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Green decline 'may bring irreversible change'

By Richard Black Environment correspondent, BBC News



Climate change threatens to make life worse in areas such as sub-Saharan Africa

With forests and fish stocks declining, water demand rising and lack of action on climate change, humanity's path is anything but sustainable, the UN warns.

The [Global Environmental Outlook](#) says significant progress is seen on only four out of 90 environmental goals.

Meanwhile, a team of scientists warns that life on Earth may be on the way to an irreversible "tipping point".

The UN Environment Programme (Unep) urges leaders to agree tough goals at this month's Rio+20 summit.

Where governments have agreed specific treaties, it says, major change has transpired.

However, negotiations leading up to the summit appear mired in problems, with governments failing to find agreement since January on issues such as eliminating subsidies on fossil fuels, regulating fishing on the high seas and obliging corporations to measure their environmental footprint.

"GEO-5 reminds world leaders and nations meeting at Rio+20 why a decisive and defining transition to awards a low-carbon, resource-efficient, job-generating 'green economy' is urgently needed," said Achim Steiner, Unep's executive director.

"If current trends continue, if current patterns of production and consumption of natural resources prevail and cannot be reversed, then governments will preside over unprecedented

levels of damage and degradation."

Pollution costs

This is the fifth edition of the Global Environmental Outlook, Unep's blue-chip five-yearly assessment of the natural world.



Innovative farming methods can save on water and fertilisers while giving good yields

The last, published in 2007, warned that factors such as rising demand for freshwater were affecting human wellbeing.

For the current edition, researchers assessed progress in 90 important environmental issues.

They concluded that meaningful progress had been made on just four - making petrol lead-free, tackling ozone layer depletion, increasing access to clean water and boosting research on marine pollution.

A further 40 showed some progress, including the establishment of protected habitat for plants and animals on land and slowing the rate of deforestation.

Little or no progress was noted for 24, including tackling climate change, while clear deterioration was found in eight, including the parlous state of coral reefs around the world.

For the remainder, there was too little data to draw firm conclusions.

This is despite more than 700 international agreements designed to tackle specific aspects of environmental decline, and agreements on alleviating poverty and malnutrition such as the Millennium Development Goals.

Among the report's "low-lights" are:

- air pollution indoors and outdoors is probably causing more than six million premature deaths each year
- greenhouse gas emissions are on track to warm the world by at least 3C on average by 2100

- most river basins contain places where drinking water standards are below World Health Organization standards
- only 1.6% of the world's oceans are protected.

"The moment has come to put away the paralysis of indecision"

Achim Steiner Unep

A few hours after GEO-5's release, the journal Nature published a [review of evidence](#) on environmental change concluding that the biosphere - the part of the planet that supports life - could be heading for rapid, possibly irreversible change.

The authors, headed by Anthony Barnofsky from the University of California, Berkeley, combined information on major transformations in the Earth's past (such as mass extinctions) with models incorporating the present and the immediate future.

More than 40% of the Earth's land is used for human needs, including cities and farms; and with the population set to grow by a further two billion by 2050, that figure could soon exceed 50%.

Rising demand for resource-expensive foods such as beef could mean it happens by 2025, Prof Barnofsky's modelling suggests.

"It really will be a new world, biologically, at that point," he said.

"I think that if we want to avoid the most unpleasant surprises, we want to stay away from the 50% mark."

Rio calling

At the core of the Rio+20 agenda is the idea of changing many of the factors driving this pattern of environmental decline while also raising living standards for the world's poor.

Unep adds its voice to many others urging world leaders to seize this baton when they assemble in Rio on 20 June.



The world continues to lose forested areas, despite planting campaigns in East Asia and Europe

Population growth, unsustainable consumption in western and fast-industrialising nations, and environmentally destructive subsidies all need urgent action, it says.

A few years ago the World Bank concluded that destructive fishing practices, fuelled largely by subsidies, had depleted stocks so much that society was missing out on \$50bn per year worth of fish it could otherwise have eaten.

The G20 has previously agreed to phase out fossil fuel subsidies - calculated at over \$400bn per year - without setting firm targets or a timetable. Unep says leaders should make specific moves on this in Rio.

The summit - which marks 20 years since the Rio Earth Summit and [40 years since the very first UN environmental gathering in Stockholm](#) - is likely to agree to develop a set of sustainable development goals (SDGs), a concept that Unep endorses.

It points out that factors such as air pollution and climate change are also imposing costs on the global economy - in the US, for example, air pollution is calculated to cut crop yields by \$14-26bn each year.

"The moment has come to put away the paralysis of indecision, acknowledge the facts and face up to the common humanity that unites all peoples," said Mr Steiner.

"Rio+20 is a moment to turn sustainable development from aspiration and patchy implementation into a genuine path to progress and prosperity for this and the next generations to come."