

# Can we eat Big Macs and still avoid climate chaos?

August 9 2019, by Marlowe Hood

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Not everyone needs to become a vegetarian much less vegan to keep the planet from overheating, but it would probably make things a lot easier if they did, a UN report concludes

Not everyone needs to become a vegetarian, much less vegan, to keep

the planet from overheating, but it would probably make things a lot easier if they did.

That's the ambiguous and—for many on either side of this meaty issue—unsatisfying conclusion of the most comprehensive report ever compiled on the link between climate change and how we feed ourselves, released Thursday by the United Nations.

The core findings are crystal clear: climate change is threatening the world's [food supply](#), even as the way we produce food fuels [global warming](#).

Rising temperatures in tropical zones are starting to shrink yields, displace staple crops, and sap essential nutrients from [food plants](#).

At the same time, the global food system—from farm to food court—accounts for at least a quarter of global greenhouse gas emissions. With two billion more mouths to feed by mid-century, it cannot simply be scaled up without pushing Earth's thermometer deep into the red zone, according to the Intergovernmental Panel on Climate Change (IPCC) "special report".

More than half of today's food-related emissions come from the animal sector, and half of that from sheep and, most of all, cattle.

"Today's IPCC report identifies the enormous impact that our dietary choices have on the environment," commented Alan Dangour, a nutrition and global health expert at the London School of Hygiene & Tropical Medicine.



Rising temperatures in the African Sahel have caused prolonged drought and unpredictable weather patterns, exacerbating food shortages

### **Double climate threat**

"It is clear that reducing the demand for meat in diets is an important approach to lowering the environmental impact of the food system."

The livestock industry is a double climate threat: it replaces CO<sub>2</sub>-absorbing forests—notably in sub-tropical Brazil—with land for grazing and soy crops for cattle feed. The animals also belch huge amounts of methane, a potent greenhouse gas.

On average, beef requires 20 times more land and emits 20 times more

greenhouse gases per unit of edible protein than basic plant proteins, notes the World Resources Institute, a Washington-based policy think tank.

For all these reasons, the IPCC concludes, gravitating towards "balanced diets, featuring plant-based foods" would hugely help the [climate change](#) cause.

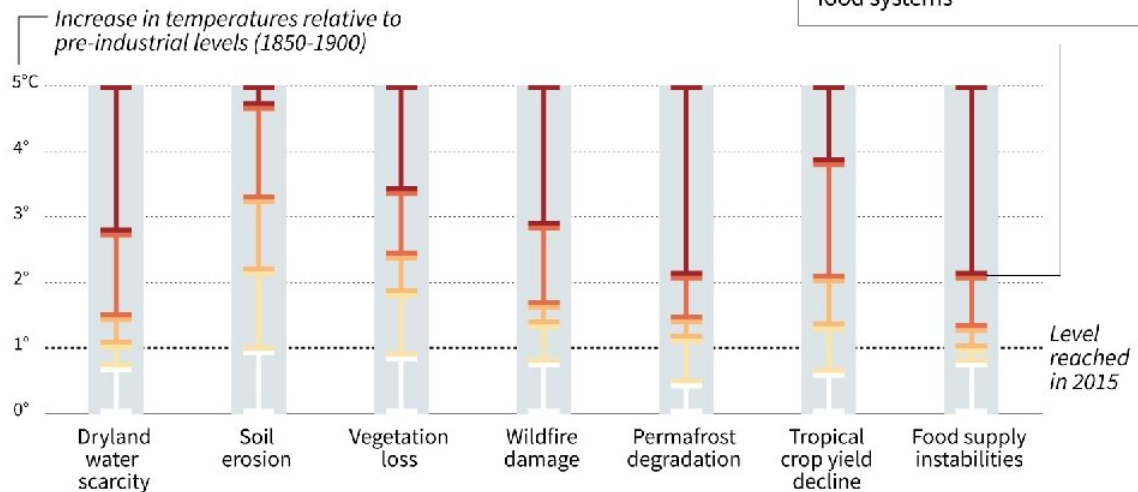
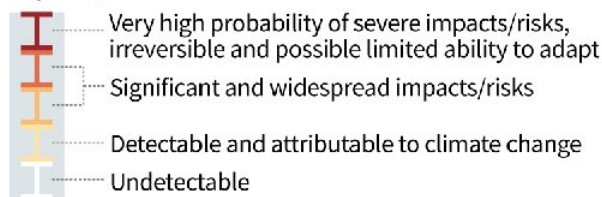
This may sound like a ringing endorsement of vegetarianism, but it doesn't necessarily mean the world must, or should, eschew meat altogether, the IPCC said.

Besides "coarse grains, legumes, fruits, vegetables, nuts and seeds," that "balanced diet" also includes "animal-sourced food produced in resilient, sustainable and low-greenhouse gas emission systems," the report concluded.



## Climate change threatens food security

**Impacts/risks:**



Source: UN's Intergovernmental Panel on Climate Change report, August 2019



Chart showing how climate change threatens food security, according to a new report by the UN's Intergovernmental Panel on Climate Change (IPCC)

There are likely several reasons the 100-plus authors stopped short of calling for a ban on carbon-intensive red meat.

To begin with, calling for anything is not part of their brief.

"The IPCC does not recommend people's diets," co-chair Jim Skea, a professor at Imperial College London's Centre for Environmental Policy, tweeted in reaction to misleading media stories.

## 'Reference diet'

"What we've pointed out on the basis of scientific evidence is that there are certain diets that have a lower carbon footprint."

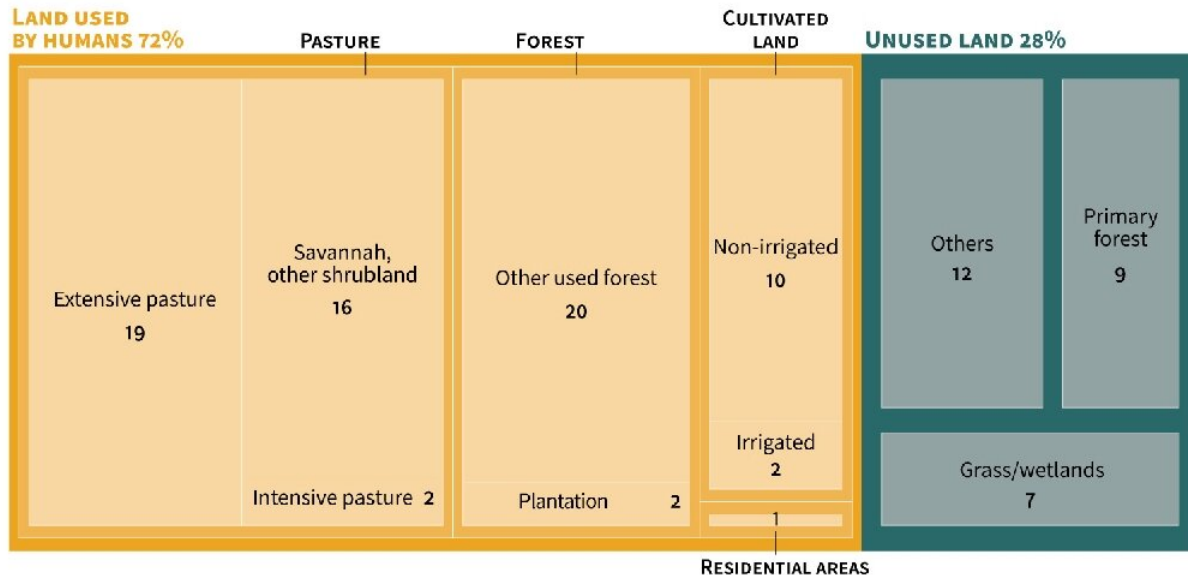
Observers privy to the week-long meeting, which vets the report summary line-by-line, also note that some scientific findings align better than others with the interests of beef-producing nations.

IPCC reports are based entirely on published, peer-reviewed research, and this one included thousands of data points.

### Land use in the world

130 million km<sup>2</sup> of land is ice-free

LAND USED BY HUMANS 72%



Source: IPCC report August 2019

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Distribution of the world's ice-free land, according to the latest IPCC report

But the final step in a years-long process is approval by diplomats who tussle over how key passages are formulated, including what gets left in or out.

Another compelling reason not to espouse a purely plant-based diet is that billions of people around the world depend on fish, and to a lesser extent meat, for protein and nutrients that may not be readily available elsewhere.

"More than 800 million people have insufficient [food](#)," noted Harvard University's Walter Willett, co-commissioner of a landmark study earlier this year in *The Lancet* proposing a "reference diet" for optimal health that is long on veggies, legumes and nuts, and short on meat, dairy and sugar.

That diet, *The Lancet* study found, could feed a world of 10 billion people in 2050—but only barely.

"We are suggesting a more balanced [diet](#) that has roughly 100 grammes per person per week of red meat—a single serving once a week rather than ever day," co-author Johan Rockstrom, former director of the Potsdam Institute for Climate Change Impacts, told AFP.

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