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Organización
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联合国教育、
科学及文化组织

Message from Mr Koïchiro Matsuura,

Director-General of UNESCO

on the occasion

of World Environment Day: Melting Ice: A Hot Topic?

5 June 2007

The growing importance of polar regions, in particular with regard to the crucial role that they play in Earth systems and how they affect climate change, has led the United Nations Environment Programme (UNEP) to select “Melting Ice” as the theme for this year’s World Environment Day. This year, World Environment Day highlights the work undertaken within the framework of the International Polar Year (2007-2008), which addresses both the scientific and societal implications of dramatic changes in polar regions. In an era of climate and global environmental change, learning and caring about Polar Regions is critical to human well-being and the well-being of the planet as a whole.

Rising global temperatures are lengthening melting seasons, thawing frozen ground and thinning polar ice caps and glaciers. Although glaciers have generally been retreating worldwide, in recent years this phenomenon has accelerated. Melting glaciers in every region of the world are putting millions of people at risk from floods, droughts and lack of drinking water. This is particularly evident in areas such as Asia and South America, where millions of people rely on glacial runoff for drinking water and irrigation. If these rapidly melting glaciers were to disappear, severe water shortages would occur, causing dramatic socio-economic consequences as well as political instability in regions where rivers and glaciers cross national boundaries.

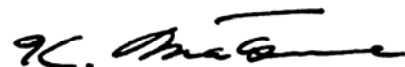
Communities that live in environments characterized by certain climatic conditions are experiencing profound changes in the ecological balance due to glacial melting. Thus, the ecological balance of mountainous areas, considered by some scientists as the planet’s third pole, and drylands are particularly affected, as Polar Regions have an important role in maintaining the Earth’s heat balance. There are also

implications of a socio-economic nature, as local economies depending on resources no longer available may become disrupted, while local knowledge and cultural approaches to land management will need to be adapted. Biodiversity and the relationship between humans and nature will be affected, and to a large extent depend on how Polar Regions evolve in the years and centuries to come.

The International Polar Year launched in March 2007 will be devoted to monitoring the Polar Regions, which still remain a grey area for scientists. Indeed, scientists have been unable to predict the influence on sea-level rise of future changes in the dynamic ice flows in Greenland and Antarctica, as current understanding of these processes remains limited. The Polar Year will strive to fill some of the gaps in our understanding, an urgent task when one considers that the last time average polar temperatures were 3-5°C higher than today, some 125 000 years ago according to ice core data, the corresponding reduction in polar ice volume led to a 4-6m rise in sea-levels.

UNESCO has a longstanding tradition of scientific programmes that act as decision-support tools, in the areas of oceans, water, ecosystems, energy, engineering, disasters – to name a few. Thus, in the context of the International Polar Year, UNESCO has established the Artic-HYDRA project, which will monitor the artic hydrological cycle between 2008 and 2013. UNESCO's programmes in the sciences, as well as its programmes in the fields of education, culture and communication that relate to the environment, are important vehicles that can promote awareness about our changing planet and help find collective solutions to mitigate adverse changes and their impacts.

Only a well-informed society will be able to take responsible decisions about the future of the environment and our planet, and in this regard the United Nations has an important role to play. I would like to praise UNEP for continuing to pursue the important initiative of celebrating World Environment Day. UNESCO stands ready to participate in this effort and make World Environment Day even more visible and effective in years to come.



Koïchiro Matsuura