

Session 4 (Parallel)

Creating Innovation Based on Science and Technology

Chairperson: Itaru Yasui

Vice-Rector
United Nations University
Japan

Rapporteur: Srikantha Herath

Senior Academic Program Officer
Environment and Sustainable Development Programme
United Nations University
Sri Lanka

In session 4, we will adopt a model that will be used through out the International Symposium. The model describes three stages of Innovation: "Input" stage, "Ba=Interaction Fields" stage and "Output" stage. In the "Input" stage, it is necessary to have new seeds or new knowledge in basic sciences, basic technologies and other areas. The first challenge for innovation is how to create such seeds or knowledge. The essential function of the second stage "Ba" is to provide opportunities for all stakeholders to get to know these seeds and discuss about them. How to enhance possibilities to create seeds or knowledge by means of funding systems, education and/or human resource management are the primary topics to be discussed in the session 4. Innovation can mean different concepts to different countries or regions. It is therefore necessary to define the boundary conditions before we discuss innovation in the stage 3, "Output". In many countries we consider economical value is the most important output of any innovation, but in other regions, social or environmental values can be regarded as more important results of innovation.

In summary, the objectives of panel discussion in session 4 are to find out several significant points and factors to attain the overall target of the symposium through discussions with "Science and Technology" in mind. It is necessary for us, first of all, to find out solutions to fill in the existing gap between basic science and applications. It is also essential to find out a method to identify true innovation.

Possible topics in session 4 can be summarized as shown below:

- (a) Roles of basic science, role of researchers working in basic science areas
- (b) Roles of technologies, role of researchers working in technologies
- (c) Roles of funding system in terms of effectiveness and accountability
- (d) Roles of "Ba" and how to create such "Ba".
- (e) Differences in several types of innovations; innovation to expand horizons, innovation to apply existing knowledge to new disciplines, innovations limited in certain regions.
- (f) Output of innovation; economical values, social values and other values.

It is most welcome if all speakers, panelists and attendants try to include examples of historically prominent true innovations, such as electricity, airplanes, plastics, liquid crystal, mobile phones, the Internet, etc., in the discussions.

Although global sustainability is the ultimate goal of mankind, it is a complex and broad issue that also depends on the stage of human activities and economic development. As our time is limited in the session, it may be necessary for us to focus our discussion on the topics directly related to "Innovation" and the "Role of Science and Technology".