

Economic growth has 'devastating cost to nature', review finds

February 2 2021, by Patrick Galey



The 600-page review said that all livelihoods on Earth depended on the health of the planet

Humanity's unbridled growth in recent decades has come at a "devastating cost to nature" according a wide-ranging international

review on the vital economic role played by our living planet.

The 600-page rundown of scientific material commissioned by the British government highlighted the precarious state of biodiversity and warned that only a sea change in how countries power economic growth could prevent catastrophic impacts for nature, and humanity.

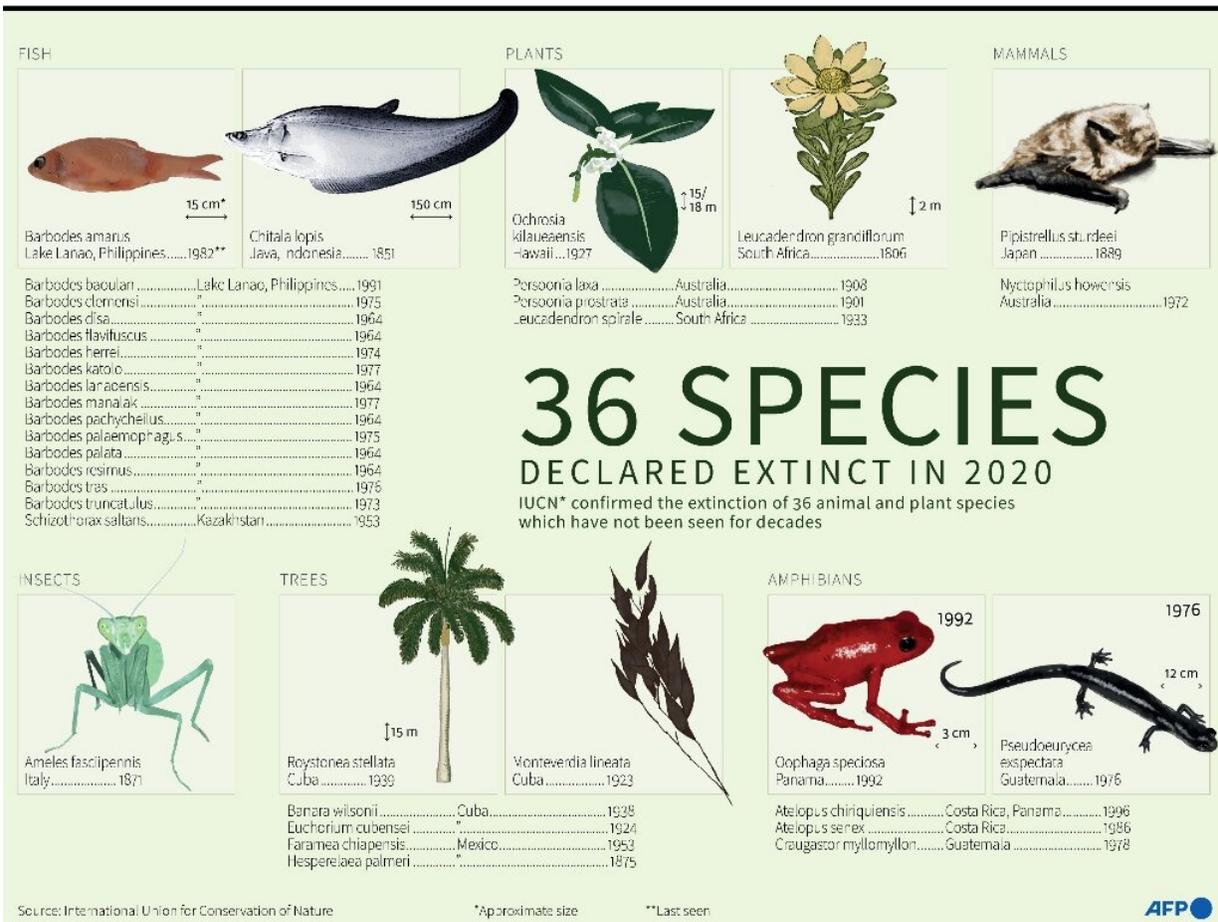
The Dasgupta Review—a two-year global collaboration of hundreds of academics overseen by Partha Dasgupta, professor emeritus of economics at the University of Cambridge—said that all livelihoods depended on the health of the planet.

It showed that while global capital produced per person had doubled in the three decades since 1992, the stock of natural capital—that is, the quantifiable benefit an individual derives from services bestowed by nature—had plunged 40 percent.

"While humanity has prospered immensely in recent decades, the ways in which we have achieved such prosperity means that it has come at a devastating cost to nature," the review said.

It called for a fundamental redressing of humanity's demands and nature's supply, warning that biodiversity is intricately linked with human wellbeing and health.

Some species are going extinct up to 1,000 times faster than the historical average, "undermining nature's productivity, resilience and adaptability", the review said.



FISH

Barbodes amarus Lake Lanao, Philippines.....1982** (15 cm*)

Chitala lopis Java, Indonesia.....1851 (150 cm)

PLANTS

Ochrosia kilauaeensis Hawaii.....1927 (15/18 m)

Leucadendron gracillorum South Africa.....1806 (2 m)

Persea laxa.....Australia.....1908

Persea prostrata.....Australia.....1901

Leucadendron spirale.....South Africa.....1933

MAMMALS

Pipistrellus sturdeeii Japan.....1889

Nyctophilus howensis Australia.....1972

36 SPECIES DECLARED EXTINCT IN 2020

IUCN* confirmed the extinction of 36 animal and plant species which have not been seen for decades

INSECTS

Ameletus fasciipennis Italy.....1871

TREES

Roystonea stellata Cuba.....1939 (15 m)

Monteverdia lineata Cuba.....1923

Banara wilsonii.....Cuba.....1928

Euchorium cubensei.....1924

Faramia chiapensis.....Mexico.....1953

Hesperiaiaea palmeri.....1875

AMPHIBIANS

Gophaga speciosa Panama.....1992 (3 cm)

Pseudoeurycea expectata Guatemala.....1976 (12 cm)

Atelopus chiriquiensis.....Costa Rica, Panama.....1996

Atelopus senex.....Costa Rica.....1986

Craugastor myllomylon.....Guatemala.....1978

Source: International Union for Conservation of Nature *Approximate size **Last seen

AFP

The International Union for Conservation of Nature (IUCN) confirmed the extinction in 2020 of 36 plant and animal species, not seen for decades.

'Totally dependent'

It warned that catastrophes related to nature loss—including the COVID-19 pandemic which was driven by land-use changes and species exploitation—could prove to be "the tip of the iceberg" if development continued at its current rate.

"We are totally dependent upon the natural world," renowned naturalist

David Attenborough wrote in a foreword to the review.

"It supplies us with every oxygen-laden breath we take and every mouthful of food we eat.

"But we are currently damaging it so profoundly that many of its natural systems are now on the verge of breakdown."

The economic benefits of biodiversity had historically been missed from growth models, distorting the value of capital accumulation and leaving crucial conservation programmes chronically underfunded, said the review.



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With an estimated \$4-6 trillion in funding each year going to unsustainable economic activities such as fossil fuel use and damaging farming techniques, governments "exacerbate the problem by paying people more to exploit nature than to protect it", it added.

It called for a new way of defining economic wellbeing, one that takes nature's services into account, to replace the traditional GDP model.

But it warned that choosing a more sustainable growth trajectory would require international will and coordination "akin to, or even greater than, those of the Marshall Plan".

Rethinking economics

Such a sustainable future would include a total decarbonisation of the global energy system, the review concluded.

Moreover, properly managing Earth's precious resources would involve people in richer nations changing consumption and wasteful habits, and better access to finance and education for women.



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"Never before has it been so important to consider the economics of nature and the role biodiversity plays in supporting a healthy economy," said Guy Poppy, professor of Ecology at the University of Southampton, who was not involved in the review.

"Two of the major challenges currently facing humankind—climate change and COVID—both illustrate the need to link economics with the environment and to rethink how we will become more prosperous and healthy in the future."

The review warned of waning biodiversity within Earth's soil, which

provides 65 percent of the planet's fresh water and 99 percent of humans' calorific intake.

Together with this, its capacity to absorb carbon pollution, and provide shelter and medicine, nature is estimated to provide around \$33 trillion worth of services to the global economy.

But land-use changes, urban development and large-scale farming are threatening nature's vital ecosystems with imminent collapse, the review said.

"Science shows us that nature is teetering on a knife-edge -- future generations will judge us for how we respond," said Jennifer Morris, CEO of The Nature Conservancy.

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