

**First RCE Thematic Conference: Towards Achieving the SDGs
5-7 December, 2017, Okayama, Japan**



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**Plenary I: The Okayama Session on SDGs
Panel Discussion on Further Development of ESD Towards the
Achievement of SDGs
5 December, 2017, Okayama, Japan**

Moderator: Prof. Kiichi Oyasu (Okayama ESD Promotion Commission/Okayama University)

Panellists:

- **Prof. Hirofumi Abe (Chairperson, Okayama ESD Promotion Commission/Professor, Okayama University)**
- **Mr. Ichiro Kobayashi (Representative of Seto Tourism and Culture Association "Ayumodoki" Leptobotia curta protection group)**
- **Dr. Adela Kincaid (RCE Saskatchewan)**
- **Ms. Etsuko Hiromoto (Chairperson, NPO organization Enemira)**
- **Mr. David Rangan (RCE Denmark)**
- **Mr. Yukiyasu Arimoto (AEON TOPVALU Co., Ltd)**
- **Prof. Hani Sewilam (RCE Cairo)**

This session highlighted initiatives aimed at implementing Education for Sustainable Development (ESD) within communities, especially amongst youth and within local schools, as well as the importance of involving stakeholders from all sections within the community. Following each presentation, the panellists were asked to comment on the initiative and for their reflections on the ideas presented.

Prof. Hirofumi Abe presented on the Okayama ESD Project's beginnings and the major initiatives it is currently conducting. In April 2005, the Okayama ESD Promotion Commission project was established – the same year that RCE Okayama was acknowledged as one of the first seven RCEs. He then touched on the ESD Okayama Model, which sets out the characteristics of the ESD Project, such as the inclusion of multi-stakeholders of all generations, a focus on a community-based approach and continuous university and industry support. In terms of the multi-stakeholders of all generations, the growth of organisations involved was highlighted – in 2005 there were 40 organisations involved, with this number jumping to 260 organisations by 2016. The areas of activity started with environmental conservation and environmental understanding however have now diversified and involve up to 37 kominkans in the city of Okayama. Activities include children interviewing farmers and learning about local agricultural methods from agricultural high school students. By providing children with these opportunities on top of theoretical studies, it enables them to learn about global challenges via a hands-on approach. In 2014 during the UNESCO World Conference, goals were established in areas

focusing on youth, capacity building, and participation from private companies. In 2017, in March, Okayama city developed a comprehensive plan, with the goal of developing a sustainable city, vibrant with life and working towards a sustainable future.

Comment/s:

Mr. Ichiro Kobayashi noted how well-established the programme is, in addition acknowledging the focus on climate change and water quality within their activities.

Mr. Ichiro Kobayashi presented on the critically endangered *Parabotia curtus* (Ayumodoki or Kissing Loach), a freshwater fish endemic to Japan that cannot expand its habitat, and as such can only live in freshwater surviving in only three small locations. Work has been carried out to maintain their spawning ground, along with the monitoring of reproduction and observations on spawning behaviour, allowing conditions for spawning to be qualified. Alien predators such as the 'largemouth bass' have been identified, with extermination activities carried out such as fishing competitions.

Comment/s:

Dr. Adela Kincaid spoke about the impacts to protect certain species and noted how she could learn from Mr. Kobayashi's project to reintroduce the burrowing owl to the land in Saskatchewan, Canada.

Dr. Adela Kincaid presented on 'ecomuseums', noting their many forms, shaped in many different communities dependent on the need of that community. Essentially an ecomuseum is 'a museum without walls', or 'a mirror the local population uses to discover its own image'. Dr. Kincaid explained that there are a number of characteristics that can form an ecomuseum. An example is in the case of a family of private land owners who wanted their land preserved for generations to come. The land in question held unique features such as glacial rock, wildlife species, and natural springs. They wanted the land conserved (with no development), and to be used for education and conservation purposes. The outcome was the development of a programme for local schools that could take place on that land in the form of a Heritage Sustainability Programme, with the first programme to be delivered in May 2018. It will be open to Grades four and six of the local elementary school, over one week (half days each day), with the University of Regina delivering lessons created by interdisciplinary groups. Examples of lesson topics to be delivered on site include compass use and orienteering, water pollution and water quality, climate change (games/live demonstrations) and indigenous storytelling.

Comment/s:

Ms. Etsuko Hiromoto mentioned what an interesting initiative ecomuseums are and how it would be useful to learn from their experiences, as learning is vital to improvement. She explained that within Okayama prefecture, there is a forestry that is not being utilised and they are keen to explore ways in which carpenters and those involved in construction could

be upskilled and learn more about better construction methods in order to save energy in a more efficient way.

Ms Etsuko Hiromoto spoke about future energy planning in Okayama. Following COP 3 in Kyoto and learning about the realities of environmental destruction from global warming, in 2000, Ms. Hiromoto formed an NPO called Enemira with the aim of implementing natural energy. Initiatives include collaborative electricity generating stations on buildings in Okayama city such as nursing schools and the implementation of solar panels in areas such as Nishiawakura village, Kurashiki city and in a number of kominkans. Environmental classes and lectures are also conducted at primary schools, providing students with hands-on experiences and energy-saving programmes during the Summer holidays. The organisation is continuing to develop through its relationship with the city of Okayama.

Comment/s:

Mr. David Rangan thanked Ms. Hiromoto for addressing the important subject of showing children how energy is produced, leaving the audience with a thought to ponder: When will we build a house that produces more energy than it uses?

Mr. David Rangan presented on a solution to reduce carbon emissions in the construction of buildings, noting that 36% of CO₂ produced by the human race is produced by the building industry, making it the biggest single CO₂ emission. One of the solutions they found, which is easy for their region to develop, is to build urban buildings with wood. Not only does wood carry a very old cultural connection, it is very practical and has the added benefit of being able to store CO₂. As long as there is sustainable forestry, building urban houses and constructions with wood can aid in storing CO₂ rather than producing it. Issues such as susceptibility to fire, moisture, the ability to build high houses, have all been solved by skilled engineers. What is left is changing the mindsets of people. Mr. Rangan spoke about how the project started in schools in the region within craft education, providing about 400 school pupils with 14 day periods to learn the basics. Furthermore, 240 students are taught about sustainability regarding crafts on a daily basis. The key is building it into the teaching rather than as a standalone subject, as 17 goals is too much to teach the students at the basic level. To analyse their learning processes and projects, content is split up between topics including the biosphere, society and economy. So far, 40 teachers and 45 professionals in the construction industry have been trained in sustainability, and seminars about sustainable construction and building methods and six educational films have also been produced. Overall, 13 cooperating organisations are involved in the project.

Comment/s:

Mr. Yukiyasu Arimoto expressed how valuable it was to learn about the activities Mr. Rangan presented, especially as it highlighted the importance of co-existing together with the arts.

Mr. Yukiyasu Arimoto presented on AEON TOPVALU's 'fururi' product; an unbreakable umbrella that supports consumers in the form of a long-life product, preventing disposal and wastage. The story behind the naming of the product comes from the wish of a high school girl in Cambodia, who, after noticing the large divide between the rich and the poor, came up with the name 'fururi' – 'fu' means raining, whilst 'ri' comes from the word 'recycle'. Mr. Arimoto also spoke about other work AEON is involved in, including the provision of learning opportunities for children with disabilities, supported by countries outside Japan too. In its work, AEON TOPVALU aims to develop ethical products which contribute to sustainable community development and sustainable societies in developing countries. AEON's policy is to produce goods to make the community happy, and moving from CSR to CSV – corporate social value.

Comment/s:

Prof. Hani Sewilam commented how it was a very interesting concept that supports the community. Not only is it about sustainable products, but the concept involves school children in the initiative which is important. How to involve kids in the process of ESD and grow them in a way where they will understand sustainability is crucial and is a concept Prof. Sewilam will take back to Cairo to teach to his students.

Prof. Hani Sewilam spoke about the 'Water, Energy and Food Nexus', a project initiated by RCE Cairo which started three to four years ago and presents an opportunity for youth entrepreneurs. It aims to tackle some of the main serious issues in the Middle East; food security and water. The region has plenty of sun (solar energy), sand and seawater, however how can these be used to produce food and in a more sustainable way? Water scarcity is another main issue in the region, with climate change making it more difficult. At the same time, the population is increasing. Not only is water needed for food, it's needed for Biomass (water for energy) and it's needed for cooling. Furthermore, energy is used for water desalination and treatment, whilst food and water can also be used for energy. However, one of the challenges is the cost of energy. The answer lies in changing agricultural methods, and understanding the interrelationship between water, energy and food, which RCE Cairo have studied and developed into the 'Water, Energy and Food Nexus Model' which will aid in the quest to achieve the Sustainable Development Goals (SDGs). This model has been integrated into a postgraduate curriculum in Sustainable Development (SD).

Comment/s:

Prof. Hani Sewilam expressed how it is not enough to do research to solve community problems – it is also important for those in academia and research to open their doors to spread their knowledge to the community in general. Communicating knowledge, educating and building the capacity of the next generation on how to use such knowledge is key to helping them achieve the SDGs.

Prof. Dr. Kiichi Oyasu summarised and closed the session, noting the scope of presentations covered particular initiatives in communities, each with the overarching theme of implementing projects for ESD. The lesson from the presentations is how nature and people can interact and learn together.

Dr. Hirofumi Abe noted that local initiatives should be viewed in terms of how they can form a connection with and contribute to the rest of the world. He spoke about the importance of not leaving anybody behind, and that these initiatives need to be linked with the 17 goals, providing the added motivation going forward.