



Keynote speech

By

The Minister of Environment

The Republic of Indonesia

Delivered at

International Conference on Integrated Space Technology
Applications to Climate Change

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Distinguished Guests;
Ladies and Gentlemen;

First of all I would like to extend my warmest welcome and greetings to all of participants of this meeting. It gives me a great pleasure to be here, International Conference on Integrated Space Technology Applications to Climate Change, to address the issues of National policy in climate change and the role of Space Technology application.

Distinguished Ladies and Gentlemen:

The climate belongs to us all. We see changes in the climate that worries us, changes that cannot be explained as natural and changes that may origin from human thoughtless use of resources and nature. As you are well aware, the 2007 IPCC (IPCC, 2007) has documented the growing risks of flooding posed for Asia's coastal cities by the climate change, as reflected in sea level rise and intensified storms and storm surges, and ongoing urban growth in low-lying coastal zones.

Recent studies indicate that climate change, sea level rise and the sinking of the deltas on which most Asian mega urban regions have arisen, are all occurring at much faster rates than earlier projected and therefore pose even greater risks than previously indicated.

Global warming appears to be accelerating and may increase to 4° C or more by the end of this century, twice the earlier IPCC projections. The sea level is now expected to rise by one meter or more by 2100; two or three times the earlier projections. The recent typhoons and rains striking Southeast Asia have been the most intense in decades as would be expected as a result of global warming.

Indonesia, as an archipelagic country, is identified as one of the vulnerable countries based on the recent studies such as World Bank. Refer to the Indonesian National Disaster Management Agency's 2010-2014 Plan, the island of Java, where approximately 130 million people live, is particularly vulnerable to tropical cyclones. In 2011 the Meteorology, Climatology and Geophysics Agency (BMKG) detected 23 tropical cyclones off the coast, which produced high-speed winds, heavy rains and heightened tidal levels that caused flooding and structural damage to buildings and coastal infrastructure.

In terms of marine biodiversity *as an example*, Indonesia is home to 16% of the world's coral reefs and the highest reef-associated population in the world, with nearly 60 million people living on the coast near coral reefs. The loss of coral reef areas is inevitable due to the blast-fishing, tourist activities and pollutions, and in addition to that, climate change worsening those cases. The El Niño event in 1997-98 triggered widespread bleaching in Indonesia, with western and west-central Indonesia most affected. In 2000, bleaching was recorded in East Sumatra, Java, Bali, and Lombok. In the Seribu Islands northwest of Jakarta, 90% to 95% of the coral reef from the reef flat down to 25 m died. According to LIPI-study, a number of 70 % of the total coral reefs in Indonesia is identified will be lost by 2050 if restoration action does not occur.

The other example, land and forest cover, based on Indonesia Environment Status 2012, there were also decreasing eventhough the acceleration is more slower now.

Ladies and Gentlemen,

The evidence shows that ignoring climate change will eventually hinder economic growth. Our actions over the coming few decades could create risks of major disruption to economic and social activity, later in this century and in the next, on a scale similar to those associated with the great wars and the economic depression of the first half of the 20th century. And it will be very difficult or impossible to reverse these changes.

Tackling climate change is the pro-growth strategy for the longer term, and it can be done in a way that does not cap the aspirations for growth of rich or poor countries. The earlier effective action is taken, the less costly it will be. At the same time, given that climate change is happening, measures to help people in adapting the environmental changes are essential. And the less mitigation we do now, the greater the difficulty of continuing to adapt in future.

Distinguished Ladies and Gentlemen;

Efforts in adaptation and mitigation in conjunction to face climate change are require to be done as soon as possible. Indonesia has prepared a set of policies for disaster management and various supporting adaptation strategies in vulnerable sectors as mentioned in the National Action on Climate Change (RAN-PI, 2007) and Indonesia Climate Change Sectoral Roadmap (2009), such as coastal infrastructures, water resources management, health , fisheries and agriculture.

Another crucial progress in climate change adaptation in Indonesia is the National Action Plan for Adaptation (RAN-PI) development coordinated by National Planning Agency (Bappenas) in cooperation

with the National Council on Climate Change (DNPI) and the Ministry of Environment, and also involves other line ministries. The purpose of the document is to coordinate and synchronize adaptation activities in the national level.

Regarding mitigation of climate change, there were National Action Plan of Green House Gas and National Inventory of Green House Gas under Presidential Decree No.61 year 2011 and No. 71 year 2011.

Ladies and Gentlemen,

For combating climate change, Ministry of Environment recently developing information system what we call SIGN – *Sistem Informasi GRK Nasional* (National Information System of Green House Gases) and SIDIK - *Sistem Inventori Data Indeks Kerentanan Perubahan Iklim* (Climate Change Vulnerability Index Inventory System).

These two *system will* provide the status of GHG in Indonesia and the *Vulnerability* status of region such as cities, districts or islands as well as sector such as water, coastal, agriculture and so on.

Ladies and Gentlemen,

Recent technology development and application of space technology in providing accurate and valid data and information of climate change is very critical issue for Indonesia to support these *two Instruments*. Therefore through this conference, which has covered partners of the *UNOOSA (United Nations Office for Outer Space Affairs)*, I believe will give the opportunity to discuss and share the experiences in identifying problems and its solutions and hopefully will continue to work closely in the future.

Thank you.

Prof. DR. Balthasar Kambuaya, MBA.