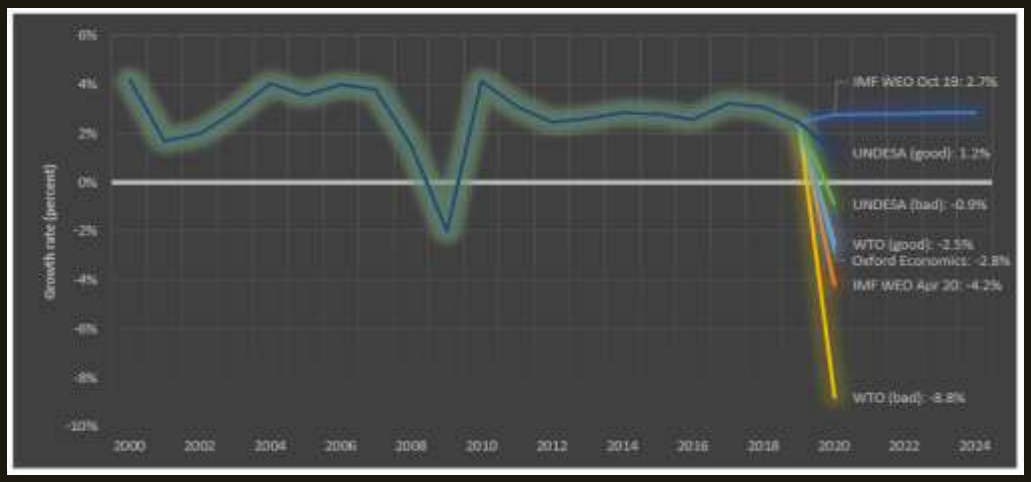
Global GDP growth:

The projections for 2020 range between -8.8 per cent (WTO) and 1 per cent (UNDESA, optimistic scenario) as shown in Figure 1. Among these projections, the International Monetary Fund's (IMF) is the main reference point for assessing the economic impact of COVID-19. Accordingly, global growth will shrink by -4.2 per cent, a difference of 7 percentage points compared to the projections published before the outbreak of the crisis.

Figure 1: World growth outlook: latest projections by different organizations

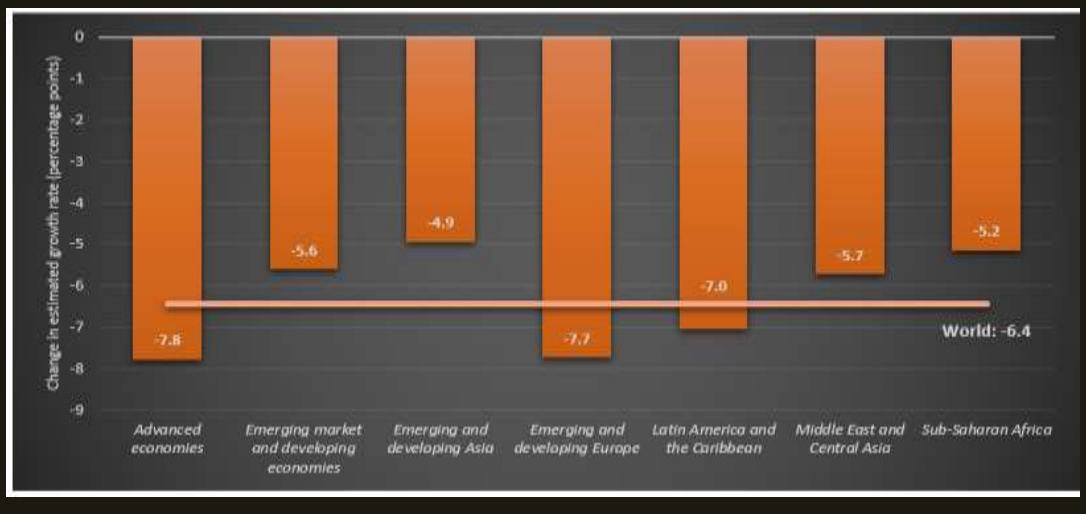


The projections are based on market exchange rates and were carried out on the following dates: IMF = 14 April; Oxford Economics = 14 April; UNDESA = 1 April; WTO = 9 April. UNDESA and WTO distinguish between two possible scenarios on the pandemic's severity. The projections carried out by the IMF World Economic Outlook (WEO) 2019 (blue line) are used as the baseline for comparison.

Source: UNIDO elaboration based on Oxford Economics (2020), IMF (2019, 2020a), UNDESA (2020) and WTO (2020).

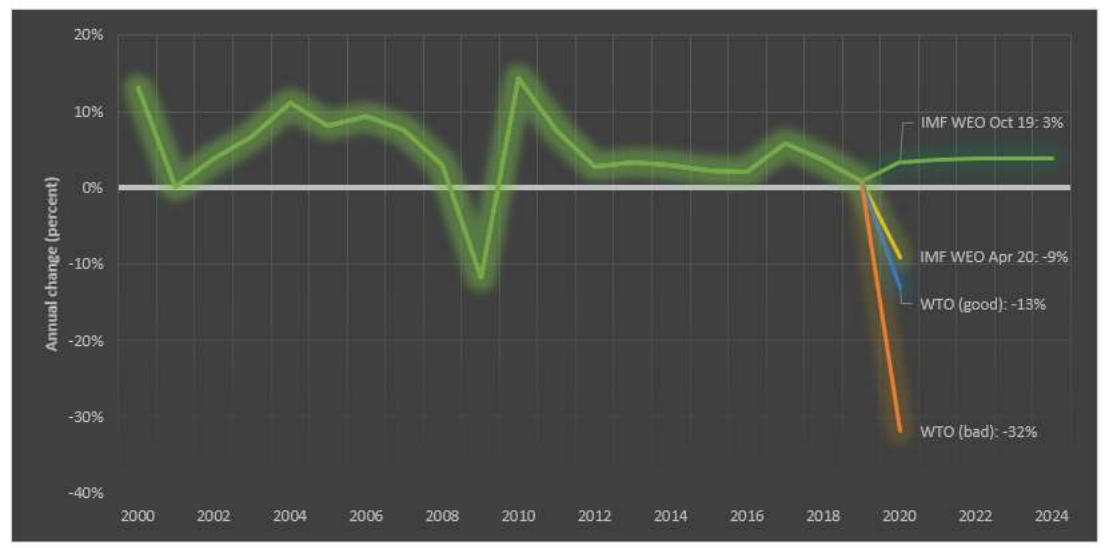
While advanced economies are expected to be hit hardest by the COVID-19 crisis, two emerging regions will also suffer above-average declines: developing Europe and Latin America and the Caribbean (Figure 2).

Figure 2: Regional differences of GDP growth rates projected for 2020 in the IMF's WEO Oct 2019 and Apr 2020



Global trade and investment: world trade volumes are expected to drop between -32 per cent (WTO, pessimistic scenario) and -9 per cent (IMF) in 2020, as shown in Figure 3. Moreover, capital flows are now being diverted towards advanced economies.

Figure 3: Annual change in the volume of global trade: latest projections by different organizations

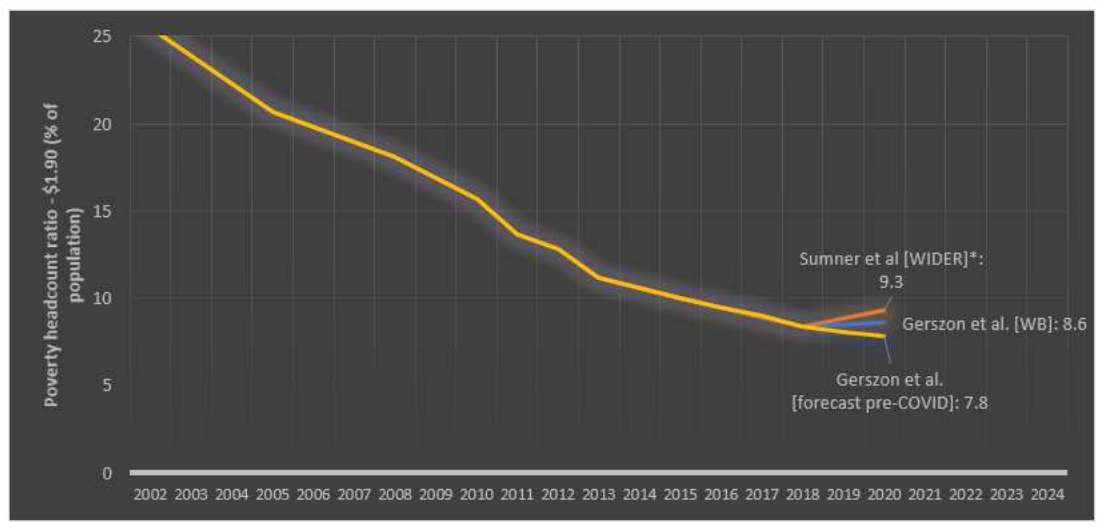


Change in trade is calculated as the average in the change of exports and imports. WTO projections include only merchandise trade (excluding services). IMF figures include goods and services. The projections were carried out on the following dates: IMF = 14 April; WTO = 9 April. The projections conducted by the IMF in its World Economic Outlook (WEO) 2019 (green line) are used as the baseline for comparison.

Global poverty:

Assuming a drop in global GDP based on the IMF estimate, the expected increase in the share of people living in extreme poverty will range from 0.8 per cent to 1.5 percentage points. This is equivalent to an increase of between 50 million to 70 million people compared with the original estimates for 2020. Other figures using different GDP growth projections and poverty baselines indicate an increase of nearly 420 million additional people living in extreme poverty (Figure 4).

Figure 4: World extreme poverty headcount ratio: latest projections by different organizations



The projections were carried out on the following dates: Gerszon et al. [World Bank] = 20 April; Sumner et al. [UNU-WIDER] = 8 April. The pre-COVID-19 forecast of Gerszon et al. (yellow line) is used as the baseline for comparison. The estimates by Sumner et al. are adjusted to match the baseline of Gerszon et al. and only the "good" scenario is presented (5% drop in global GDP).

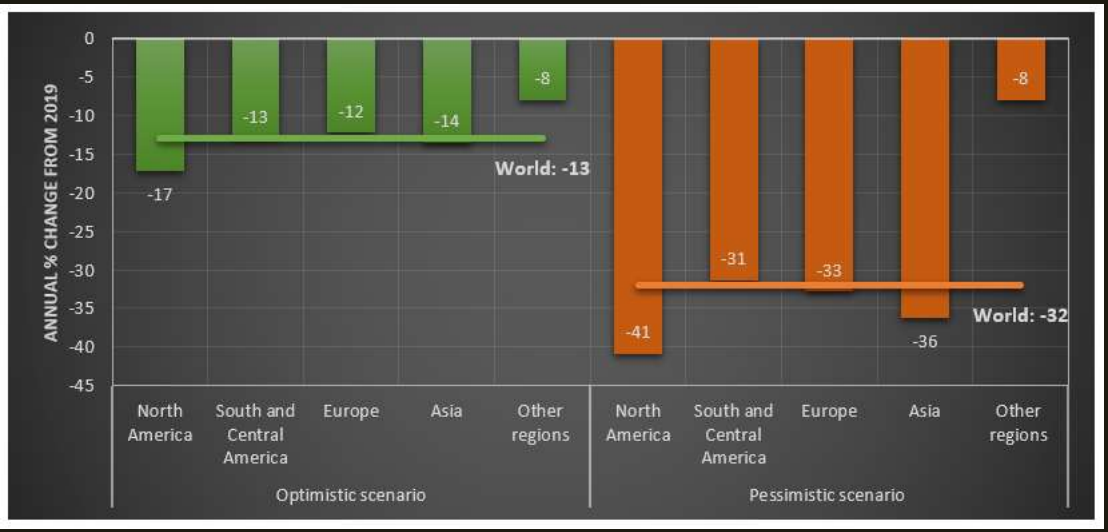
New evidence II: Actual data for the first quarter of 2020 confirm trade projections

Data for the first quarter of 2020 suggest that the COVID-19 pandemic has reduced global trade values by 3 per cent. This downturn is expected to accelerate in the second quarter of 2020, with world trade projected to record a quarter-on-quarter decline of 27 per cent, according to the latest UNCTAD assessment.

New evidence III: North America and Asia expected to suffer more from global trade decline

Nearly all regions are expected to suffer double-digit declines in trade volume, even in the most optimistic scenarios. In a regional comparison, as illustrated in Figure 5, North America and Asia are predicted to suffer the highest negative impacts on their export volumes

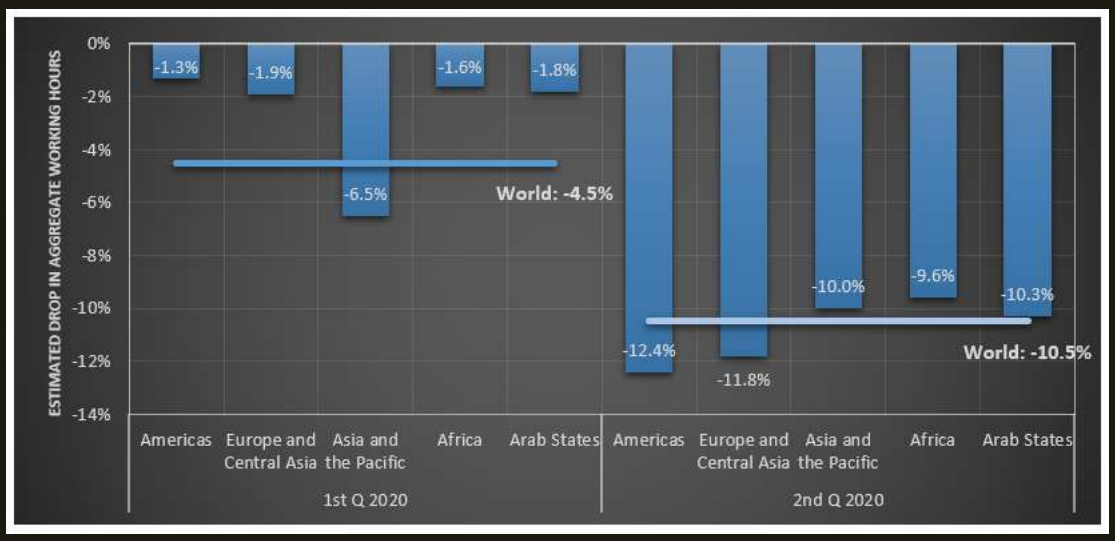
Figure 5: Projected annual change in the volume of global trade, by region



New evidence IV: Unemployment rates are skyrocketing, with the Americas, Europe and Central Asia hit hardest

Unemployment rates are skyrocketing to unprecedented levels. The third edition of the ILO Monitor on COVID-19's impact on labour contends that the share of workers affected by temporary workplace closures has decreased from 81 per cent to 68 per cent over the last two weeks. The losses in working hours, however, remain high. While working hours are expected to decrease in all regions, the ´Americas´ and ´Europe and Central Asia´ will be hit hardest with 12,4 per cent and 11,8 per cent, respectively (Figure 6).

Figure 6: Estimated effects on aggregate working hours by region



The impact of COVID on industrial production and trade:

New evidence based on UNIDO's Industrial Production Index (IIP) dataset provides a preliminary picture of the impact of COVID 19 so far (March 2020) on the manufacturing sectors of 48 countries. Far from being exhaustive, the data allow us to capture some initial trends (data are seasonally adjusted to take into account that countries produce different volumes of goods throughout different periods of the year). The sample of 48 countries comprises 30 high-income countries, 15 upper middle-income countries and three lower middle-income countries in the Americas, Europe and Asia.

The environmental impact of agriculture is the effect that different farming practices have on the ecosystems around them, and how those effects can be traced back to those practices. The environmental impact of agriculture varies based on the wide variety of agricultural practices employed around the world. Ultimately, the environmental impact depends on the production practices of the system used by farmers. The connection between emissions into the environment and the farming system is indirect, as it also depends on other climate variables such as rainfall and temperature. Some other factors can include types of machinery used for agriculture purposes as well as the farmer's choice of how they handle their livestock.

There are two types of indicators of environmental impact:

"means-based", which is based on the farmer's production methods, and "effect-based", which is the impact that farming methods have on the farming system or on emissions to the environment. An example of a means-based indicator would be the quality of groundwater, that is effected by the amount of nitrogen applied to the soil. An indicator reflecting the loss of nitrate to groundwater would be effect-based.The means-based evaluation looks at farmers' practices of agriculture, and the effect-based evaluation considers the actual effects of the agricultural system. For example, the means-based analysis might look at pesticides and fertilization methods that farmers are using, and effect-based analysis would consider how much CO_2 is being emitted or what the Nitrogen content of the soil is.

The environmental impact of agriculture involves a variety of factors from the soil, to water, the air, animal and soil variety, people, plants, and the food itself. Some of the environmental issues that are related to agriculture are climate change, deforestation, dead zones, genetic engineering, irrigation problems, pollutants, soil degradation, and waste.

Thus, we find that traditional agriculture increases pollution of the environment and waste and causes water pollution

Climate change and agriculture are interrelated processes, both of which take place on a worldwide scale. Global warming is projected to have significant impacts on conditions affecting agriculture, including temperature, precipitation and glacial run-off. These conditions determine the carrying capacity of the biosphere to produce enough food for the human population and domesticated animals. Rising carbon dioxide levels would also have effects, both detrimental and beneficial, on crop yields. Assessment of the effects of global climate changes on agriculture might help to properly anticipate and adapt farming to maximize agricultural production. Although the net impact of climate change on agricultural production is uncertain it is likely that it will shift the suitable growing zones for individual crops. Adjustment to this geographical shift will involve considerable economic costs and social impacts.

At the same time, agriculture has been shown to produce significant effects on climate change, primarily through the production and release of greenhouse gases such as carbon dioxide, methane, and nitrous oxide. In addition, agriculture that practices tillage, fertilization, and pesticide application also releases ammonia, nitrate, phosphorus, and many other pesticides that affect air, water, and soil quality, as well as biodiversity. Agriculture also alters the Earth's land cover, which can change its ability to absorb or reflect heat and light, thus contributing to radiative forcing.

Land use change such as deforestation and desertification, together with use of fossil fuels, are the major anthropogenic sources of carbon dioxide; agriculture itself is the major contributor to increasing methane and nitrous oxide concentrations in earth's atmosphere.

Most of the methane emissions result from the use of livestock, in particular ruminants such as cattle and pigs. Other livestock as poultry, fish, ... has a far lower impact. Some solutions are being developed to counter the emissions of ruminants. Strategies include using biogas from manure.genetic selection, immunization, rumen defaunation, outcompetition of methanogenic archaea with acetogens, introduction of methanotrophic bacteria into the rumen, diet modification and grazing management, among others.Certain diet changes (such as with Asparagopsis taxiformis) allow for a reduction of up to 99% in ruminant greenhouse gas emissions. Due to these negative impacts, but also for reasons of farming efficiency (see Food vs. feed), one projection mentions a large decline of livestock at least some animals (i.e. cattle) in certain countries by 2030.

Thus, we find that traditional agriculture increases the rate of global warming, which causes global problems and damage

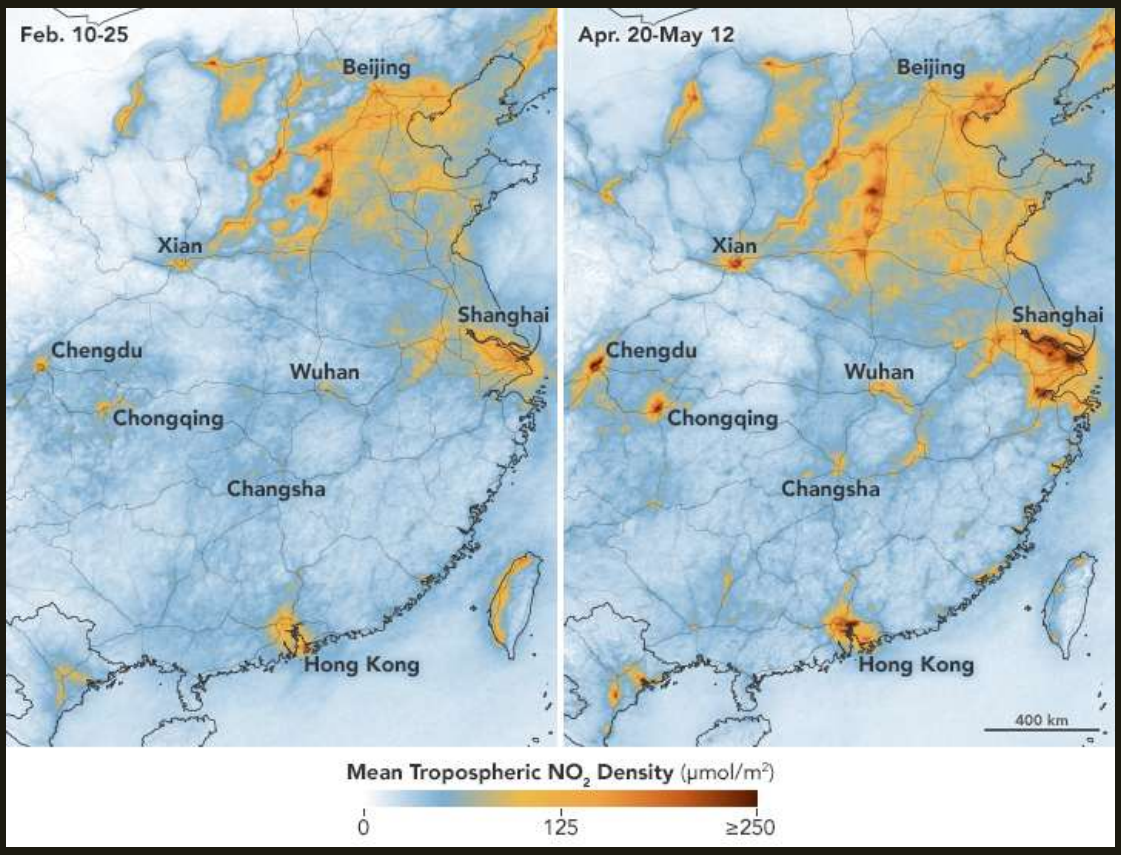
Deforestation:

Deforestation is clearing the Earth's forests on a large scale worldwide and resulting in many land damages. One of the causes of deforestation is to clear land for pasture or crops. According to British environmentalist Norman Myers, 5% of deforestation is due to cattle ranching, 19% due to over-heavy logging, 22% due to the growing sector of palm oil plantations, and 54% due to slash-and-burn farming.

Deforestation causes the loss of habitat for millions of species, and is also a driver of climate change. Trees act as a carbon sink: that is, they absorb carbon dioxide, an unwanted greenhouse gas, out of the atmosphere. Removing trees releases carbon dioxide into the atmosphere and leaves behind fewer trees to absorb the increasing amount of carbon dioxide in the air. In this way, deforestation exacerbates climate change. When trees are removed from forests, the soils tend to dry out because there is no longer shade, and there are not enough trees to assist in the water cycle by returning water vapor back to the environment. With no trees, landscapes that were once forests can potentially become barren deserts. The removal of trees also causes extreme fluctuations in temperature.

In 2000 the United Nations Food and Agriculture Organization (FAO) found that "the role of population dynamics in a local setting may vary from decisive to negligible," and that deforestation can result from "a combination of population pressure and stagnating economic, social and technological conditions.

All of the above explains the disadvantages of traditional agriculture and its impact on the ground before Covid- 19 and in the next article the changes that resulted after Covid -19

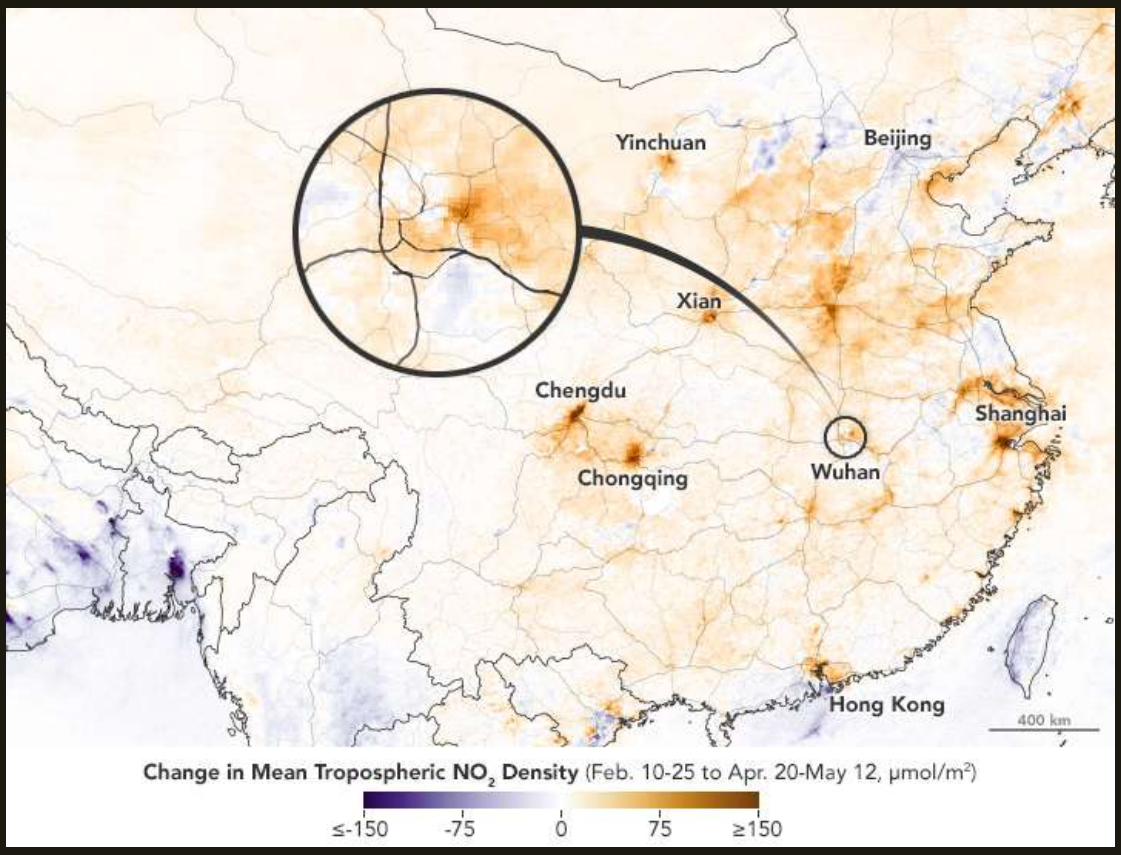


In early February 2020, scientists using NASA and European satellites detected a significant reduction in a key air pollutant over China after the country shut down transportation and much of its economy. Three months later, with most coronavirus (COVID-19) lockdowns ending in China and economic activity resuming, the levels of nitrogen dioxide over the country have returned to near normal for this time of year. Scientists expected this rebound.

Nitrogen dioxide (NO2) is a noxious gas emitted primarily through the burning of gasoline, coal, and diesel fuel by motor vehicles, power plants, and industrial facilities. Near the ground, NO2 can turn into ozone that makes air hazy and unhealthy to breathe. Higher in the atmosphere, it can form acid rain. Scientists in the Atmospheric Chemistry and Dynamics Laboratory at NASA's Goddard Space Flight Center have been monitoring nitrogen dioxide and other aspects of global air quality for several decades.

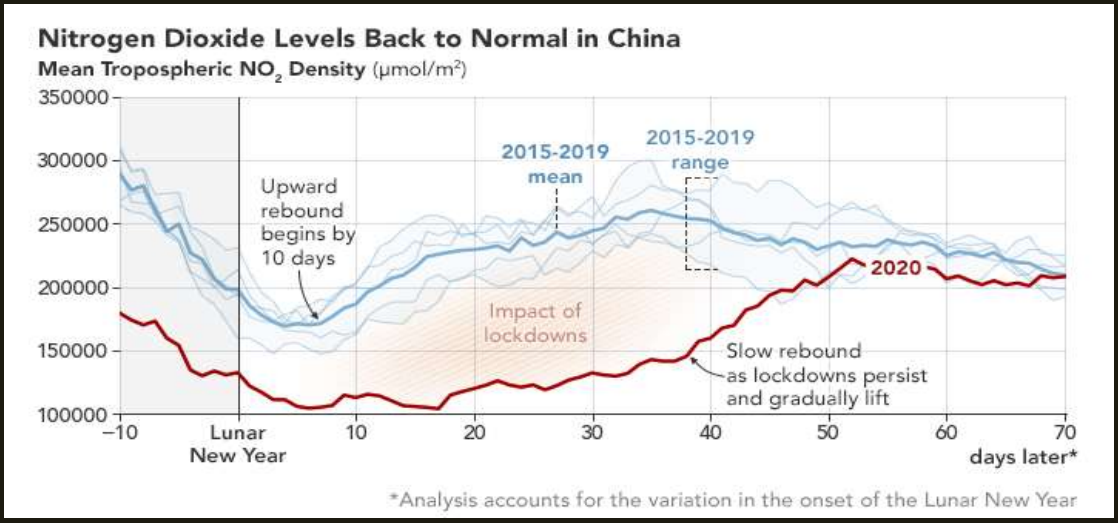
The maps on this page show levels of nitrogen dioxide in the troposphere (the lowest layer of the atmosphere) over China. The maps above show NO2 levels in central and eastern portions of the country from February 10–25 (during the quarantine) and April 20 to May 12 (after restrictions were lifted).

The map below shows the changes in NO2 levels between the two periods. Orange areas depict increases (mainly in China) since February, while blue areas have seen decreases (such as India and Bangladesh, which were still under quarantine). These data were collected by the Tropospheric Monitoring Instrument (TROPOMI) on the European Commission's Copernicus Sentinel-5P satellite, built by the European Space Agency.



The predecessor to TROPOMI, the Ozone Monitoring Instrument (OMI) on NASA's Aura satellite, has been making comparable measurements since 2004. Though OMI provides lower spatial resolution, it has a longer data record that can put pollution changes into context. OMI has recorded similar trends in 2020 over China as observed with TROPOMI. (To view OMI's NO2 data for more than 200 cities around the world, click here).

The plot below shows the mean column density of nitrogen dioxide—how much NO2 would be found in a column of air stretching up through the troposphere—over China as measured by OMI in 2020 (red line) and from 2015-2019 (blue lines). Time is measured in days before and after the Lunar New Year began. (In 2020, it started on January 25.) Past research has shown that air pollution in China usually decreases during New Year's celebrations and then increases slowly in the month after the celebrations are over.



However, in 2020, that post-holiday rebound was delayed by several weeks because of the COVID-19 lockdown. In February and March 2020, NO2 levels over Wuhan and some other Chinese cities were well below long-term trends. By April, levels approached the long-term norm for the season.

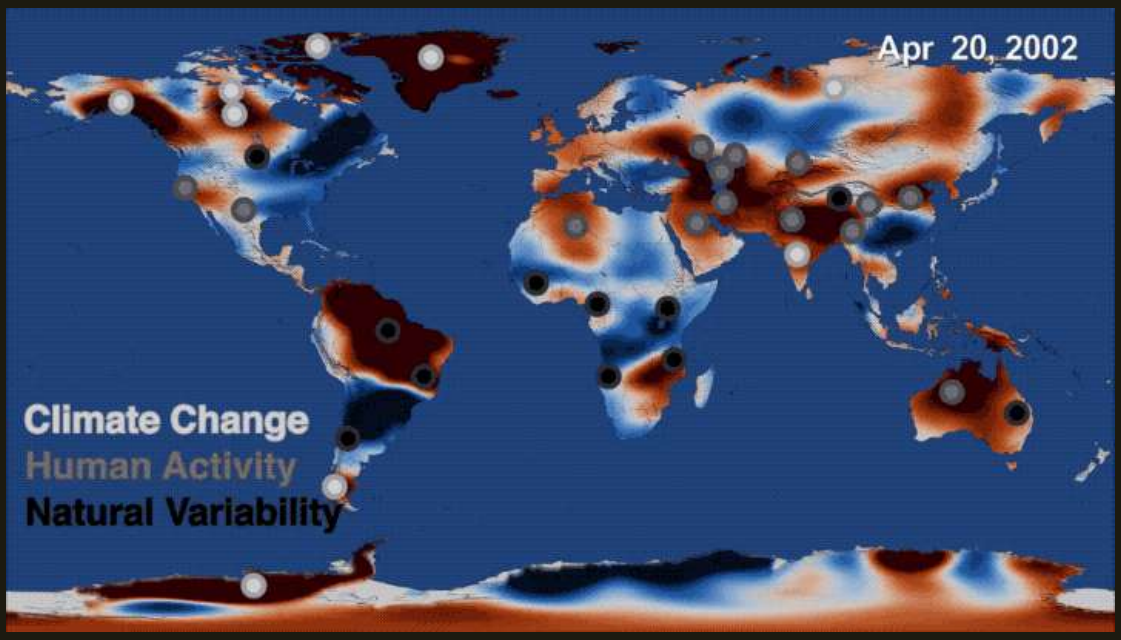
It is important to note that NO2 levels in the atmosphere naturally decline each year from winter to spring and summer, apart from the Lunar New Year pattern. Increasing sunlight shortens the lifetime of the gas near the ground, and changing weather patterns can cause the pollutant to disperse more readily from the air.

Editor's Note: For more information on NASA's long-term measurements of nitrogen dioxide, see this page.

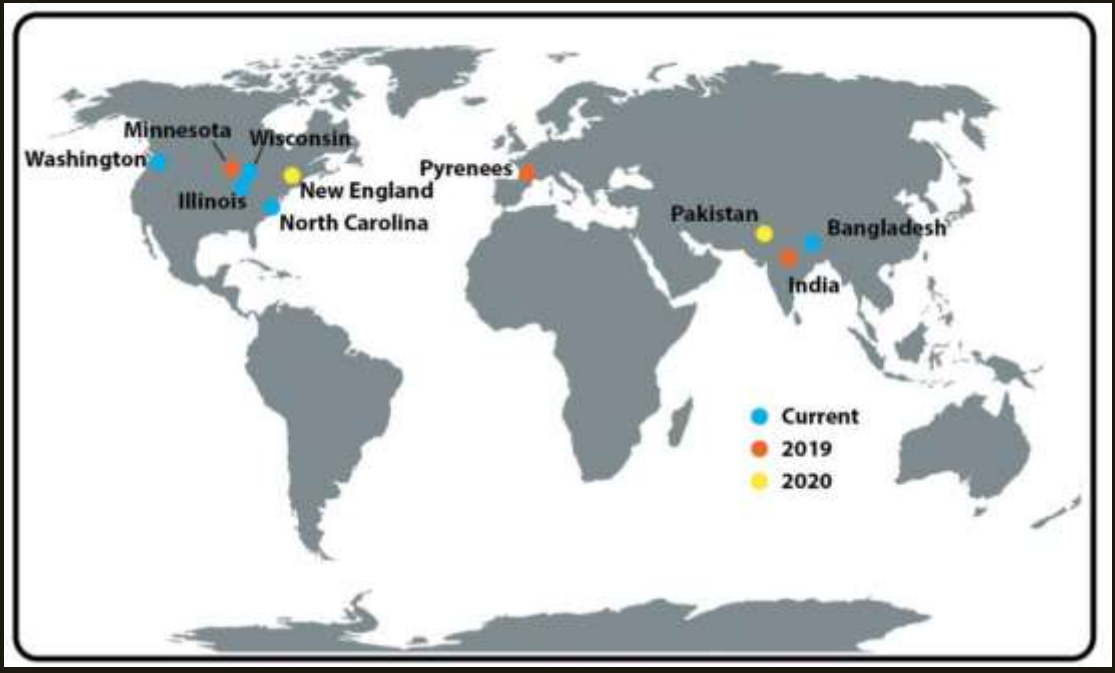
NASA Earth Observatory images by Joshua Stevens, using Ozone Monitoring Instrument (OMI) data from the NASA Goddard Earth Sciences Data and Information Services Center (GES DISC), and modified Copernicus Sentinel 5P data processed by the European Space Agency.

Environmental Effects of Coronavirus Quarantines:

As nations and economies shut down due to the COVID-19 pandemic, pollution levels and human patterns changed in ways that were detectable by satellites.



Lakes are the primary source of irrigation and drinking water in many parts of the world. They are used to provide food and generate electricity. They can also lessen the impact of flooding due to natural disasters, and they provide habitats for fish, plants, and other wildlife.



Because of the poor use of water for irrigation of agricultural lands, water pollution and high temperatures, this led to a shrinking amount of water in fresh lakes and rivers.

This is because traditional agriculture consumes a large amount of water and is wasted and polluted.

A comparison of the conditions of the land before the Covid_19 and its solutions show us that stopping traditional cultivation solves global problems caused by traditional agriculture since a time such as global warming, water and air pollution, Desertification, and others.

In order for agricultural activity to remain in the best condition, a large number of agricultural lands must be reclaimed for this and future generations, but if this project is implemented, we will not have to reclaim agricultural lands and will not pollute the air and water and we will not consume a large amount of water when irrigation, and this The method is much safer than conventional farming and is inexpensive.