

Humanity falls deeper into ecological debt: study

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The most [dominant species](#) in Earth's history, in other words, is living beyond the planet's threshold of sustainability, trashing the house it lives in.

At its current pace of consumption humankind will need, by 2030, a second globe to satisfy its voracious appetites and absorb all its waste, the report calculated.

Earth's seven billion denizens -- nine billion by mid-century -- are using more water, cutting down more forests and eating more fish than Nature can replace, it said.

At the same time, we are disgorging more CO₂, pollutants and [chemical fertilizers](#) than the atmosphere, soil and oceans can soak up without severely disrupting the [ecosystems](#) that have made our planet such a comfortable place for homo sapiens to live.

Counting down from January 1, the date when human activity exceeds its budget -- dubbed "Earth Overshoot Day" -- had receded by about three days each year since 2001.

The tipping point into non-sustainability happened sometime in the 1970s, said the Oakland, California-based Global Footprint Network, which issued the report.

This year, researchers estimate that the equivalent of Earth's resource quota will be depleted on September 27.

"That's like spending your annual salary three months before the year is over, and eating into savings year after year," Global Footprint Network President Mathis Wackernagel said in a statement.

"Pretty soon, you run out of savings."

Even as Earth's capacity to host our ever-expanding species diminishes, the demands on "[ecosystem services](#)" -- the term scientists use to describe Nature's bounty -- continues to grow.

"From soaring [food prices](#) to the crippling effects of climate change, our economies are now confronting the reality of years of spending beyond our means," Wackernagel said.

UN chief Ban Ki-moon earlier this month said sustainable development now tops the global agenda of issues demanding urgent action.

"Overshoot" is driven by three factors: how much we consume, the global population, and how much Nature can produce.

Technology has vastly boosted productivity of edible plants and animals, but that expansion has barely kept pace with the rate at which demand has increased, the report said.

As critical, it has not taken into account all the collateral damage inflicted on the environment.

The United States is the biggest ecological deficit spender, according to an earlier calculation by the same group.

If all people adopted the American lifestyle -- big house, two cars, huge per-capita energy consumption -- the world's population would need about five "Earths" to meet its needs.

By contrast, if everyone on Earth matched the average footprint of someone in India today, humanity would be using less than half the planet's biocapacity.

But as India, China and other emerging giants continue to grow their economies at breakneck pace -- fuelled in large part by the desire for a "Western" lifestyle -- that per-capita footprint will become much larger, scientists warn.

Already today, for example, China is the top emitter of greenhouse gases and the top producer of automobiles.

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