

# THE PRINCETON PACKET



SOLUTIONS

By Huck Fairman

## Shortages: Planet's decline hinders the ability to feed population

This week, a new report by the Intergovernmental Panel on Climate Change (IPCC) warned, on top of its 2018 evaluation, that both climate change and mankind's poor stewardship of farmlands and forests are threatening the world's ability to produce the food it needs. Already as much as 10% of the global population suffers from inadequate food supplies – nearly 20% in sub-Saharan Africa. This is on top of water scarcity that even greater numbers suffer from.

If people don't have sufficient food and water, they will move, and countries will face increased immigration pressures.

This report was prepared by 100 experts from 52 countries. They informed us the opportunity to address this dire problem is closing rapidly, and it's a problem that is occurring on several continents at once, and is affecting poorer populations more than affluent ones.

The world's land and water resources are being exploited, poorly managed and

used up as never before. A half-billion people already live in places that are turning into desert-like conditions, and soil is being lost between 10 and 100 times faster than it is forming.

Climate change both creates and exacerbates these problems. In addition, growing population numbers increase the pressures. Floods, unprecedented downpours, droughts, cyclones, hurricanes and increasing heat combine to reduce food supplies.

Cynthia Rosenzweig, a senior research scientist at the NASA Goddard Institute for Space Studies and one of the lead authors of the report, warned, "The potential risk of multi-breadbasket failure is increasing." She added, "All of these things are happening at the same time."

So, what, if anything, can be done?

The IPCC report did offer some hope through policies that could first reduce emissions, but also stave off the looming food crisis. These, however, would

require large-scale, governmental and intergovernmental planning and coordination – none of which have been exhibited by many current national (and nationalist) leaders. It would necessitate major re-evaluations of land use and agriculture worldwide, as well as consumer behavior. Proposals would need to address: productivity of land and wiser management, but also reduced wastage of food and persuading more people to shift their diets away from cattle and other types of meat.

Additionally, to avoid many of the worst repercussions, a transformation of the world economy would be needed – at a speed and scale that has no historic precedent. Something on the order, perhaps, of a global Marshall Plan.

This IPCC report is one of a series it is writing, following last year's warning of the disastrous consequences if the planet's temperature rises just 1.5 degrees Celsius above preindustrial levels. An upcoming report will look at the state of the

world's oceans.

But that landmark 2018 report paints a far more dire picture of the immediate consequences of climate change than previously thought. And now this latest report describes a world of worsening food shortages and wildfires, as well as a mass die-off of coral reefs, possibly by 2040 – well within the lifetime of much of the global population.

Some of the report's authors noted the existing immigration pressures are already redefining politics in North America, Europe, Australia and other parts of the world.

"This is a perfect storm," said Dave Reay, a professor at the University of Edinburgh who was an expert reviewer for the IPCC report. "Limited land, an expanding human population, all wrapped in a suffocating blanket of climate emergency. Earth has never felt smaller, it's natural ecosystems never under such direct threat."