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**CONSERVATION AND SUSTAINABLE USE OF BIOLOGICAL RESOURCES
WITH MAIN EMPHASIS ON MICROBIAL RESOURCES**
*[THE IMPLEMENTATION OF NAGOYA PROTOCOL UNDER THE CONVENTION ON
BIOLOGICAL DIVERSITY]*

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Related RISH mission : Mission 1, 2, and 4

Biodiversity is the most important system that can support our life on Earth. Biodiversity is a complicated nature and forms a complex ecosystem and perfect natural environment to provide almost all of our basic need to live, to breathe, to eat, to drink and to shelter ourselves. It is estimated that there are around 10 million of living species currently inhabit Planet Earth, and almost 2 million species are currently known and documented. But due our limited knowledge, only small numbers of species are being used.

Our awareness on the important of biodiversity is very limited. Consequently, many species are in danger of extinction, threatened by habitat transformation, overexploitation, invasive alien species, pollution and climate change. The disappearance of biodiversity is one of the greatest threats facing humans.

Through the rapid development on science and technology in particularly biology and biotechnology, the economic value of biodiversity is continuously discovered. It is anticipated that the exploitation of genetic resources and its related traditional knowledge, bio-prospecting, to further discover the economic value of biodiversity will continue to grow.

The Convention on Biological Diversity (CBD) is the most important legally binding instrument to conserve biodiversity, to sustainably use and to ensure fair and equitable sharing of the benefits arising out of the utilization of genetic resources. It is noted, however, that the 20 years implementation of CBD does not able to significantly halt biodiversity loss. In fact, the loss of biodiversity is continued and even in accelerated fashion. Nagoya Protocol (NP) which is adopted late 2010 in Nagoya, Japan, is a hope to change the conditions. This NP is focusing on the third objective of the CBD, the fair and equitable sharing of the benefits arising from the utilization of genetic resources. NP is designed to ensure the appropriate access to genetic resources, the appropriate transfer of relevant technologies, and fair and equitable sharing of the benefits from the utilization of genetic resources and its traditional knowledge while acknowledging the sovereign right of the Party. NP could significantly contribute to the conservation of biodiversity and the sustainable use of its components.

Case study on international research cooperation on microbial genetic resources between Indonesia and Japan will be highlighted. The possibility in adopting this experience as a model for the implementation of NP under the CBD will be discussed in this seminar. Indonesian initiative on the implementation of NP under the CBD will also be updated.