Remarks by Achim Steiner, UN Under-Secretary General and UN Environment Programme Executive Director (UNEP)

Eye on Earth Summit—From a Moment to a Movement

13 December 2011—HE. Mohammad Ahmad Al Bowardi, Managing Director of Environment Agency - Abu Dhabi

Bill Clinton, former President of the United States and Founder of the William J. Clinton Foundation

H.E. Dr. Rashid Ahmed Bin Fahd, UAE Minister of Environment and Water

Senior figures from the United Nations and other multilateral institutions; indigenous leaders, the private sector, distinguished delegates, ladies and gentlemen,

We meet here in Abu Dhabi, amid the 40th anniversary celebrations of the Unification of the United Arab Emirates.

Next year we mark 20 years after the 1992 Rio Earth Summit and another 40th anniversary—40 years after the Stockholm Conference on the Human Environment that also established the environment programme of the UN or UNEP.

The last 40 years has seen remarkable progress in terms of humanity's understanding of the processes and systems that day in and day out make planet Earth habitable.

This in part has been propelled by technological advances.

It is just over 50 years since Explorer VII, widely viewed as the first Earth Observation satellite was launched by the United States to measure the amount of heat reflected by the Earth back into space.

By 2005, close to 70 were in orbit from an ever growing number of space agencies including ones from China and India. And just over two years ago the United Arab Emirates launched its first earth observing satellite.

Allied to rapidly advancing computing power, monitoring networks across our lands, air and oceans, the world is awash with data including environmental data.

By some estimates, the amount of data held in the world is 315 times the number of grains of sand, and continuing to grow.

Managing, processing and making these volumes of data available in user-friendly ways and in service of sustainable development is one of the global challenges and one of the issues for Eye on Earth-- and a key input to assisting Rio+20 in June next year.

But there are many others.

Data Gaps
In some cases the data or knowledge gap is not so much volume but paucity of reliable data—even with all this information and high tech systems, many areas of the planet remain unmapped or not sufficiently monitored for the accelerating environmental change witnessed almost everywhere.

In respect to rivers alot of data on flows, water withdrawls and the recharge rates of underground aquifers are patchy (to say the least) across rivers basins and freshwater shared by more than two nations.

Information on water quality can be even more challenging especially in developing countries.

Meanwhile only 0.1 per cent of the oceans have been mapped at a scale as detailed as a hectare.

And large tracts of the seafloor, such as most of the southern ocean, have not been mapped at all—we have better data on the surface of the moon.

Sometimes it is a case of joining up disparate networks and data sets--there is no globally interconnected information network specific to floods for example but there could be with political ambition.

Data Sharing
Sharing data is also key.

The oil and gas industry for example carries out Environmental Impact Assessments, including in the Gulf region.

This in turn generates large amounts of data on species such as dolphins, as well as whole ecosystems such as coral reefs and seagrass beds.

But much of this vital data is often lost to researchers and policymakers for a range of reasons from privacy considerations up to the fact that such surveys and the underlying raw data is often not standardized.

Some Continents have special and urgent capacity building needs.

By some estimates about 25 per cent out of the Global Climate Observing System surface stations in east and southern Africa are not working and most of the remaining stations elsewhere in Africa are functioning in a less than desirable manner.

Around a fifth of the 10 upper air network stations are in a similar state.

Overall it is estimated that Africa needs 200 automatic weather stations and a major effort to rescue historical data, a significant amount of which remains in paper form rather than digitized for deployment in modern forecasting and climate super computer modeling.

This has implications for the global climate supercomputer models as well as for predicting droughts and floods in order to improve disaster early warning.

These are historical challenges, but new ones alongside new opportunities are emerging as a result of the technological age.

Citizen's Science

Harnessing 'citizen' science, including the networks of mobile phones users, is also part of the environmental data debate.

It is an area identified as a promising opportunity by Global Pulse, a new initiative by Ban ki-Moon, the UN Secretary General.

The public and their cell phones could, if encouraged, become early warning systems of droughts and floods, as well as forest fires and wildlife poaching.

In India, Project Suraya-- which is linked to UNEP's Atmospheric Brown Cloud initiative-- is using special cell phones in villages to measure levels of black carbon emitted by cook stoves.

The project is also linking to satellites with the aim of measuring how more efficient stoves are simultaneously improving public health while providing climate benefits in the atmosphere.

Excellences, Ladies and gentlemen,

UNEP is delighted to have been a partner with the authorities in the United Arab Emirates and the Abu Dhabi on Eye on Earth.

Eye on Earth Special Initiatives

UNEP and the UN system as a whole congratulates the organizers on the 9 Special Initiatives proposed as contributions to Rio+20 and beyond.

The Access for All initiative, aimed at making environmental data available for all citizens, is one idea that is rapidly maturing in advance of Rio+20.

It is a natural ally to the Green Economy in the context of sustainable development and poverty eradication and the institutional framework for sustainable development.

The opportunity to implement Principle 10 of the 1992 Rio outcome globally, building on the work done in Europe and central Asia through the Aarhus Convention, is gaining a great deal of traction among governments and civil society.

I am delighted that here at the Eye on Earth Summit the Eye on Earth network involving partners including the European Environment Agency, ESRI, the Abu Dhabi Environment Agency and UNEP is officially launched.

It is part of this head of steam towards greater public access to environmental data including powerful mapping portals—a contribution to what we call UNEP Live.

If you visit the exhibition centre, you can see this extraordinary new network and its potential in operation.

For example, maps showing known locations of turtle nesting sites near Abu Dhabi, overlayed with oil and gas operations, dugongs and multiple additional maps—ranging from wave heights to human population.

Knowledge and data displayed in a way that can assist planners as well as those managing say an oil spill or another environmental challenge.

There are also big questions that also need answering in order to catalyze sustainable development and which could serve as a focus for the Special Initiatives.

Let's take the science of biodiversity for example. The world community needs to understand, at the global level, the potential impact of biodiversity loss to human development.