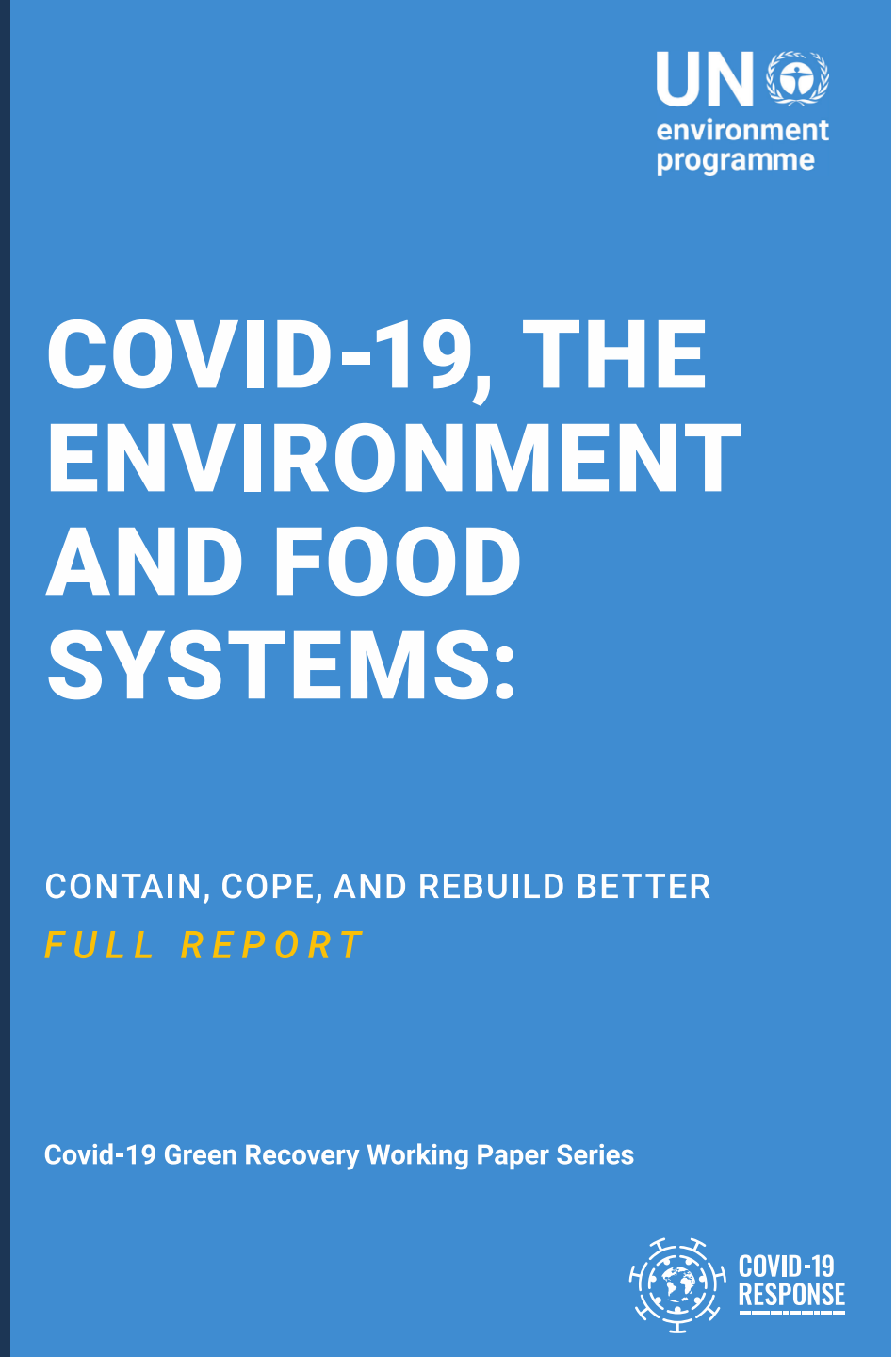
COVID19, the Environment, and Food systems

[Contain, Cope, and Rebuild Better]

TEEB
The Economics of Ecosystems & Biodiversity

Jacob Salcone

March 2021



UN REPORT

The impacts of the pandemic on food systems and recommendations for how countries and international agencies should respond

Go to:
www.unep.org/covid-19

Click on **Reports and Publications** for this and other UNEP Covid resources

UN environment programme

COVID-19, THE ENVIRONMENT AND FOOD SYSTEMS:

CONTAIN, COPE, AND REBUILD BETTER

FULL REPORT

Covid-19 Green Recovery Working Paper Series

COVID-19 RESPONSE

AUTHORS

Professor Anil Markandya
Coordinating Lead Author
Ikerbasque Professor, Basque Centre for Climate Change (BC3), Leioa, Spain

Jacob Salcone
Lead Author
Environmental Economist; TEEB – UNEP

Dr. Simi Thambi
Contributing Author
Environmental Economist; TEEB - UNEP

Alexander Mueller
Report Director
Managing Director, TMG Research gGmbH

Dr. Salman Hussain
UNEP Project Coordinator
Head a.i. Ecosystem Services Economics Unit / TEEB Coordinator

Unprecedented Global Health & Economic Crises

More than 125 million infections and 2.8 million deaths
On average, for the past year, that's 5 deaths every minute

- Millions have lost jobs and income
- First increase in global extreme poverty since 1998; Extreme poverty is up by 71 to 100 million (at poverty of $1.9/day)
- People suffering from acute hunger doubled from 135 million at the start of the pandemic to 265 million by the end of 2020 (WFP).
- Women are disproportionately affected by the impacts of the pandemic, including child care to income loss.

TEEB
The Economics of Ecosystems & Biodiversity

https://www.unep.org/covid-19

COVID-19 RESPONSE

COVID19 and the Environment

POSITIVE

- Less international travel, more work from home: Global GHG emissions fell about 8% in 2020
- Improved air quality in many cities
- Decline in demand for some products like exotic hardwoods and bushmeat
- Reduced visitor pressure in some natural areas

NEGATIVE

- In some places cars are replacing public transport
- To limit global warming to 1.5 °C, emissions would need to continue to fall by 8% every year for the next 10 years!
- Public budgets are being re-prioritized, hurting the management of protected areas
- Many protected areas are funded by visitor tourism, which has collapsed
- Limited monitoring and need for incomes is leading to illegal logging and poaching

COVID19 and Environmental Health

- Both wild meat trafficking and intensive livestock rearing have been linked to the emergence of zoonotic disease; both are drivers of biodiversity loss.
- Long-term exposure to air pollution may be “one of the most important contributors to fatality caused by the COVID-19 virus”.
- Farm worker housing and food processing have been Covid “hot spots”
- More time spent indoors is having health impact through combustion of wood and coal inside homes in many developing countries.
- 6.5 million more children under 5 years of age could suffer from wasting during the first year of the pandemic, an increase of 14.3 per cent.
- Diet related NCDs, such as obesity and diabetes, worsen outcomes of Covid infection.

TEEB
The Economics of Ecosystems & Biodiversity

https://www.unep.org/covid-19

COVID-19 RESPONSE

COVID19 and Food Security

- A few countries introduced export restrictions, which raised prices on some food products, but global impact was relatively small.
- Some supply chains are being negatively impacted by a lack of workers and transportation, such as meat processing and dairy.
- Average food prices rose only modestly during 2020 (3.1%).
- The immediate food security crisis is loss of income,
- But disruptions to food production and processing point to increased scarcity and higher prices in 2021.

TEEB
The Economics of Ecosystems & Biodiversity

https://www.unep.org/covid-19

COVID-19 RESPONSE

Responses and their limitations

- Unprecedented fiscal and monetary stimulus. Globally, in late 2020 it stood at $12 trillion or approximately 14% of global GDP.
- While all countries have taken measures, emerging and developing countries are limited by an insufficient tax base and the lack of borrowing potential.
- It is probable that COVID-support will drive overall reductions in global aid. Global official development assistance levels could drop by around $25 billion by 2021.
- Furthermore, emergency support will also shift the focus away from other development programmes.
- Failure to build back better - Only 0.2% of packages in 2020 in 50 biggest countries was dedicated to investments in sustainability

Actions Needed: Short Term

- Secure, stable incomes is critically important for food security. Even farming families buy most of their food.
- Must provide safe movement and housing of farm workers.
- Habitat loss, zoonotic disease, NCDs, climate change all demonstrate an urgent need to rethink how we produce, process, market, handle and consume our food
- Even short-term responses need a systems approach. For example a simple ban on wild meat trade could have unintended consequences.
- Emergency response will have lasting consequences and should support low carbon, sustainable and resilient food systems and energy-saving changes

TEEB
The Economics of Ecosystems & Biodiversity

https://www.unep.org/covid-19

COVID-19 RESPONSE

Actions Needed: Medium and Long term

- Building back better includes ensuring healthy diets, slashing food loss and waste. This requires a systematic approach in which environmental and social factors are part of the evaluation of policies.
- Specific attention must be paid to the aspects of the recovery that decouple economic growth from carbon emissions and biodiversity loss and not just to using resources more efficiently.
- Investment in the food system should be guided by the results of life cycle assessments and comprehensive impact analyses.
- Need to emerge from the crisis with an international implementation plan for One Health, an integrated approach that prevents and mitigates the threats at animal–human–plant–environment interfaces.

TEEB
The Economics of Ecosystems & Biodiversity

https://www.unep.org/covid-19

COVID-19 RESPONSE

KEY MESSAGES

1. **Governments around the world have invested about $12 trillion to counteract the economic effects of COVID-19.** This investment could contribute to progress on the Sustainable Development Goals (SDGs) and global climate targets if invested within a framework that supports both socioeconomic recovery and sustainability. Expenditures must be monitored to deliver multiple benefits simultaneously and guide rebuilding better.
2. **COVID-19 increases poverty and limits access to food**. The right to food is a basic human right and should always have highest priority. During a pandemic, food security is a precondition for successfully fighting the virus. Hungry people will not accept measures like social distancing and lockdowns.

3. Initial investments for economic recovery do not sufficiently address sustainability, concentrating instead on immediate economic risk management. So far, we have only limited information on the concrete impacts of COVID-19 on the environment, food systems and the SDGs. The risk that COVID-19 is undermining sustainable development, especially sustainable food systems, has not yet been addressed.

4. The global sustainable development agenda must support food systems via a framework of policies and measures that (i) account for environmental thresholds and trade-offs; (ii) promote food security and healthy diets; (iii) enhance and protect rural livelihoods; and (iv) address the inequalities and injustices that have emerged during the crises.

PRIORITIES

1. Align pandemic responses with global agreements
Fiscal responses must align with the SDGs and the Paris climate change agreement.

2. Ensure food security
Measures to mitigate the pandemic and promote economic recovery will only be successful when food security is guaranteed.

3. Facilitate the safe movement of farmworkers
This would help ensure demand for their services can be better satisfied.

4. Promote a green recovery
Take opportunities to leapfrog to green investments. Promote nature-based solutions to bolster the biodiversity that underpins sustainable food systems.

5. Recognize that win-win opportunities exist and capture them
Habitat restoration and climate-smart agriculture can have a positive impact on reducing greenhouse gases and improving food security.

6. Improve the efficiency of water infrastructure
Water scarcity can reduce food security and increase competition for water. COVID-19 has underlined the importance of clean water for sanitation.

7. Better regulate the meat and animal trade
This would reduce the chances of a new pandemic, protect endangered species and support rural livelihoods.

8. Apply a food systems approach and adopt One Health
Ensure ecosystem services are valued, human and social capital is included in assessments and a full value chain assessment is applied.

SUMMARY

THREATS AND OPPORTUNITIES

There is a risk that the pandemic will worsen the weaknesses of food systems – focusing on maximizing yield at lowest cost, ignoring environmental externalities and social justice

We have an opportunity to take a different path, to take a food systems approach and invest in all four capitals

UN environment programme

COVID-19, THE ENVIRONMENT AND FOOD SYSTEMS:

CONTAIN, COPE, AND REBUILD BETTER

FULL REPORT

Covid-19 Green Recovery Working Paper Series

COVID-19 RESPONSE

Contain, Cope, and Rebuild Better

[COVID19, the Environment, and Food systems]

TEEB
The Economics of Ecosystems & Biodiversity

Jacob Salcone

March 2021