INTRODUCTORY COURSE ON
"*SCIENCE DIPLOMACY AND SUSTAINABILITY*"

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Course outline

I. Challenges of sustainability

II. Principles and practice of science diplomacy

III Case studies

SYNOPSIS

I. SUSTAINABILITY

In a recent remark, UN Secretary-General, Antonio Guterres said, "Our planet is broken…humanity is waging war on Nature". Human activities have fuelled global warming, with the decade between 2011 and 2020 being the warmest on record, according to the World Meteorological Organization. Unless we are able to reverse global warming at a faster rate, frequent wildfires, floods and hurricanes could be the planet's 'new normal'.

The global community is also not doing well in managing our natural resources. Biodiversity – the variety of animals, plants and microorganisms that provide us ecosystem services such as soil formation, provision of food and fibre, air quality and climate regulation, the regulation of water supply and quality and the cultural and aesthetic value of certain plants and species – are

being lost at an alarming rate. An authoritative report released by the UN-backed Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) in 2019 revealed that up to one million species of plants and animals are being threatened by extinction due to unbridled human activities.

According to a new OECD report released last year, the world is producing twice as much plastic waste as two decades ago, with the bulk of it ending up in landfill, incinerated or leaking into the environment, and only 9% successfully recycled. Plastic pollution is a grave threat to plants and animals, and humans. Scientists have found that microplastics in 114 marine species, about a third of which ended up on our plates. Polluting plastic also effects the ecological chain and destroys ecosystems.

These are but three of the grave challenges facing life on Earth today. We are at a crossroads – how do we grapple with these intergenerational problems: the need for us to embark on sustainable development, “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”, defined by the 1987 Bruntland Commission report known as “Our Common Future.”

II . SCIENCE DIPLOMACY

Science diplomacy is the use of scientific collaborations among nations to address common problems and to build constructive international partnerships. Goal #17 of the 2030 Development Agenda which embodies the 17 Sustainable Development Goals is a good manifestation of science diplomacy. As described by the Royal Society and the AAAS in a 2010 publication, science diplomacy has three strands:

Diplomacy for science – the use of diplomatic action to facilitate international scientific collaboration, e.g. by negotiating R&D agreements and exchange programmes or enabling the establishment of international research infrastructures;

Science for diplomacy – the use of science as a soft power to advance diplomatic objectives, e.g. for building bridges between nations and creating goodwill on which diplomatic relations can be built;

Science in diplomacy – the direct support of diplomatic processes through science, e.g. by providing scientific advice and evidence to inform and support decision-making in foreign and security policies.

In this course, we will illustrate the role of science in multilateral negotiations to overcome the problem of climate change through the UN Framework Convention on Climate Change (UNFCCC) and that of biodiversity loss through the UN Convention on Biological Diversity (CBD). Two instruments of advice predicated on scientific evidence are the Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).

III. CASE STUDIES

The drive towards sustainability is more challenging in countries of the Global South, or more specifically in the 57-member states of the Organization of Islamic Cooperation. One of the issues is the abundance of natural resources, such as biodiversity found in those developing countries. The Global North, mostly industrialized countries, and with little natural resources among them, are the ones most vocal about conservation. The irony is

these developing countries are still in need of development, thus in our efforts to acknowledge the need for protected areas for flora and fauna, a careful balance needs to be fostered between conservation and development. After all, SDG#1 – poverty alleviation is still the top priority for the majority of OIC member countries.

A set of case studies will be presented in the course to illustrate the problems and to deliberate on the course of action to be taken by numerous stakeholders to solve the issues.