unu-ias

meeting note

Open Symposium

The Role of Universities in the Promotion of Education for Sustainable Development in Africa

FRIDAY, 27 February 2009

Elizabeth Rose Hall, UNU, Tokyo

INTRODUCTION

The sustainable development challenge is deep-rooted and requires a holistic approach. In the endeavor to meet these challenges and to link with the Millennium Development Goals, in 2002, the General Assembly adopted the United Nations Decade of Education for Sustainable Development (DESD), spanning from 2005 to 2014. It aims to change the approach to education by integrating the principles, values, and practices of sustainable development. With Japan and UNU's long-standing commitment to DESD and development in Africa, **United Nations University Institute of Advanced Studies (UNU-IAS)** and the newly established **United Nations University Institute for Sustainability and Peace (UNU-ISP)** convened its first joint symposium on "The Role of Universities in the Promotion of Education for Sustainable Development in Africa." The symposium consisted of presentations by experts in the area of sustainable development and education in Africa to discuss the challenges the continent faces in higher education. Supporters include the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Ministry of Environment (MOE) of Japan.

Dr. Claudia ten Have, UNU-IAS, opened the symposium by inviting **Professor Govindan Parayil,** Vice-Rector of UNU and Director of UNU-IAS for his welcoming remarks.

Welcoming Remarks

Professor Govindan Parayil welcomed all the speakers and participants stating that we live in a spectacularly rich world, though stressed by poverty. Children are especially affected by this situation, as can be noted in diseases, illiteracy, and malnutrition statistics.

UNU is concerned with the needs of the present but also with those of future generations. According to its mission, many activities are being carried out to address global problems that affect us all. The severity and scale of these problems are great in magnitude and complexity, posing a harsh challenge for all humanity. However, the bigger the problems, the more prepared we need to be. Recognizing the importance of education to address sustainability issues, UNU has been playing an important role in the advancement of DESD. UNU is engaged in activities to develop competencies, especially in the field of education. He mentioned UNU's efforts to address sustainable development issues through Regional Centres of Expertise (RCEs) in Africa and ProSPER.Net in the Asia-Pacific region in this regard.

Stating that the symposium aims to listen to African experts and learn from their experiences, he concluded by thanking the Ministry of the Environment of Japan and the Ministry of Education, Culture, Sports, Science and Technology for their generous support as promoters and funders to develop ESD in Japan and abroad.

Key Note Address

Professor Akito Arima, former Minister of Education, Japan and former President of the University of Tokyo, called to build an environment that is equitable and peaceful for all human beings. He emphasized the importance of learning from past lessons and mistakes to face the challenges of the 21st century, especially with regards to the depletion of natural resources and fossil fuels, as well as the shortage of food and water.

His keynote speech outlined what needs to be done both by developing countries and developed countries. First, he stressed that CO_2 emissions have to be reduced, and energy consumption has to become proportionate to the world population. China and India are industrializing at a rapid pace, and African countries with other emerging economies will advance, consuming more energy, leading to increased emission levels. Thus, he called for developed countries to promote energy saving policies, improve and disseminate technology, and with the developing countries, propose a sustainable framework that is acceptable for developing countries. Ways to go about this are through education and raising awareness among citizens in advanced countries about their energy overconsumption patterns, and to encourage the 'reduce, reuse, and recycle' and *mottainai* movement. [1] He spoke about the bitter

[1] This movement was set in motion by Prof. Wangari Maathai of Kenya in 2005, where it roughly means in Japanese to reduce, reuse, and recycle. It became a common keyword for conserving the environment.

experience of Japan in its path toward development with the spread of the *itai-itai* disease,[2] as a result of mining pollution. Such tragedies should not be repeated, and countries worldwide must cooperate in bringing about sustainable development.

In order to achieve this, science and technology development will have to be advanced to bring economic growth that is mindful of environmental impacts. Arima spoke about Japanese CO_2 capture and storage technology, which significantly reduced CO_2 levels in Japan. Such advancements, like the green revolution, will lead to the improvement of human well-being. Additionally, he encouraged the exchange of researchers and students between Africa and Japan to build human capacity and to improve inter-university cooperation. Lastly, Arima spoke about the role of the United Nations University. He called upon its community of scholars to take a lead in researching how to deal with the depletion of fossil fuel, CO_2 emission, and distribution of natural resources. He concluded by stating that sustainable development must be achieved through peaceful means, and scientists and researchers should promote science and technology for the peace and well-being of all of humanity.

Opening Remarks

Professor Osmund Mwandemele, Pro-Vice Chancellor of the University of Nambia, acknowledged Education for Sustainable Development (ESD) as holding the key to African development. Accordingly, he posed the question of what role higher education institutions (HEIs) can play in promoting ESD in Africa. For ESD to be more comprehensive, he stated that increased focus should be placed on community involvement, economic sustainability and training of intellectuals to make innovative contributions to society.

To achieve these goals, ESD must be reoriented in radical ways, requiring educational reform at all levels with involvement from all sectors of society. For example, ESD cannot be limited to the topics of environment and natural resources. Rather, HEIs should develop core modules on contemporary issues to students, including compulsory studies on gender, HIV, and economics.

Furthermore, African HEIs must create and support positions for innovation. These goals require universities to step outside their ivory towers and to increase their community involvement in promoting sustainable issues among local communities. Because financial resources are limited in African HEIs, partnerships with private and public sectors at domestic and international levels are crucial. He concluded that Africa offers significant opportunities in sustainable development, especially if based on strong global partnerships. "A sustainable society can and needs to be achieved through committed global support."

[2] Literally means "ouch-ouch" disease, and the term was coined when cadmium pollution caused softening of bones and kidney failure due to mining in Toyama prefecture. The disease first appeared in 1912 and continued until 1946.

SESSION I: Sustainability Challenges in Africa
Chair: Claudia ten Have and Yoshihiro Natori (UNU-IAS)

Mr. Yoshihiro Natori, Senior Fellow, UNU-IAS, opened the first session. He expressed his gratitude to the speakers and the audience for their attendance.

Natural Resources

Dr. Karl Harmsen, Director of United Nations Institute for Natural Resources (UNU-INRA), provided an overview of poverty, land and productivity, and climate change in Africa. Addressing poverty issues, he demonstrated that the Sub-Saharan Africa region is significantly more vulnerable than the rest of the world. His comparison included pictures of families and groceries they can buy with a week's income. Differences could be easily identified in terms of income and diet in countries such as Germany, USA, Mexico, Bhutan, Egypt, and Chad. He stated that poverty is persistent, widespread and concentrated in rural areas.

Regarding land and productivity, Harmsen presented global fertilizer consumption and cereal yield patterns, illustrating that East Asia, South Asia, Latin America, and Southeast Asia have demonstrated increasing trends since the 1960s and 1970s. However, in Sub-Saharan Africa, fertilizer usage and yield per hectare are low and conditions for increasing production need to be developed. Harmsen then addressed climate change issues, specifically how they have affected Ghana and neighboring countries. His conclusion is that there are new variations in temperature and rainfall in space and time, making land and water management complex and challenging issues to address.

He concluded that poverty alleviation is key in addressing sustainable development issues. Furthermore, management of natural resources and environment are necessary conditions for sustainable development, requiring action on poverty alleviation, economic growth, and education for sustainable development.

Land Degradation

Professor Robert Abaidoo, Kwame Nkrumah University of Science and Technology (KNUST), presented alarming statistics on land degradation worldwide and in Africa. He showed that 25% of the world's degraded land is in Africa, and 65% of agricultural land is degraded through deforestation and overgrazing. This is the result of poverty, technological challenges, and lack of opportunities and knowledge of sound agricultural practices. Losses measure up to 190 tons of topsoil a year. Sub-Saharan Africa is

especially prone to land degradation and erosion with overall low soil fertility, salty water intrusion, unstable climate, and unfavorable topography such as steep slopes and rolling topsoil. Moreover, coupled with unfavorable agricultural practices such as the use of heavy machinery and animal traction on fragile soils and low agricultural management, this leads to low crop productivity and nutrient depletion. Land is further degraded through overgrazing, bush fires, timber exploitation, firewood harvesting, charcoal burning, and unsustainable mining practices.

Abaidoo explained that land degradation is in part due to Africa's colonial history, as well as unfavorable policies. Productivity and food security are now pressing concerns, and 6% agricultural production increase must be met to satisfy the demands of the continent's increasing population. Abaidoo presented solutions including: focusing on institutional and human capacity building, emphasizing participatory approaches to development, and reducing information costs through technology and sustainable policies such as farming subsidies.

Urbanization

Dr. Ademola Braimoh, Executive Director of the Global Land Project, Hokkaido University, introduced the sustainability challenge of urbanization in Africa. As the fastest urbanizing region in the world, Africa's urbanization transition includes various ecological and social challenges, including demographic, economic, and spatial. Demographically, Africa is experiencing high population increases. Economically, Africa's highly vulnerable economic base is exposed to the pressures of globalization and there is little prospect of meeting the MDGs for urban sustainability. Spatially, the diverse locations of African cities experience varying levels of vulnerability to disasters, with small and medium-sized cities growing at an unprecedented pace and scale in Africa.

Braimoh then discussed the state of African higher education in the sustainability transition, explaining that while post-independent African universities initially focused on training civil servants for national building, the current search for sustainability places a new focus on the role of universities as knowledge institutions. As African countries are face new challenges, local authorities are willing to act, but many are unaware of the options for sustainable urban transition. Braimoh stated that universities must reorient themselves to produce, adapt, and disseminate appropriate knowledge to communities, providing strong examples of urban planning education.

Climate Change

Dr. Marie Rarieya, UNU-JSPS Postdoctoral Fellow, UNU-IAS, addressed climate changes issues and their impact on Africa, linking this topic to the role of African universities in fostering sustainable development. She stated that Africa is one of the most vulnerable regions to climate change and variability, noting that the impact are unequally distributed throughout the continent. Consequences also differ depending on sectors, raising food security risk issues due to the extreme dependency on rain-fed agriculture, desertification problems, and conflicts over water resources. Other areas of concern are health (vector and water-born diseases are expected to increase), as well as natural resources and biodiversity.

In this context, education has an important role to build a sustainable society, as well as to generate knowledge in areas of science and technology, research, and training. However, Africa's current situation of rapidly expanding universities does not match the necessary resources, raising many challenges: financial constraints (budget deficits, low remuneration, under-funded projects), human resources (large classes and overloaded teachers), and inadequate infrastructure regarding library services and laboratories.

Rarieya concluded by stating that climate change is a global threat that demands concerted action at all levels. This requires capacity building, advances in science and technological innovations, curricula tailored to address sustainability concerns, strengthening of science and policy linkages, partnership and cooperation. She especially highlighted the importance of fostering diaspora networks, calling upon African scholars and professionals who leave the African continent to contribute back to Africa's sustainable development through their work.

Peace and Security

Dr. Obi Aginam, Academic Programme Officer, UNU-ISP, spoke about the linkages among peace, security, and resource conflict. Conflicts in Africa are most often related to the struggle for natural resources. Aginam outlined examples in Sierra Leone (diamonds), Liberia (timber) and Angola (oil and diamonds). He cited the theory of Thomas Homer-Dixon, explaining that future wars and civil violence will often arise from scarcities of resources such as water, forests, and fish. He added that climate change would also be a contributing factor to conflict through the spread of disease, drought, rising sea levels, deforestation, and soil erosion. He pointed to Lake Chad and the Zambezi River, where mismanagement of shared watersheds led to water scarcity and degraded water ecosystems.

With *freedom from fear* and *freedom from want* as necessary to achieve human security, Aginam outlined the way forward through four main policy recommendations. First is to focus on institutional reform, such as improving transparency in extractive industries. Second is to respect environmental rights and promote green businesses, and third, promote global efforts to address climate change. Lastly, sustainable development and the precautionary

principle must be taken seriously, including environmental impact hearings.

Poverty and Health

Professor Dorcas Otieno, Senior Lecturer, Kenyatta University, presented the sustainability challenges of poverty and health in Africa. While poverty can be defined in various ways in the African context, urban poverty in diverse African cities highlight the urgent need for ESD innovations. Accordingly, Otieno emphasized universities' critical role to improve ESD data and information usage at all stages of planning and management. She introduced RCEs as avenues for university-public-private partnerships of ESD, illustrating the case of RCE Greater Nairobi's accomplishments. Additionally, Otieno provided examples of how universities have implemented practical innovations in Africa. In particular, she highlighted "Eco-schools," an action-research RCE flagship project, which uses schools as springboards to reach communities to demonstrate the links between environment, development, and underdevelopment while addressing poverty challenges. Other examples of innovative projects underscored the need to 'help communities help themselves' and the importance of participatory development and health promotion at the local levels. Otieno urged higher education institutions to "get out of their ivory towers and into action at the community level."

Science and Technology

Dr. Claudia ten Have, Managing Research Fellow, UNU-IAS, reinforced the objectives of this symposium, which is to discuss ways to prepare individuals and institutions to respond to sustainability challenges. This symposium is to further the development of a new UNU programme, namely Education for Sustainable Development in Africa (ESDA). Last year, TICAD IV was convened in Yokohama, and one of the areas of focus for UNU-IAS was on science and technology (S&T) and its relation to sustainability in Africa.

UNU-IAS convened a public forum to identify linkages for Japan and Africa to cooperate on science and technology. Many opportunities and platforms exist. Raising awareness of these connections and initiatives is important to capitalize on complementary resources and best practices in Japan and Africa. She outlined that there were country-driven programmes, such as South Africa's priority skills development project on S&T, which builds knowledge and provides practical skills. She additionally spoke about inter-regional S&T forums in Africa and Asia, both among governments and among universities.

Ten Have concluded by speaking about S&T relations to universities. Africa deals with the brain drain on a continuous basis; however, instead of despairing at this, she pointed out the imperative role of the African diaspora and the increasing recognition of the importance of "brain circulation." Incidentally, a concept referred to in the most recent G8 statement of S&T ministers. Brain circulation in this sense refers not only to the exchange of graduate students, but also deploying more senior Japanese researchers and strategists in all areas of expertise to assist building capacity in African institutions through joint projects.

SESSION I Question and Answer/Discussion

Many participants engaged in a lively discussion about common concerns, turning words into actions, the tangible practices and necessities needed to achieve sustainability in people's daily lives and ways for developing concrete collaborations between Japanese and African universities.

Commentators noted that Japan's history of development is inspiring and should be considered. Universities have to evolve from knowledge production to wealth production, since "knowledge itself is not enough to fight poverty."

Another speaker stressed identifying the community's needs to find appropriate solutions for problems. Additionally, local innovation and adaptation have to be considered, since foreign technologies and approaches are not always easily integrated. In this sense, institutional frameworks need to be adapted and built in a way that best suits local needs.

Another recurring theme was that the symposium served as an opportunity for African colleagues to learn from Japanese experiences in embedding education into daily life issues, and finding solution at the community level.

SESSION II: Education for Sustainable in Africa
Chairs: Kazuhiko Takeuchi and Masafumi Nagao (UNU-ISP)

Core Competencies for Sustainable Development in Africa

Professor Rob O'Donoghue, Rhodes University, argued for the need to revisit the concept of "core competencies" in ESD in Africa, particularly focusing on sustainability practices in the context of poverty, vulnerability, and risk. Specifically, he questions how to situate ESD in Regional Centres of Expertise (RCEs) so that there are immediate and tangible benefits. In the context of RCE Makana and Rhodes University Environmental ESD Research, O'Donoghue explored how academics can work toward the idea of core competencies in ESD. He suggested that the *a priori* specification of competence may no longer be desirable or possible in ESD. Instead, he argued for the development of a more situated and historically nuanced specification of competence in education practices, focusing on "the need for both ontological depth (situated culture) and participatory co-engagement (agency) to engage the social politics of cultural and material marginalisation in modernity."

Through providing examples of innovative small scale RCE experiments in active learning and change, he presented a learner-led social learning framework with depth, diversity, integration, and agency. This framework includes a cycle of situating prior knowledge and information, engaging enquiry and action (e.g. through experiments in school), and reflection through reporting and reflecting (e.g. writing-up accounts of environmental learning and change).

UNEP's MESA: Mainstreaming Environment and Sustainability into African Universities

Ms. Akpezi Ogbuigwe, Head of the Environmental Education and Training, United Nations Environment Programme (UNEP), through a video message, highlighted UNEP's MESA programme, supported by UNESCO, UNU, Africa Environment Network and other regional/sub regional networks. The aim of the programme is to strengthen the capacity of African universities to intervene in environment and sustainability crises all over the world, and to give African universities a voice and influence through instruction, research, and curriculum development. The MESA initiative responds to the challenges of poverty, climate change, and environmental degradation.

MESA incorporates ESD in its initiative through workshops and conferences and development of learning materials, which are all jointly conducted with African universities. MESA is divided into three phases, the first from 2004 – 2007, produced a baseline study on existing African programmes on environment and sustainability. The second phase from 2008 – 2010, seeks to strengthen the work achieved in the first phase, and the third phase from 2011 – 2014, will expand the MESA initiative to other African universities. Ogbuigwe raised several examples of pilot universities from all over Africa and their accomplishments.

An important lesson learned, she noted was that African universities are willing and able to implement ESD change projects within universities. Africa is forging new partnerships through individuals and institutions, "emerging from the shadows to make their voice heard for ESD."

Inter-University Collaboration in Africa

Dr. Christoff Pauw, Coordinator for South-South and North-South-South Academic Network, Stellenbosch University, presented a comparative overview of the African continent in terms of ecological footprints, poverty, carbon emissions, youth literacy, tertiary education and science research. In all of these areas, the African continent's scores are worrisome. In this regard, he stressed the role of universities as drivers for promoting sustainable development. However, he noted that inter-institutional collaboration between African universities is limited.

In the case of Stellenbosch University, he outlined initiatives to contribute to African scientific capacity development, which are based on the university's motto of "pedagogy of hope" to support critical thinking, engaging in dialogue and community transformation through integrated strategic thinking. To achieve this goal, a database of African initiatives with ongoing projects has been created, aiming to foster continental interactions and to build a collaborative model. Real inter-university collaboration should bring together individual initiatives, bilateral projects, and multilateral networks, and replace dependence with joint ownership among project design partners. Collaboration also has to include technology transfer and sharing administrative and financial burdens. He concluded by stating the need to establish a research niche for Africa in which the continent's comparative advantage – cultural and geopolitical location – should be taken into consideration.

Africa-Japan Education for Sustainable Development Cooperation

Professor Osamu Kobayashi, Environmental Education for Sustainable Development Project, Ehime University, presented accomplishments in the realm of Africa-Japan ESD cooperation. Recently, he developed a collaborative Environmental-ESD (EESD) model between Mozambique universities and Japan (Ehime University), through the cooperation of communities, NGOs, and universities. Kobayashi stresses the importance of this *mutual* cooperation between Mozambique and Ehime to create academic exchange programmes in higher education organizations. He hopes that this mutual cooperation model can be applied beyond Africa and Japan.

There have been several progressive outcomes, including the "Transboundary MUSA Errant EESD Leader Programme," which is Ehime University's approach in creating a global EESD Graduate School. This initiative allows students to travel globally to see what sustainable development problems occur around the world. At Ehime University, the EESD curriculum focuses on empowering students to shift their lifestyles to a sustainable form and to take concrete actions to develop a sustainable society at different levels. By requiring students to go into local communities, the EESD curriculum is actively forging linkages between the university and the community.

External Support to Restructure and Reorient Universities for Sustainable Development

Dr. Zinaida Fadeeva, Research Fellow, UNU-IAS, presented UNU-IAS initiatives and support for ESD actions in HEIs. In response to the DESD established by the UN, two major projects are being carried out by UNU-IAS: (1) RCE –

Regional Centres of Expertise, which are local networks of diverse stakeholders; and (2) ProSPER.Net (Promotion of Sustainability in Postgraduate Education and Research Network), a network of higher education institutions in the Asia-Pacific region.

RCEs are networks comprising formal and non-formal educational institutions, whose challenge is to embed sustainability issues in education at the local level. Universities are usually the main stakeholder within the RCE structure. This project is an attempt to address frequently missed links, to articulate a global vision in local terms, and to turn words into actions. UNU-IAS's main role is to link the RCE community to global developments, both among themselves (continental and global networking), and with specialized agencies that are supporting RCE's activities.

Fadeeva also briefly presented UNU-IAS's ProSPER.Net initiative, which is part of the Japan-funded Environmental Leadership Initiatives for Asian Sustainability (ELIAS) project. ProSPER.Net is a network of 18 universities in the Asia-Pacific, created in June 2008, before the G8 Hokkaido Toyako Summit. Current joint activities comprise of the reorientation of business schools curricula, public policy-makers' training, and faculty training.

She concluded her presentation by pointing out that both projects are platforms for multi-sectoral and interdisciplinary partnerships. Through these two projects and their activities, the expectation is to identify good practices and disseminate them, while also analyzing drivers and barriers to implement ESD at the local level and in higher education institutions.

MEXT International Cooperation Initiative

Mr. Atsumu Iwai, Senior Specialist for International Cooperation of the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) of Japan, outlined MEXT's International Cooperation Initiative. The aim of this initiative is to formulate practical international cooperation models, utilizing the knowledge of universities in relation to DESD, and secondly to convene international symposiums on ESD. The initiative is distinctive in that it takes a practical approach and is shaped as equal collaboration among universities in Japan and in developing countries.

An example in this regard, is the Japan-South Africa collaboration on ESD module development for primary and secondary schools based on inter-university collaboration, where the project will bring together teachers and learners in partnering schools to elaborate a vision for sustainable development, and develop learning modules for classroom application. Another example is utilizing community learning centers to develop education models from the perspective of ESD in food, nutrition, and health with Okayama University.

Lastly, Iwai spoke about the importance of linking theory and practice and utilize the knowledge of universities towards DESD's target. He noted that cooperation with other frameworks, such as UNU's ESDA, and the promotion of universities' contributions to enhance inter-RCE cooperation activities to facilitate actions for sustainable future, are the way forward.

MOE Environmental Leadership Initiatives for Asian Sustainability (ELIAS) in Higher Education

Ms. Eri Nakajima, Deputy Director of the Office of Environmental Education of the Ministry of Environment of Japan (MOEJ), presented the ministry's Environmental Leadership Initiatives for Asian Sustainability (ELIAS) in Higher Education, which was developed in response to Higher Education for SD (HESD) in Asia as one of top three pillars. Nakajima discussed the vision for ELIAS, elaborating on the need for 'Environmental Leaders,' defined as individuals who value the relationship between personal experiences and the environment, in addition to having a holistic and interdisciplinary understanding of ESD.

In addressing the challenges for developing effective human resources, the MOEJ recognizes that collaboration among universities, businesses, government organizations, and NGOs is required. Nakajima presented three projects under ELIAS, including (1) a Model Programme, which currently supports 6 universities to develop special "Environmental Leaders" programmes; (2) the Multi-Stakeholder Cooperative Consortium for developing Environmental Leaders, which comprises every sector of society that utilizes environmental leaders, including universities, governments, local people, industries, and NGOs; and (3) the promotion of Prosper.NET. MOEJ hopes to continue collaborations with the UNU in furthering and building on these innovative programmes.

SESSION II Question and Answer/Discussion

The second round of discussions showed participants' concerns on how to adapt ESD knowledge and practice for local needs and specific features. In response, Parayil stated that although Africa has its specific cultures and needs, he has a positive view on how technology can be successfully implemented to address these issues. There is a need to start by enhancing capacity development for innovation through advanced research with sectoral and regional approaches.

Other participants also expressed their views regarding the need for a space to bring together African voices with their own knowledge and practices, giving visibility for their ongoing activities and initiatives. Furthermore, participants noted that there is a need for increased showcasing of ongoing activities to encourage others.

Another concern raised was the need to increase publications on ESD in Africa, to capture African insights.

Concluding Remarks

Professor Masafumi Nagao, Coordinator of UNU Education for Sustainable Development in Africa (ESDA) Project, concluded the symposium, which followed three days of consultation with African and Japanese university experts on ESD. The consultation began with a field visit to Kitakyushu City to understand development and sustainability experiences there.

Nagao outlined that the ESDA project led by UNU is based on continuous consultation among African and Japanese stakeholders. ESDA is headed by a steering committee that will outline the project's conceptual framework in the next year. The aim of ESDA is to find appropriate mechanisms between UNU, Japanese, and African universities to set up joint graduate training on ESD. In the meantime, three working groups were identified, each headed by a steering committee member.

The first will focus on agriculture and rural development, the second will examine community-based initiative for sustainable development in urban areas, and the third will focus on mining management and energy resources.

Nagao thanked MEXT for its enthusiasm and support for this new project at UNU. He assured the audience that ESDA will work concertedly to scope the best possibilities for joint graduate teaching in the next two year, and announced that a follow-up conference will take place. He concluded by thanking the interpreters, UNU staff, student support from Tokyo University and Chuo University, and all colleagues who travelled from far and near to attend this meeting to share their insights.

Speakers and Chairs

Govindan Parayil, Vice-Rector, UNU and Director, UNU-IAS
Akito Arima, former Minister of Education, Japan and former President, University of Tokyo
Osmund Mwandemele, Pro-Vice Chancellor, University of Namibia
Claudia ten Have, Managing Research Fellow, UNU-IAS
Yoshihiro Natori, Senior Fellow, UNU-IAS
Karl Harmsen, Director, UNU-INRA
Robert Abaidoo, Kwame Nkrumah University of Science and Technology
Ademola Braimoh, Executive Director, Global Land Project, Sapporo Nodal Office, Hokkaido
Marie Rarieya, UNU-JSPS Postdoctoral Fellow, UNU-IAS
Obi Aginam, Academic Programme Officer, UNU-ISP
Dorcas Otieno, Senior Lecturer, Kenyatta University
Kazuhiko Takeuchi, Vice-Rector, UNU and Director, UNU-ISP
Masafumi Nagao, ESDA Coordinator, UNU-ISP
Rob O'Donoghue, Rhodes University
Akpezi Ogbuigwe, Head of the Environmental Education and Training, UNEP
Christoff Pauw, Coordinator, South-South and North-South-South Academic Network, Stellenbosch University
Osamu Kobayashi, Project Manager, Environmental Education for Sustainable Development, Ehime University
Zinaida Fadeeva, Research Fellow, UNU-IAS
Atsumu Iwai, Senior Specialist for International Cooperation, Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan
Eri Nakajima, Deputy Director, Office of Environmental Education, Ministry of Environment, Japan

Read the UNU-IAS editorial:
"ESDA, RCEs and Prosper.Net: UNU's Contributions towards the UNESCO World Conference on ESD 2009 in Bonn and Beyond" at http://www.ias.unu.edu/sub_page.aspx?catID=705&ddlID=820

See also:
Mochizuki, Yoko and Zinaida Fadeeva. "Regional Centres of Expertise on Education for Sustainable Development (RCEs): an overview" *International Journal of Sustainability in Higher Education* (2008) Vol. 9 Issue 4: 369 – 381
http://www.emeraldinsight.com/Insight/viewContainer.do;jsessionid=79B7DD565012E11F90EC4D072D7755F5?containerType=Issue&containerId=6013499

Upcoming Events:

- **UNESCO World Conference on ESD – Moving into the Second Half of the UN Decade**
  When: 31 March – 2 April 2009) **Where:** Bonn, Germany For more information: http://www.esd-world-conference-2009.org/
- **The Fifth World Environmental Education Congress** **When:** 10 – 14 May 2009 **Where:** Montreal, Canada
  For more information: http://www.5weec.uqam.ca/EN/
- **Fourth International RCE Conference 2009** **When:** 13 – 15 May 2009 **Where:** Montreal, Canada
  For more information: http://www.ias.unu.edu

This *unu-ias meeting note* was written by Mana Nakagawa, Yoshie Oya, and Aurea Tanaka, PhD, and edited by Claudia ten Have, PhD, of United Nations University Institute of Advanced Studies. For further information, contact: Yoshie Oya at oya@ias.unu.edu, +81-45-221-2300, or 6F International Organizations Center, Pacifico Yokohama, 1-1-1 Minato Mirai, Nishi-ku, Yokohama 220-8502 Japan.

REGIONAL CENTRES OF EXPERTISE IN AFRICA

building capacity through Education for Sustainable Development

RCE Greater Nairobi, Kenya

Pushing the Education for Sustainable Development agenda in impoverished communities of the capital city.

RCE Lagos, Nigeria

Promoting education for a sustainable and healthy lifestyle rather than education geared towards employment.

RCE Kano, Nigeria

Supporting learning for poverty eradication and combating environmental degradation.

RCE Ghana

Spearheading advocacy initiatives to change the educational framework, so that graduates at all levels are capable of ensuring sustainability in the region.

RCE Greater Mbarara, Uganda

Promoting civic and private sector organisation partnerships and learning for sustainable livelihoods.

RCE Maputo, Mozambique

Creating a society imbued with social and cultural values as well as scientific knowledge that supports sustainable principles of development.

RCE Swaziland

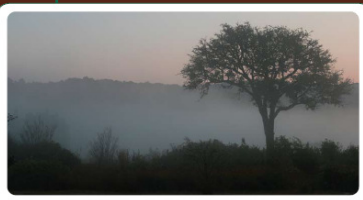
Promoting and facilitating access to innovative approaches to Education for Environment and sustainable socio-economic development.

RCE KwaZulu Natal, South Africa

Developing partnerships and building capacity to promote public participation in environment conservation through education.

RCE Makana and Rural Eastern Cape, South Africa

Building institutional and community knowledge for sustainable development in the municipality and province.



RCE Zomba, Malawi

Creating a society that is socially responsible, economically viable and environmentally sound.

www.ias.unu.edu/efsd

UNITED NATIONS UNIVERSITY
UNU-IAS
Institute of Advanced Studies

REGIONAL CENTRE OF EXPERTISE ON EDUCATION FOR SUSTAINABLE DEVELOPMENT
ACKNOWLEDGED BY
UNITED NATIONS UNIVERSITY

For more information
The Global RCE Service Centre
Education for Sustainable Development Programme
United Nations University – Institute of Advanced Studies (UNU-IAS)
Yokohama, Japan
rceservicecentre@ias.unu.edu