers who are working in the agricultural sector in Africa. In addition, young people are reluctant to be engaged in the sector because of tough work. Therefore, it is highly expected that micro high-tech agricultural equipment would be marketed to Africa from Japan.

**Prof. Iizuka** emphasized that now is the time that Japan should learn from Africa about
the reality of the continent to co-create business opportunity there rather than Japan teaches Africa development. At this point, co-learning is key to advance a society. Innovation for sustainable development will happen by reviewing the role, attitude and mentality of each stakeholder. Among them, she highlighted the role of business school discussed in the panel because she believes they can play an important role thanks to its practical education. Then, even in the digital era, human to human interface is always essential to realize co-creation and co-learning.

Prof. Baba had wanted to touch on the concept of Kaizen (continuous improvement) in this dialogue. It is because Kaizen was a key method for the development of all industries in Japan.

6.8. Panel discussion 2 final remark by the chair: Prof. Francis Petersen

Considering African sustainable industrialization, Prof. Francis Petersen suggested that the first step would be to have knowledge banks in which people produces and develops new knowledge in a system. Then, once knowledge was produced, it should be appropriately disseminated to bring a real impact to society. Knowledge dissemination, which was one of the key aspects focused on this second panel discussion, needs an active engagement of universities and industries.

In order to make knowledge dissemination happen, the role of universities should be reconsidered. The university role is composed of teaching, learning and doing research. In addition to these functions, he emphasized that they should work for knowledge dissemination for society. Knowledge dissemination should be occurred in an appropriate way for society so that people could benefit of the use of it. To do so, he indicated that there were two types of approaches within universities: knowledge generation primarily aimed at research output, and knowledge generation aimed at societal impact. The first one is good at generating new knowledge. The latter one is a good interface with society and industries. Therefore, he claims that University – University collaboration should be also more intensified to learn from each other, and subsequently these learnings could benefit the overall university-industry engagement.
7. **Closing Session**

Prof. Ahmed Bawa, Chief Executive Officer of Universities South Africa (USAf), gave a closing address. Firstly, he expressed his gratitude to JICA for making possible his visit to Japan. He expressed also his appreciation to Prof. Masafumi Nagao, Prof. Shinichi Takeuchi, Prof. Takahiro Morio, AfDB and all members of the team that made this conference happen. He stated that this wonderful opportunity was created by the international partnership of universities, in particular between (USAf) and the Tokyo University of Foreign Studies (TUFS).

What is the role of universities in producing social justice? This question underlies this dialogue. And this question should be considered in the context of a society, such as South Africa, which is deeply divided due to severe inequality and poverty. Prof. Bawa emphasized first that it was essential for universities to ensure the sustainability of higher education so that they can best give effect to their role which depends on their ability to continuously produce new knowledge and nurture academic talent.

Considering that so many challenges faced by humanity in the 21st Century are simultaneously intensely local and global, an international partnership of the kind that the South Africa – Japan Universities Forum contemplates can contribute to the co-creation of new knowledge. At the centre of this kind of engagement the importance of the principle of mutuality has to be observed.

Universities as social institutions are placed in a unique position to play a critical role in human development and wellbeing. As knowledge intensive institutions they are natural bridges between societies and can therefore contribute both to global and local issues by performing both on the international and national stage. At the same time, universities have also to contribute to nation building, democracy deepening, economic development and so on by knowledge creation and human capacity development.

In addition, taking into consideration that societies around the world are sliding towards anti-intellectualism which leads to social and political distrust of science and experts, we should rethink the role of universities in terms of their engagement with society. There can be no more important challenge for universities than to produce new generations of locally and globally engaged scholars of high quality – a new generation of intellectuals that can work in a global common to address some of the most pressing challenges that humanity faces.
Appendix

Profile of Panel Chairs and Panelists

**Prof. Taikan Oki** is the Senior Vice-Rector at the United Nations University, and the United Nations Assistant-Secretary-General. Concurrently appointed as a Special Advisor to the President and a Professor (Integrated Research System for Sustainability Science) of The University of Tokyo. His areas of expertise are global hydrology and the sustainability of world water resources including the virtual water trade and water footprint. He was one of the coordinating lead authors for the chapter “Freshwater Resources” of the IPCC WGII AR5. He got many awards including the Biwako Prize for Ecology in 2011. He is the first Japanese AGU Fellow in its Hydrology Section (2014).

**Prof. Kayoko Hayashi** is President of Tokyo University of Foreign Studies (TUFS). She specializes in Turkish social history, particularly that of the Ottoman era. She has worked at TUFS since 1993, teaching Turkish language, culture, and history, and has held her current position since April 2019. She has also played leading roles in respected academic organizations, including the Japan Association for Middle East Studies, the Historical Society of Japan, and the Science Council of Japan.

**Prof. Tawana Kupe** is the Vice-Chancellor and Principal of the University of Pretoria, South Africa since January 2019. Previously he was Vice-Principal of the University of the Witwatersrand, where he also played a key role in the establishment of select new innovative initiatives, including the Africa Centre for the Study of the United States. His main field of academic specialization is media studies and journalism. Prof. Kupe holds a DPhil in Media Studies from the University of Oslo in Norway.

**Prof. Masanori Kasahara** is the Acting President of Hokkaido University (HU), Sapporo, Japan. He received his M.D. and Ph.D. from HU, where he also holds an appointment as Professor in the School of Medicine’s Department of Pathology. He received postdoctoral training at the Max Planck Institute for Biology, Germany, and then held a faculty position at the University of Miami School of Medicine, FL, USA. His research interests include the role of the major histocompatibility complex in health and disease. Previously he served as dean of the School of Medicine.
Prof. Luke Evuta Mumba is the Vice-Chancellor of the University of Zambia. Previously he served for 10 years at the African Union’s New Partnership for Africa’s Development Planning and Coordinating Agency (NPCA) in South Africa. His current research interests include biotechnology and biosafety, Science Technology and Innovation Indicators/Policy. He is a Member of the EUFORUM Board’s Executive Committee. Professor Mumba has a PhD in Plant Genetics from University of Cambridge. [Unfortunately Prof. Mumba was unable to participate in the meeting; his panelist role was replaced by Dr. Jewette Masinja.]

Prof. Peter Mulwa Felix Mbithi is the Vice Chancellor and Professor of Veterinary Surgery, University of Nairobi (UoN). He is an eminent scholar with visionary and high level leadership insights and experience of over 30 years. He is currently the Chair of the Education for Sustainable Development in Africa (ESDA), and is a Board Member of the World Universities Network (WUN). Prof. Mbithi has a Ph.D. in veterinary science from the University of Nairobi.

Dr Molapo Qhobela is Chief Executive Officer of the National Research Foundation, South Africa. His prior appointments include: Vice-Principal: Institutional Development at the University of South Africa; Deputy Director-General at the Department of Science and Technology; Deputy Director-General and Acting Director-General of the Department of Higher Education and Training. Dr. Qhobela obtained his PhD (Plant Pathology) from Kansas State University.

Prof. Francis William Petersen is the Rector and Vice-Chancellor of the University of the Free State since 1 April 2017. Previously he was Deputy Vice-Chancellor of the University of Cape Town, Executive Head, Strategy at Anglo American Platinum, Chairman of the Board of the Council for Scientific and Industrial Research (CSIR), and member of the South African Minister of Science and Technology’s National Advisory Council on Innovation (NACI). Prof. Petersen holds a Ph. D in engineering from Stellenbosch University.

Prof. Yasunori Baba is Emeritus Professor of the University of Tokyo, and currently professor of economics at Reitaku University, Japan. Previously he was with the Research Center for Advanced Science and Technology (RECAST), the University of Tokyo. His research interests include economics of technical change and sociology of science and their applications to science and technology. Prof. Baba holds a DPhil from Sussex University, UK.
**Prof. Mari Iizuka** is a founding member of Global MBA program Doshisha University, Japan Global Compact Academic Network and Doshisha University Well-being Research Center. She obtained her MBA and MA (development economics) from Stanford and Ph.D. from Kyoto University. She worked at the World Bank, Asian Institute of Management in the Philippines and Ritsumeikan Asia Pacific University. Her research interests include Inequality, Business and Society and Mindfulness.

**Mr. Clinton Douglas Gass** has facilitated business between South Africa and Japan for over 20 years through roles including former Chair of the South African Chamber of Commerce in Japan and manager and business owner of companies primarily in the food industry. His main focus has been rooibos tea at the companies, Rooibos Marketing Ltd and Gass Co. Ltd, where under his leadership, Japan has become the largest market outside of South Africa. His academic ties include student and then instructor at McGill MBA Japan and collaborating with universities in Japan and South Africa for research on rooibos.

**Mr. Iwasuke Shimada** is Managing Director of Toshiba Africa (Pty) Ltd in Johannesburg since 2016 and its Kenya Branch in Nairobi since 2019. He joined Toshiba in April 1994, initially worked in manufacturing division, but most of his career has been dedicated to sales and marketing in international markets. His assignments have extended across Toshiba’s diverse product lines, from power systems to digital products, and to the markets of Europe, the Middle East, Africa, India and Southeast Asia.

**Mr. Yo Murofushi** is CEO and Founder of And Africa Co., Ltd. He focuses on the creation of African startup eco-system, through investment promotion for startups in Africa from Japanese investors. He used to work at major consulting firms like Deloitte for 5 years and had been engaged in M&A support. Based on that experience, he supports investment for Japanese investment funds, venture capitals, Japanese corporations, and angel investors, in support of African startups.

**Mr. Dr. Farai Kapfudzarwa** is a post-doctoral fellow at the University of Pretoria Centre for the Advancement of Scholarship (CAS). He also coordinates the Education for Sustainable Development in Africa (ESDA), a UNU-initiated inter-university collaboration project for sustainability capacity building in Africa, and heads the Next Generation Research (NGR) project being implemented in collaboration with 23 leading African universities. Dr. Kapfudzarwa holds a PhD in Business and Political Science from the University of Cape Town.
List of the members of Secretariat

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<th>Name</th>
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<tr>
<td>Prof. Masafumi Nagao</td>
<td>Research Advisor, International Development Center of Japan</td>
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<td>Prof. Shinichi Takeuchi</td>
<td>Professor, Tokyo University of Foreign Studies</td>
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<td>Ms. Ayumu Yagi</td>
<td>4th year student, International Christian University</td>
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<td>Mr. Ren Kitamura</td>
<td>3rd year student, Toyo University</td>
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<td>Mr. Masahiro Togasaki</td>
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<td>Ms. Minami Ishikawa</td>
<td>Undergraduate student, International Christian University</td>
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<td>Mr. Ryotaro Kurihara</td>
<td>Graduate student, Tokyo University of Foreign Studies</td>
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<td>Ms. Lilian Mbinya Muasa</td>
<td>PhD candidate, University of Tokyo</td>
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<td>Ms. Mariko Kaneko</td>
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Collaboration between the University of Zambia and Hokkaido University:
A Brief Overview

Masanori Kasahara, M.D., Ph.D
Acting President, Hokkaido University
27th August 2019

History of Collaboration with the University of Zambia

HU started to dispatch veterinarians and other experts to UNZA for technical cooperation under JICA projects

1982

HU started to dispatch veterinarians and other experts to UNZA for technical cooperation under JICA projects

School of Veterinary Medicine (SVM) was established at UNZA

1980

HU dispatched volunteers and experts to the SVM

Research Center for Zoonosis Control was established at the SVM

2007

Inter-University Exchange Agreement was signed, which greatly facilitated researcher exchanges and collaborative activities

2011

HU African Office was established at the SVM

2012

HU started the “Study in Japan Global Network Project” and dispatched “Study in Japan” coordinators to the SVM

2014

Joint Research Activities and Achievements

Bio safety level 3 (BSL-3) laboratory at the SVM, University of Zambia

• Bio safety level 3 (BSL-3) laboratory at the SVM, University of Zambia
• Development of measures for Ebola virus diagnosis and prevention
• Establishment of rapid gene diagnostic systems for tuberculosis
• 84 joint research papers published in international journals since 2006

Joint Research Activities and Achievements (continued)

Project for the Visualization of Impact of Chronic/Latent Chemical Hazard and Geo-Ecological Remediation in Zambia

Management of lead (Pb) contamination problems through multi-disciplinary approaches

• Improvement of water, sanitation and hygiene systems
• Low cost and high levels of safety through a pipeless network

Sanitation Value Chain Project

Overview of Human Exchange with Africa at HU

Exchange of Students and Researchers with Africa

• 105 students and 42 researchers from Africa
• 97 researchers from HU to Africa

INTER-UNIVERSITY EXCHANGE AGREEMENTS

SOUTH AFRICA
• University of Pretoria
• University of Stellenbosch
• University of the Western Cape

NIGERIA
• University of Ibadan

EGYPT
• Cairo University

Ghana
• Kwame Nkrumah University of Science and Technology

MOZAMBIQUE
• University of Coimbra

ZAMBIAN
• Copperbelt University
• University of Zambia

Japan-Africa Academic Network (JAAN)

Network of 22 institutions with common interests in academic exchange activities

Contribution of HU at the National Level

“Study in Japan Global Network Project” for Sub-Saharan Africa

Projected number of students from Sub-Saharan Africa (50% increase in 5 years)

The government of Japan commissioned “Study in Japan Global Network Project” for Sub-Saharan Africa to HU in 2014

A total of nine “Study in Japan Fairs” and seven academic exchange workshops have been held in Ethiopia, Ghana, Kenya, Rwanda, South Africa, Tanzania, Uganda, and Zambia

A new satellite office in Nairobi was opened in 2019 to extend “Study in Japan” activities to Eastern and Western Africa

Japanese Language Course at UNZA

Started in 2013, upgraded to the credited course in 2018

Document presented by the panelists
Prof. Masanori Kasahara (Acting President, Hokkaido University)
Conclusions

We will continue to expand our research and education activities in Africa and contribute to the SDGs in Africa

For further information, please visit Hokkaido University booth A 23
Thank you
Overview of Presentation
1. Introduction
2. Education: An anchor to all the SDGs
3. How universities facilitate social, environmental and economic development
4. Universities as strong institutions
5. Universities must empower local communities
6. Universities must drive integration across SDGs
7. Conclusions

1. Introduction
• Sustainable development is crucial to the future of Africa and the entire planet.
• Education, research and innovation are essential in sustainable development, making universities key contributors to achieving the goals.
• Universities provide cutting-edge research, high quality education, and ground-breaking innovation (Goal 4 and 9).

2. Education anchors all the Sustainable Development Goals

Role of Universities
- Addressing social inequality & poverty
- Entrepreneurship Training
- Vocational Skills Development
- Open & Distance Education

Dr. Jewette Masinja (School of Mines, University of Zambia)
2. Role of Universities - Environmental Management

ESDA Masters degree students at First Quantum Open Pit Mine – Solwezi Zambia

3. How universities facilitate social, environmental and economic development

Well-being

- Higher education contributes in various ways to making people more resilient and able to face various challenges.
- Recent Organization for Economic Co-operation and Development (OECD) statistics higher education improves employability by 54%
- Higher education graduates are less likely to suffer from depression, which is an important factor for health and well-being.

Environment

- Universities research on how nature and the earth’s ecosystems function.
- Universities facilitate innovative solutions to the world’s challenges.
- Climate change and global warming, as well as their impact.
- Research is also crucial in understanding the interactions of various SDGs, identifying trade-offs and mutual reinforcements and developing a balanced approach in pursuing them.
3. How universities facilitate social, environmental and economic development

- Economy
  - Sustainable Development demands a change in the way we produce and consume.
  - Innovative solutions must be developed in a collaborative effort.
  - University industry partnership

4. Universities as strong institutions

- Strong institutions foster sustainable development.
- Strong autonomous universities are important partners
- These partnerships and collaborations are crucial in the promotion and implementation of the SDGs, both in Africa and internationally.
- Joint Research activities are important in prompting global solutions.

5. Universities must empower local communities

- The aim of education is to bring about development
- Education must be adaptable and usable by the people
- Universities must connect knowledge creation with practice and problems the immediate society faces.
- Global sustainable development must take into account the need to promote and improve on local knowledge.

THE AGRICULTURAL TECHNOLOGY DEMONSTRATION CENTRE AT THE UNIVERSITY OF ZAMBIA
A PLATFORM FOR TRANSFERRING CHINESE AGRICULTURAL TECHNOLOGY IN ORDER TO IMPROVE LIVELIHOOD OF SMALL HOLDER FARMERS

CAPACITY BUILDING/TRAINING
Since March 2012, ATDC has organized 40 training courses, the total number of participants is 771

Outreach/Community Engagement
1,000 household farmers benefitted from the activities
5. Universities must empower local communities

- Preservation of indigenous knowledge is important in sustainable development.
- Universities must teach from the known to the unknown.
- Universities have a critical role to play in ensuring that the curriculum they develop is responsive to the needs of society including the rural people.

6. UNIVERSITIES MUST DRIVE INTEGRATION ACROSS SUSTAINABILITY GOALS

- Sustainability must address interacting biophysical, social, economic and governance issues.
- The SDGs reflect traditional compartmentalization of sectors and are presented in a siloed manner.
- There is also minimal cross-referencing across goals.
- Universities have an important role to harness integration.

6. UNIVERSITIES MUST DRIVE INTEGRATION ACROSS SUSTAINABILITY GOALS

- For example, how does the meeting of the SDGs present challenges for the future generation?
- We have 17 goals and 169 targets both of which require consistency in approach.
- Therefore the Universities have an important role to identify inconsistencies and suggest policy to address them.

6. CASE STUDY OF UNIVERSITIES PROMOTING INTEGRATION ACROSS SUSTAINABILITY GOALS

7. Conclusion

- Universities must create direct communication channels with government ministries/departments on implementation of the sustainable development agenda.
- Contribute towards capacity building of educators to incorporate sustainable development into their respective fields.
- They ensure graduates develop the skills to understand sustainable development from a trans-disciplinary perspective that is universal, integrated, and transformative.

In order to strengthen the role of Universities in SDGs:

- Need to promote vocational and technical skills
- Need to build capacity for environmental management
- Sustainable development must start from Community development
- Need for heavy investment in education infrastructure and research
- Need for policy advocacy
THANK YOU
INTERNATIONAL UNIVERSITY-INDUSTRY COLLABORATION FOR AFRICA’S SUSTAINABLE INDUSTRIALIZATION

Yasunori Baba, Reitaku University, Department of Economics; Emeritus Professor of The University of Tokyo

Japanese-African University Dialogue on Global Sustainable Development (TICAD VII Partner Project) 27 August 2019, Tokyo Hongo

GOALS OF AGS AS OF 1996

- Research: an interdisciplinary approach establishing themes that cut across traditional disciplinary boundaries would be important.
- Education: allow graduate students and post-doctoral fellows the opportunity to work on challenging complex issues.
- Outreach: expressing the visibility, e.g. Tokyo meeting provided the special session on “Asian Environmental Problems” with Tsinghua as a guest university.

10 RESEARCH CATEGORIES AS OF 1996

- Global climate change
- Sustainable management of environmental resources (rivers and watersheds)
- Mobility
- Future cities and land use planning
- Industrial ecology
- Lifestyle assessment
- Definition of sustainability
- Systematic harmonization of global regulation
- Clean technology
- Medicine

ORGANIZATIONAL MOTIVATION

- MIT: focusing on cooperation of its individual researchers, strategically increase its impact on society by establishing the AGS flagship; compensate cut of military research funding
- UT: mobilizing the AGS for it’s organizational restructuring, i.e. the setting of new graduate school specializing in environmental studies
- ETH: maximizing the visibility of AGS to make it strong brand for sustainable development (the academic counterpart of WBCSD); expanding collaborations with non-EU universities

FINANCIAL BACKGROUND

- ETH & MIT: main recipients of 2 million dollars per year as a unique funding to the AGS for five years (Avina Foundation donated by Stephan Schmidheiny)
- UT: getting little money from Avina; appealing to Japanese industry for fund raising, with several big companies donated 10 million yen per year for five years, successfully prepared matched funding and set financial infrastructure for its own unique AGS activities.

WHO KNOWS “AGS” (ALLIANCE FOR GLOBAL SUSTAINABILITY)?
SWISS PHILANTHROPIST WITH HIS WEALTH OF $3 BILLION

EXPECTED OUTCOME OF THE AGS AS OF 1996

- A need for the development of complicated research theme as an integrated project was proposed
- A exemplar: “Environmental Aid and Coal Combustion in China”
- Born out under two of the identified AGS priorities, clean technology and systematic harmonization of global regulation
- Participants from Tsinghua University and ABB as an industry partner
- The publication of the book, ”Integrated Assessment of Sustainable Energy Systems in China” scored highly in IAB’s evaluations

HAS THE “AGS” MET THE ORIGINAL EXPECTATIONS? THE VIEW OF UT

- Research: advancement of research in traditional disciplines; starting a new journal, “Sustainability Science” for promotion of interdisciplinary research
- Education: the setting of Environmental Studies at the Graduate School of Frontier Science and publication of AGS textbooks
- Outreach: any visible social impact? proper acknowledgement from donors?

FACTORS DETERRING “AGS” FROM BECOMING “VERY” FAMOUS: THE VIEW OF UT

- No problem on the side of Science and Technology
- Major problems in the program management: weak leadership and bottom up and decentralized organizational management fail to raise the visibility of “AGS” lowering it’s social impact
- Problem of moral hazard due to the wind-fall financial support from well established firms

IMPLICATIONS OF THE “AGS” FOR AFRICA

- Bounded rationality? (Mark Wrighton as MIT provost!)
- Did the AGS start it’s movement too early?
- Did the AGS attempt to answer to social requests in the form of “being specific”?
- Did the AGS try to find the “pain points” of a society?
- Did the AGS successfully induce social participation of all the stake-holders?

‘WISDOM’ (I. NONAKA) OR ‘SENSEMAKING’ (C. MADSBJERG) MAY GOVERN SOCIAL CONCERN FOR MAKING SDGS

- What is good, right and just for everyone?
- In Aristotle’s framework (Nicomachean ethics, 1984), phronesis is the kind of prudential judgement, a virtue not an art, practical rather than metaphysical and it takes its cue from everyday experiences rather than eternal verities
- Phronesis is the ability to understand and bring to fruition the direction towards an ultimate good for producer, consumer, environment and society at large
- Wise leaders are able to do what is good for their companies and for societies by understanding the high moral purpose of what they do while remaining grounded in everyday detail
U-H POSSIBILITIES FOR THE FUTURE IN AFRICA

- The Faculty of Engineering at the University of Tokyo attaches importance to nurturing innovators capable of solving problems to meet the local needs of people in every part of the world.
- As an example of digital co-creation with an African society, the doctoral research project that won the Tokyo University President's Award for 2014 focused on the possible introduction of AI and 3D printing to BOP businesses in Africa.
- Professor R. Abe co-founded (with T. Akita) the start-up, called Wasfixa, which provides power to the African people through kiosks in off-grid areas with affordable, accessible and safe electricity.
Mr. Iwasuke Shimada (Managing Director, Toshiba Africa Ltd)

**TOSHIBA**

Co-Organizer Project
Japanese-African University Dialogue on Global Sustainable Development
Panel Discussions on International University-Industry Collaboration for Africa’s Sustainable Development

**Toshiba Business in Africa**

Toshiba Africa (Pty) Ltd
Iwasauke Shimada
2019.08.27

**Toshiba’s Offices in Africa**

**Contribution to SECOs through business**

Apply CPS technologies to solving social issues

**Toshiba in Africa**
Total Smart Solution to Enhance People’s Lifestyle in Africa

SMART GRID

Contribute to People, Committed to the Future (basic commitment of the Toshiba Group)
Toshiba has hosted interns from African Business Education initiative scholarship at our office.

Global Partnership
Toshiba work closely among global group companies and partners from France, China, India, Turkey etc.

Toshiba’s Social Contribution Activities in Africa

Focus Area: Science & Technology Education

Toshiba Group Basic Policy on Social Contribution Activities

1. In accordance with the Basic Committee of the Social Contribution and Technology Education Program for Toshiba Group, we make vigorous effort to contribute to Society.

2. In contribution to society, we focus on the following fields: protection of natural environment, science and technology education, promotion of sports, culture, social welfare, and international exchange and friendship.

3. We support employees’ voluntary activities.

Positioning of Social Contribution Activities in Toshiba Group

- Sustainable Communities
- Inclusive Education for Societies
- Business
- Social Contribution Activities

Toshiba’s Social Contribution Activities in Africa

Science and Technology Education: CSR with High School in South Africa

LEAP Science & Maths Schools
LEAPS in Alexandra, Johannesburg

Environmental Education Programme
Donations of Study Materials
Conclusion

TOSHIBA Business in Africa

Partnership:
• Work together with local and international partners
• Provide localised products and solutions in Africa
• Promote skill development and education
• Contribute to SDGs by solving problems in Africa

Bridge People and Businesses:
• Strengthen network with various stakeholders
• Increase to exchange of knowledge and dialogues
Board Member

Yo Murofushi (The founder and CEO, Johannesburg)
- Educational background: Tohoku University, Agricultural Science (Bachelor’s & Master’s)
- Job history:
  - Sekita Tomonari Consulting
  - World Leap Co., Ltd. – Co Founder & Vice President
  - And Africa Co., Ltd. – Founder & President

Masa Tanaka (The executive, Tokyo)
- Educational background: Soka University (Business Administration)
- Job history:
  - SAP (Japan) — Solution Principle
  - And Africa Co., Ltd. – Executive

Nicolas du Bois (The executive, Tokyo/Cape Town)
- Educational background: Cape Town University (Political Economy), Oxford University (Area Study)
- Job history:
  - PW (Cape Town)
  - Data Polk & Watts Ltd in Japan
  - And Africa Co., Ltd. – Executive

What is our mission?
We aim to solve the fundamental issues faced by both Africa and Japan.

- Contribute to job creation in Africa
- New Industrialisation
- Empowering entrepreneurs
- Create exponential growth opportunities for Japanese corporations

Boosting investments into African startups

Incubation for African startups

http://joozhub.org/

Online platform: ZenVentures

Finding business partners and creating market access in Africa

ZenVentures is an online entrepreneurship ecosystem where you can find investors and business partners from Africa to the world and Japan.
Investment in venture businesses from university

Support from academic institution:
- Tuition University, UG, KNUST, Proloma University, etc.

Support from Incubators, local VCs:
- MEST, KIC, Knile Capital, Kalon Venture Partners, Zulu Investment Partners, etc.

Hands-On Support from investors:

High Risk
- Technical verification

Low Risk
- Business feasibility verification

LET’S GO AHEAD TOGETHER
Acknowledgement from writers of this report

Lilian Mbinya Muasa (Ph.D. candidate, The University of Tokyo)

My experience in participating in this TICAD VII, 2019 was unique and exceptional one. It was just a few weeks after successfully defending my Ph.D. thesis at the University of Tokyo in Sustainability Science. Being from the field of sustainability and economic development, I was eager to explore and get a glimpse of the current strategies being instilled for Africa development and also to apprehend on how to actualize the gained academic knowledge to practice in the real world as I venture in the next journey in my life. Therefore, participating in this Japanese-African University Dialogue on global sustainable development conference granted me the panorama to not only understand how the universities and industry are being positioned on global sustainable development but also actualize my gained academic knowledge through this report writing. I am grateful to Prof. Nagao, IDCJ and all the organizers for being granted this chance to be part of this professional report writing since I have accrued new insights from the experience. I believe that this real experience will highly contribute to the stepping stone of my next journey.

Mariko Kaneko (Graduate of Master of Public Affairs, Sciences Po)

Right before participating in this conference, I finished a master course at Sciences Po in France. The reason why I decided to go back to school after 10-years field experience for development in Africa was because I was eager for the time and the place to connect my experience with academic knowledge. And now, I'm looking for the way to turn the knowledge to practice. This exciting opportunity to participate in the conference and write a report was for me not only to join discussion to think about great potential that university has for global sustainable development, but also to consider how I myself can be engaged again in development in Africa with using the knowledge. I greatly appreciate the organizer and participants of the conference for giving me this opportunity.