1. **Introduction**

The International Association of Universities’ (IAU’s) 2018 International Conference hosted by the University of Malaya during 13-15 November focused on “Higher Education Partnerships for Societal Impact”. Higher education communities around the world discussed their mandate and social responsibility, while presenting different forms of partnerships adopted around the world and for what societal impact they deliver.

In the Session on “Regional Centres of Expertise on Education for Sustainable Development: Partnerships between Campus and Community”, four members of the RCE community shared their experiences on a United Nations University (UNU)-acknowledged model of university-community partnership looking at the role of universities in Regional Centres of Expertise (RCEs) on Education for Sustainable Development (ESD). RCEs are multi-stakeholder networks of formal and non-formal education organisations recognised and acknowledged by UNU for their innovative and high impact teaching and learning on ESD. They shared the challenges and accomplishments of working with community partners for creating a sustainable society.

Moderated by Prof. Mario Tabucanon, a UNU-IAS Visiting Senior Research Fellow, four distinguished panellists from the RCE community enlightened the audience:

- **Prof. Hirofumi Abe** - representing RCE Okayama, Japan; a Professor at the Graduate School of Environmental and Life Science, Okayama University.
- **Prof. Irfan Prijambada** - representing RCE Yogyakarta, Indonesia; a Director at the Directorate for Community Services and Professor of Agricultural Microbiology, Universitas Gadjah Mada.
- **Prof. Munirah Ghazali** - representing RCE Penang, Malaysia; a Professor of Mathematics Education, School of Educational Studies, Universiti Sains Malaysia.
- **Prof. Roger Petry** - representing RCE Saskatchewan, Canada; an Associate Professor of Philosophy, Luther College at the University of Regina.

As a backgrounder, the audience was introduced to the concept of the RCE movement and about the importance of the university’s role in the RCE structure and leadership. The panel discussed four main topics – namely, linkages between the university and RCE; multi-stakeholder partnerships; RCE projects and their contributions to SDGs; community engagement challenges; and focus areas for societal impact.

2. **The University and the RCE**

The involvement of higher education institutions is imperative in creating strong RCE engagements with communities exemplified by the represented universities and RCEs.

**RCE Okayama**, which is led by the Okayama ESD Promotion Commission of the City Government, is strongly supported by Okayama University, whilst the Commission is currently chaired by a university professor. The Okayama ESD Promotion Commission consists of schools,
social educational institutes, resident groups, businesses, media, and an administrative body. While Okayama University has been playing the central role in the management of RCE Okayama since its inception in 2005, they have been contributing to the promotion of ESD in communities on both formal and non-formal education through RCE Okayama.

**RCE Yogyakarta** was established in 2007. Universitas Gadjah Mada is the backbone of the RCE. Education for sustainable development is carried out by RCE Yogyakarta and UGM through a program called “KKN, Kuliah Kerja Nyata” which can be translated as “Community Service Learning”.

**RCE Penang**, one of the existing four RCEs in Malaysia, is hosted by Universiti Sains Malaysia (USM). RCE Penang is one of the first seven RCEs established when the RCE movement started in 2005. RCE Penang is institutionalised in the University and operates through a faculty fellow system whereby academic faculty members volunteer to be a fellow to RCE Penang.

**RCE Saskatchewan** is coordinated at the University of Regina, which is the second largest university in the province of Saskatchewan (Canada) and Regina is the provincial capital city. Luther College, which has administratively supported coordination of the RCE since its beginning, is one of three smaller colleges federated with the University of Regina. The coordinating role of the College involves chairing the RCE Facilitation Group and managing resources for the RCE’s annual ESD Recognition Event.

### 3. Multi-stakeholder partnerships

Two graduate schools are mainly concerned with ESD in **RCE Okayama**. The Graduate School of Environmental and Life Science and its UNESCO Chair on Research and Education for Sustainable Development support ESD in local communities, the 37 community learning centres, called “Kominkan” (in Japanese), which function as the base for ESD implementation in local communities. The Graduate School of Education has been supporting the educational improvement and the teacher training, adopting a perspective of ESD. Furthermore, the University was involved in establishing the Interuniversity Network supporting the UNESCO Associated Schools Project Network (ASPNet) in 2008, and the RCE has been supporting UNESCO Associated Schools in the Okayama region (currently 51 UNESCO Associated Schools). ESD activities in RCE Okayama are characterised by a whole-city approach to ESD and community-based approaches to ESD based on multi-stakeholder partnerships. At the moment, 282 organisations participate in the Okayama ESD project. The continuous support of the municipality and university is another feature of RCE Okayama. These three features of RCE Okayama constitute what is called the “ESD Okayama Model.” It is highly praised by UNESCO and RCE Okayama was awarded the UNESCO-Japan Prize on ESD in 2016.

**RCE Penang** employs three strategies in working with partners within the RCE. Firstly, RCE Penang formed a network known as RSEN or Regional Sejahtera ESD Network. Currently there are 60 members including schools (primary, secondary and preschool), related departments and faculties in USM – e.g. the Centre for Global Sustainability Studies (CGSS), Wellness Centre, and the USM Museum. The local government is also part of NGO’s such as Friends of the Earth
and WWFs. RSEN organises green carnivals where members exhibit and share their initiatives. Secondly, RCE Penang also formed the Sejahtera school clubs with the support from the Penang State Education Department. Sejahtera school clubs provide a space for teachers and students to carry out ESD activities outside the formal curriculum. Thirdly, RCE Penang launched RSY or RCE Sejahtera Youth, an initiative that engages youth especially undergraduate students in ESD initiatives.

The founding partners of RCE Saskatchewan include the University of Saskatchewan (in Saskatoon) and its Sustainability Education Policy Network, the University of Regina and its three federated colleges (that in addition to Luther College also includes First Nations University of Canada (an Indigenous led college) and Campion College (a Jesuit College)), and Saskatchewan Polytechnic. The Government of Saskatchewan originally funded projects through the Ministry of Environment and is currently represented through its Saskatchewan Ecomuseum Partnership (through the Ministry of Parks, Culture, and Sport). The Queen is represented through the official patronage of the RCE by the Lieutenant Governor of Saskatchewan. The City of Regina and City of Saskatoon (also founding partners) have representation in the RCE structure as well as smaller communities, often represented as flagship projects of the RCE (that include the Calling Lakes Ecomuseum (including the town of Fort Qu’Appelle and Treaty 4), the White Butte Ecomuseum (which includes the town of White City), the rural community of Havelock, the Craik Ecovillage, and communities around Last Mountain Lake. Schools are frequently represented for recognition awards at the Annual RCE ESD Recognition Event and this past May was the first time the event was actually hosted by a school, in this case the School in Stockholm, Saskatchewan. The RCE also often engages business indirectly by commenting on proposed developments through government-led environmental and other assessments (this has included the nuclear industry, the potash industry, agriculture, and forestry). Some Environmental Education organisations are represented or have worked with the RCE: Provincial and National environmental NGOs (Suzuki Foundation, Ducks Unlimited), International Dev’t NGOs (SCIC), and locally incorporated NGOs (e.g. ecomuseums, Sask Alliance for Water Sustainability).

4. Projects and their contributions to SDGs

Okayama University is involved in a variety of activities in RCE Okayama. Here are some examples: The “ESD Okayama Award” which started in 2015 and honours good practices of ESD around the world and within the Okayama region. The “ESD Forum” which is an annually held event, the “ESD Cafe” which is a monthly held event, and the “ESD University Students’ Internship” are among the flagship initiatives of the RCE. After the adoption of SDGs in September 2015, the Japanese Government placed strong emphasis on SDGs and has started two public offerings on SDGs: “Japan SDGs Award” started last December and “SDGs Future City” program which started last summer. Okayama University was honoured with the SDGs Partnership Award in the first round of the award, and Okayama City was selected for the SDGs Future City with 28 other Japanese cities in the first round. Common interests of Okayama City and Okayama University are “Goal 4: Quality Education”, “Goal 3: Good Health and Well-being” and “Goal 17: Partnerships for the Goals.” Against a background of growing interest in SDGs and the need to reorient ESD, RCE Okayama, Okayama University and UNU-IAS hosted the international
conference entitled “First RCE Thematic Conference: Towards Achieving the SDGs” in Okayama from 5-7 December, 2017.

**RCE Yogyakarta** and UGM carry out a program called “KKN, Kuliah Kerja Nyata” which can be translated as “Community Service Learning”. In the program, students are sent in a group of 20 to 30 students to a certain community where they have to stay and work for and with the community. The group is supervised by a professor. The program is a compulsory program for students of UGM. To be eligible to join the program, the students have to take at least 100 Semester Credit Units of classes and lab work. Each group of students should have some members from all clusters of faculties which exist in Universitas Gadjah Mada, i.e., physical/infra-structure development cluster which consists of the Faculty of Engineering, Faculty of Science, and Faculty of Geography; community health development cluster which consists of the Faculty of Medical Science, Faculty of Pharmacy, Faculty of Dentistry, and Faculty of Biological Science; agricultural production improvement cluster which consists of the Faculty of Agriculture, Faculty of Animal Husbandry, Faculty of Veterinary Medicine, Faculty of Agricultural Technology, and Faculty of Forestry; and social and cultural development cluster which consists of the Faculty of Social and Political Science, Faculty of Law, Faculty of Economic and Business Studies, Faculty of Literature, Faculty of Psychology, and Faculty of Philosophy. The duration of the program is 6-8 weeks. UGM sent 6500-7500 students. It is impossible to make social impact with only a one time visit or engagement. Therefore, we arrange three to five times where students are involved in a certain community. The first group to come for engagement is working to map the potential and problem of natural, human, and social resources. The second group should discuss with the community the alternative programs that could be done according to the results of mapping for elevating the problem that is faced by the community or improving the livelihood of the people. The second group should assist the community to put the selected alternative on the list of programs for five years for village development programs. Putting the program into a list of programs for middle term village development programs is important as the central government may allocate an amount equal to US$100.000 per year per village for those programs. The execution of the program will be done by the third, fourth, and fifth group of students.

**RCE Penang** projects involve its affiliated networks - RSEN, Sejahtera Clubs or RSY. For example, the Empowering Preschool and primary school teachers’ capacity in infusing water education: development of a module (SDG 6, SDG 4), is funded by one of the RSEN members and targets Sejahtera Clubs primary and pre-school. It also involves multidisciplinary experts in USM for example pedagogical approach and lesson plans from the school of educational studies and studies on issues related to water and rivers from experts from the School of Biology.

Most recently, **RCE Saskatchewan** was engaged in a development proposal that the RCE stakeholders viewed as unsustainable from an economic, social, ecological, and cultural perspective. The RCE is often a first, rapid responder in terms of drawing attention to issues that require greater attention. As the region is in a prairie ecosystem, water is precious and with climate change the region is getting greater variability, periods both of extreme rainfall (often at the wrong time of year from an agricultural perspective) and drought (often in our growing season). Farmers often engage in drainage projects to remove water from their land (mostly without authorisation) and this illegal drainage has negative impacts for farms and communities downstream as well as loss of wetlands (as land is put into production that previously was a natural habitat). One part of
the province that experienced extreme rainfall and illegal drainage is a salt-water basin called the Quill Lakes. Since there was no place for water to go, the Quill Lakes have grown and farmers downstream have had high levels of flooding. A proposal was made to divert this water into Last Mountain Lake, a separate basin, which has the oldest bird sanctuary in North America and a national wildlife area. The RCE originally proposed to the government to have a large-scale roundtable to discuss the issue, especially given the relevant SDGs: 2 (Zero Hunger), 4 (Quality Education), 6 (Clean Water and Sanitation), 11 (Sustainable communities), 12 (Responsible Consumption and Production), 14 (Life Below Water), 15 (Life on Land), 16 (Peace, Justice and Strong Institutions), and 17 (Partnerships for the Goals). The Government decided against this and then ruled that there would be no environmental assessment. The local ecomuseum that is a flagship project of the RCE with a focus on water notified the RCE; the RCE with the ecomuseum mobilised a Pipe Ceremony with local indigenous leaders and communities that had not been consulted. The RCE also formally wrote to the Federal Ministry of Environment to request an EA pointing out errors in deliberation regarding the Government’s own assessment rules. In January the original proposal was withdrawn and since then, realising the underlying issue is one of illegal agricultural drainage and wetland destruction, the RCE has participated with other organisations while opening the door for academics with expertise in area of the environment, law and governance, and water.

5. Community engagement challenges

**RCE Okayama** has continued the community-based and multi-stakeholder approach to ESD for more than 13 years. Thus, there have been no serious obstacles to be overcome, except for the general ignorance on ESD. Later in the UN DESD, ESD at schools came to be promoted under close mutual cooperation between the municipal board of education and university, and junior high school districts which serve as single units to become UNESCO Associated School members. Consequently, RCE Okayama has developed a community-based ESD system which combines both formal and non-formal educations in each junior high school district. Within the university campus, however, it is still a difficult task to extend an understanding of ESD to academic staff and to promote participation. One of the reasons is that the ambiguous connection of each specialised field to ESD. It is hoped the SDGs will raise researchers’ awareness of sustainable development and ESD.

**RCE Yogyakarta** have experiences that the communities they approached are reluctant or expressed their doubt on their objective. Climate change is one of the examples. When they come to a certain community, some members of the community expressed that they do not believe on the existence of climate change. Their students also often face the same problem. But, as they stay with the community, the trust can be built to overcome that doubt. When a group of students were sent to Seteluk, a location where the inhabitants do artisanal gold mining, formerly the community told the students that they are not gold miners. However, after the students lived with the community for 2-3 weeks, and they played football, volleyball, badminton together with the youngsters of the community, the trust was built, to which they started to tell the students about their activities in mining gold using mercury.

**RCE Penang** shared the experience of their mangrove reforestation project. One of the challenges is to dedicate time and energy to engage with relevant stakeholders. For example, in this case, the
RCE engaged with JPN (State education department), the forestry department, district office, and local NGOs. Building trust with the local community may take time and in their case, they were fortunate that one of the project members was a student intern with the local NGO some time ago. The bureaucracy too can be a challenge as there is a need to formalise the engagement through MOUs, etc. Another challenge engaging the community is that they are excellent at action-oriented activities but may find documentation of the work less favourable such as writing reports and documenting.

RCE Saskatchewan enumerated several challenges for universities. There is often a lack of connection of academics, many who come from elsewhere, to local community, even when there are issues in their area of specialisation, RCE familiarity with post-secondary institutions can identify these academics and local issues and bring their expertise to bear on pressing issues while making it visible to local communities. RCE familiarity with Government development processes means that this knowledge can then be rapidly mobilised for consultation processes. University scholars often also think they need to have the answers to begin with but most upfront work on development proposals involves asking important (and often hard) questions, the ones that are not obvious, as well as highlighting what is not being said and articulating these to the appropriate audience; the SDGs allow this kind of questioning to optimise development proposals. Once key questions are identified, resources can be mobilised and research conducted with local universities or elsewhere. There is also a key role for professional academics in development processes. In Canada, development proponents often want quick development approvals using standard development designs employed elsewhere, yet sustainable development involves customisation of solutions to local contexts by engaging local and indigenous knowledge and general theory from biology, the humanities, and social sciences. Corporate developers may seek to then restrict who is viewed as a “qualified expert” to prevent consideration of this local expertise. Yet since universities train who is considered a qualified expert, academics can structurally intervene and validate the importance of this local knowledge. At the same time, because the RCE is under the UN University and the UN system, it also protects universities and individual faculty members who might otherwise be quite vulnerable in engaging in very public processes with significant impacts.

6. **Focus areas for societal impact**

RCE Okayama. In principle, we should always try to integrate the research field of various academic disciplines and to create new academic fields which contribute to the sustainable development of human society. In doing so, we should always consider the harmonious relations among economic development, social equity, environmental integrity and preservation of traditional culture. This is just the basic attitude of ESD and is requested in all universities.

For RCE Penang the areas where they can have most societal impact includes providing the expertise and leadership in the area of water education or mangrove, as well as the leadership to engage multi-stakeholders. Furthermore, support such as a small seed funding is also important for schools to set up their activities. As it is, from experience, there are people who are willing and interested. Weaving and aligning the interest with academic expectation is important.
For RCE Saskatchewan, universities are able to have sufficient resources to be creative in a crisis working with others and universities are global institutions which need to work collaboratively with other universities on ESD. RCEs have learned a great deal about how to do research in ESD and this now needs to be brought to bear on universities’ own operations. It is not a question of service in addition to scholarship – it is a question of service as a basis for new opportunities for scholarship; serving the SD needs of one’s communities creates plentiful resources in terms of new questions to explore, new collaborative opportunities for resources, new grounded methods in addressing these questions, and new sources of “data”/case studies and multi-scalar observations. A second form of service against which professional faculty are evaluated is “academic service”. Professors can perform academic service through their participation in RCEs (as a new way of organising academic activity) analogous to their participation in the support of managing scientific journals and other professional activities beyond a single university.

7. Open discussion and conclusion

It is important that academics and researchers engaged in RCE activities for communities have the support of the leadership of universities and are accorded appropriate recognition of their accomplishments. This seems to be the case for all four universities represented in the panel. Also, it is desirable that these community-related initiatives are acknowledged as part and parcel of curricula (e.g. the case of Universitas Gadjah Mada where community projects of students earn credit towards graduation).

In terms of publications, outputs of RCE initiatives with communities deserve recognition through the reward system of faculty members and researchers. It was also mentioned that through policy briefs of UNU-IAS, RCE members can co-author with UNU-IAS researchers to document science-based evidence for policy recommendations.

Higher education institutions used to be viewed solely as ivory towers; disciplines were viewed and operated in silos; and academics and researchers working with communities were rare and such activities were considered unattractive. Well, not anymore! The RCEs underscored that outreach or community service is an essential element of curriculum development and the conduct of research and this can be enhanced using multi-stakeholder partnerships (SDG 17) and quality education (SDG 4), utilising RCEs as vehicles of change. RCEs demonstrate the need for strong linkages between university research and outreach.

There is an important role for higher education institutions in implementing the SDGs and this implementation can provide concrete directions for Education for Sustainable Development (ESD); on the other hand, ESD can fully support the implementation and achievement of the SDGs.

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