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# CADMUS

NEW PERSPECTIVES ON MAJOR GLOBAL ISSUES

Commemorating the **60<sup>th</sup>** anniversary of the  
**World Academy of Art & Science** and  
the **10<sup>th</sup>** anniversary of **Cadmus Journal**

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*Inside This Issue*

## WAAS@60

Retrospective & Reflections on WAAS@60	—	<i>G. Jacobs et al.</i>
Why WAAS?	—	<i>A. Forti</i>
Reflections on Arts & Science	—	<i>D. Kiniger-Passigli</i>
Achieving WAAS' Goals & Realizing our Common Vision	—	<i>M. Vitiello</i>

## CADMUS@10: SEED-IDEAS

24 Think Pieces by 27 Authors

## ARTICLES

TransFormNation	—	<i>Y. Kahane &amp; T. Ronen</i>
Hedging Planetary Risks	—	<i>S. Brunnhuber et al.</i>
Public versus Private Sector Money Creation	—	<i>F. Dixon</i>
The COVID-19 Pandemic as a Systemic Stress Test	—	<i>T. Reuter</i>
Report on Global Reports	—	<i>M. Marien</i>
Transformation Catalysts	—	<i>S. Waddock &amp; S. Waddell</i>
The Social Architect	—	<i>J. Siddique &amp; P. Joseph</i>
A Values-based World Order	—	<i>A. Natarajan</i>
Open Societies versus Autocratic Experiments	—	<i>S. Brunnhuber</i>
Transdisciplinary Theory of the Firm	—	<i>G. Jacobs</i>

## WAAS COVID-19 Pandemic Project

**Thomas Reuter**

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The COVID-19 pandemic constitutes an acute global challenge at present, touching nearly all aspects of our lives. At its 60<sup>th</sup> anniversary conference, WAAS thus held a 2½ hours session on this issue, featuring an interdisciplinary line up of nine speakers and five respondents, and entitled: *The COVID Pandemic as a Systemic Crisis: What can we learn from a diversity of impacts, responses and failures for future crises?*,\* convened and moderated by Prof. Thomas Reuter.

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*“Even if the pandemic is contained eventually, the lessons need to be extracted for the sake of ensuring better preparedness and greater resilience for facing future crises.”*

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Meanwhile, the WAAS Centre of Excellence ISACCL in Romania, under the leadership of President Emil Constantinescu, has initiated a project on COVID-19 also.† The proposal is to hold the first event at the new WAAS Centre of Excellence, which has not yet happened due to the pandemic. The event should be in late 2021 or early 2022, to be decided with an eye to the development of the pandemic in the meantime. Vaccinations should allow travel to resume by then.

Why is this important? WAAS is a global thought leader and cannot afford to be silent on an issue that has preoccupied everyone on the planet for the last year and likely for another year to come. Economic consequences will last a decade, at least in the developing countries that were hardest hit. Indeed, economic consequences have killed more people than the virus itself. And similar crises will happen again.

Even if the pandemic is contained eventually, the lessons need to be extracted for the sake of ensuring better preparedness and greater resilience for facing future crises.

The COVID-19 pandemic constitutes an external shock with a systemic and global impact. Similar shocks are in store for us this century, and indeed already, we see how climate change and COVID-19 negatively reinforced each other’s impact, notably in India and sub-Saharan Africa. Factors such as social injustice and economic inequality cut across

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\* See Report to WAAS

† See <https://institutlevant.ro/en/category/programs-and-projects/how-will-the-world-look-like-after-the-pandemic/>

different crises, acting as accelerator fuels in a crisis. The compound effect of crises could lead to civilizational collapse, at least in parts of the world, and hence to migration and further conflict. The lessons of the COVID-19 crisis, properly understood and acted upon, could help prevent such a worst-case scenario. The aim of the project would be to prepare a list of key insights and an associated plan for action to be presented to the UN, EU and other global, regional and national political actors.

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# Articles



# **The COVID-19 Pandemic as a Systemic Stress Test: Who is most vulnerable to food insecurity and other risks in a crisis and why?**

**Thomas Reuter**

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Professor, University of Melbourne, Australia

## **Abstract**

*The COVID-19 pandemic has shown that in a global systemic crisis, differences in impact are not confined to immediate threat, in this case virus infection and mortality rates. Indirect impacts such as reduced affordability of food due to income loss can be and often are more severe. Economic inequality thus acts as a massive amplifier of disaster impact. Inequality literally kills disadvantaged people under crisis conditions. Already the number of people subject to severe food insecurity and poverty has risen dramatically in the wake of COVID-19 and other crises, such as climate change, are adding to this unfolding tragedy. Conversely, policy designed to lower inequality is the best preparation for any crisis, and should accompany all measures for disaster risk reduction and impact mitigation.*

## **1. COVID-19: An Indiscriminate Threat?**

The COVID-19 pandemic was initially experienced as a relatively indiscriminate external shock. The direct impact of the SARS-CoV-2 virus did not discriminate, because there was no population on the planet with any prior immunity. And after the original victims in Wuhan, China, by mid-April 2020 the demographic group with the greatest physical exposure to viral infection risk were the privileged, jet-setting international elite.\* This is what also guaranteed that this crisis would gain almost instant and serious global recognition.

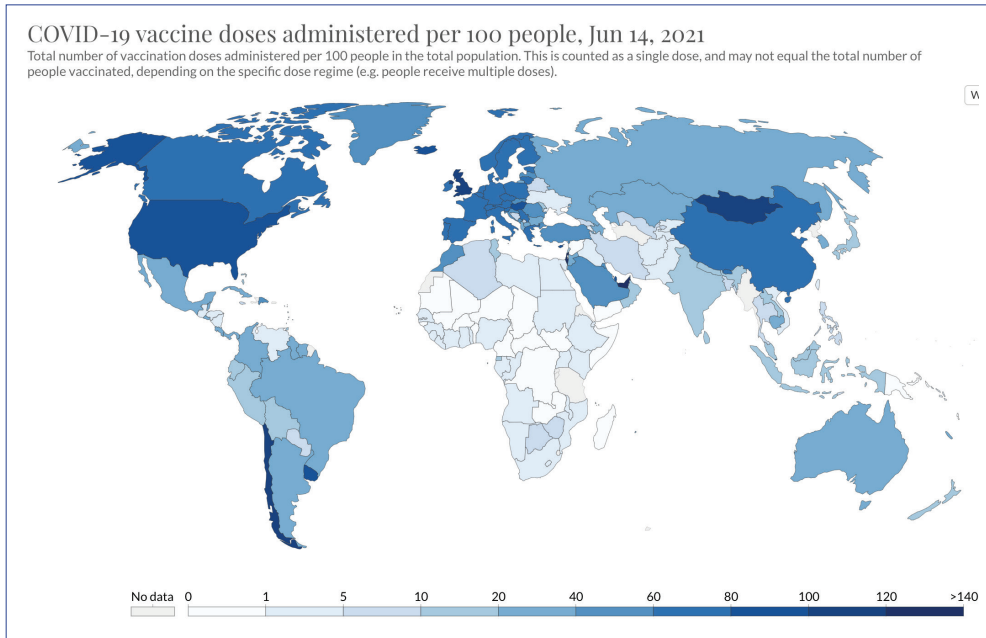
Somewhat further into the pandemic, it became evident that the variable stringency of public health measures, such as social distancing and compulsory mask wearing, and the level of pre-existing health system capacities, such as intensive care beds and ventilators, constituted key drivers of infection and mortality respectively, and that these differed greatly across nations. The impression nevertheless remained that COVID-19 did not discriminate in the usual way. Notably, some relatively poor countries like Vietnam outperformed some of the richest countries, like the US or UK, in fighting the virus; largely as a consequence of policy failures in the latter. Additionally, the warmer climate on average and the greater youthfulness of populations in developing countries kept a lid on infection and mortality rates, reflecting the fact that the virus is heat sensitive and poses a disproportionate risk for older people.

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\* [https://www.rki.de/EN/Content/Health\\_Monitoring/Health\\_Reporting/GBEDDownloads/JFocus\\_en/JoHM\\_S7\\_2020\\_Inequalities\\_COVID\\_19\\_Surveillance\\_Data.pdf?\\_\\_blob=publicationFile](https://www.rki.de/EN/Content/Health_Monitoring/Health_Reporting/GBEDDownloads/JFocus_en/JoHM_S7_2020_Inequalities_COVID_19_Surveillance_Data.pdf?__blob=publicationFile)

The impression of COVID-19 as an indiscriminate threat is nevertheless false. Like other crises, this pandemic is both revealing and deepening an underlying crisis that is set to outlive and out-scale the COVID-19 crisis: the global crisis of inequality.

*Map 1: COVID-19 vaccine doses /100 residents  
(Source: Our World in Data)*



Disadvantaged populations everywhere were soon disproportionately affected. Unsafe workplaces disproportionately affected low-paid workers, in the meat processing industry for example. Limited access to healthcare services, poor diet or malnutrition, and pre-existing medical conditions that weaken the immune response together have led to a much higher percentage of fatal outcomes among disadvantaged populations, even in wealthy countries. In the current stages of the pandemic, inequality expresses itself in the form of variable access to vaccines, as the above map shows (Map 1).<sup>\*</sup> Some 80% of all doses of the first vaccine, by BioNTech-Pfizer, for example, were claimed by a few rich countries. A similar pattern applies to most other vaccines.<sup>†‡</sup> However, these health and healthcare related inequalities pale in comparison with the differential economic impact of COVID-19. It is here that the tragic consequences of inequality in a crisis situation become fully visible.

<sup>\*</sup> <https://ourworldindata.org/covid-vaccinations>

<sup>†</sup> "Priorities for the COVID-19 pandemic at the start of 2021: Statement of the Lancet COVID-19 Commission", by Jeffrey Sachs, February 12, 2021, *The Lancet*.

<sup>‡</sup> <https://www.theguardian.com/commentisfree/2020/dec/25/covid-19-good-health-biology-pandemic-unequal-effects>

Economic disruption due to COVID-19 has reduced the food security of millions of people and led to a rapid increase in poverty. Food availability in some places was hit by disrupted production and supply chains, but more often the problem was affordability, caused by a sudden loss of employment or other income. In the mainstream daily newspapers, we look in vain for a league table comparing the number of deaths across countries due to COVID-19-induced food insecurity. That kind of news is not seen as relevant to the elites and middle classes of wealthy western nations, who supply the “worthy victims” of the crisis.

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*“The UN’s World Food Programme estimates the number of people experiencing crisis-level hunger rose to 270 million by the end of 2020 because of the pandemic, an increase of 82% compared with 2019.”*

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It is also not considered news because hundreds of millions of people have long been food insecure anyway, even under the conditions of a global food production surplus. Until 2014, however, we could hide behind the fact that their numbers were shrinking at least. From then on, however, ever more serious climate change impacts led to a global rise in hunger by 18%, even before COVID-19. Under the pandemic’s economic impact, poverty is skyrocketing, and **additional hunger is set to kill more people than the virus itself**. Allow me to illustrate briefly the nature and magnitude of this other, indirect COVID-19 crisis.

## 2. COVID-19-Driven Hunger: Some Facts on Food Security in a Global Crisis

For some the emergence of the coronavirus and the associated shut-downs of economic activity constituted a minor inconvenience, but for others the impact on their livelihoods was swift and utterly devastating.\* Around the world, people in low paid and unstable employment and without significant household savings were also the most likely to become unemployed and instantly food insecure, not to mention housing, education and health insecurity.† The UN’s World Food Programme estimates the number of people experiencing crisis-level hunger rose to 270 million by the end of 2020 because of the pandemic, an increase of 82% compared with 2019. Oxfam estimates that by the end of 2020 between 6,000 and 12,000 people died each day from additional hunger linked to the crisis. And this increase could persist for a decade or more, much longer than the pandemic itself.

Apart from income loss, other factors are food price spikes in some localities. In South Sudan, for example, COVID-19 restrictions and climatic events have driven enormous increases in prices after January 2020, whereby the average retail price of wheat has doubled.‡

\* <https://grattan.edu.au/news/covid-19-hits-the-poor-and-vulnerable-hardest/>

† <https://www.abc.net.au/triplej/programs/hack/coronavirus-covid-19-outbreak-linked-to-casual-insecure-work/12496660>

‡ See *Ecological Threat Register 2020* (first edition). [https://reliefweb.int/sites/reliefweb.int/files/resources/ETR\\_2020\\_web-1\\_0.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/ETR_2020_web-1_0.pdf)

Similar patterns are seen in many of the most food insecure countries in Africa. In November 2020 the FAO named four famine hot spots, namely Burkina Faso, Nigeria, South Sudan and Yemen.\* A recent ISC report thus estimates that overall, “the number of lives threatened by acute levels of hunger is expected to double due to the crisis.” 2021 may well go down in history as a year of famine on a scale not seen for decades.†

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*“America’s 651 billionaires increased their net worth by 30% to 4 trillion USD during the pandemic.”*

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In developed countries too, economic inequality is causing divergent COVID-19 impacts. In the US, for example, by March 2020, 39% of those earning less than 40,000 USD per annum had already lost their jobs or had pay checks reduced, compared to only 13% of those who earned 100,000 USD or more.‡ Women and young people were more likely to lose their job than men. According to a US Census Bureau pandemic survey, only half of all US households with children felt “very confident” about having enough money to afford food over the next month, and a staggering 5.6m households struggled to put enough food on the table in the past week. Families of colour were suffering disproportionately, with 27% of black and 23% of Latino respondents with children reporting not having enough to eat over the past week—compared with 12% of white people. Overall, food insecurity in the US has almost doubled in 2020 from 35 to 54 million,§ due to record unemployment and underemployment. Food banks and street kitchens reported a sharp increase in demand and long queues.¶

Inequalities in national crisis response capability are also stark. Developing nations have a larger proportion of workers in precarious employment, and governments lack the financial reserves to support them with social security payments. In India, for example, the demand for support for families made food insecure by unemployment is much greater than in the US, but the state could not afford to provide income supplements on anywhere near the scale of the 2.2 trillion USD CARES Act which the US Congress passed in March 2020—though admittedly it is not just about means, it is also a matter of political will.\*\* What is particularly worrying about the current situation of developing countries is that, as of September 2020, 84% of the IMF’s COVID-19 loans were encouraging, and in some cases requiring countries to adopt austerity measures in the aftermath of the health crisis (Oxfam). Such austerity measures could entrench newly increased levels of poverty. In short, loans may increase the

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\* <http://www.fao.org/news/story/en/item/1325054/icode/>

† Sperling, F., Havlik, P., Denis, M., Valin, H., Palazzo, A., Gaupp, F., & Visconti, P. (2020). *Transformations within reach: Pathways to a sustainable and resilient world - Resilient Food Systems*. IIASA Report. IIASA-ISC, December 2020. <http://pure.iiasa.ac.at/id/eprint/16822/>

‡ <https://www.counterpunch.org/2020/12/17/hunger-in-america-covid-19-and-the-nightmare-of-food-insecurity/>

§ *ibid*

¶ <https://www.theguardian.com/food/2020/nov/25/us-hunger-surges-spiraling-pandemic>

\*\* For example, in Australia, 40000 homeless people at high risk of infection were given emergency accommodation in vacant hotels, while in the UK, despite a population more than twice the size, only 33000 were assisted in this way. See: <https://theconversation.com/states-housed-40-000-people-for-the-covid-emergency-now-rough-sleeper-numbers-are-back-on-the-up-154059>

capability of poorer countries to respond to the immediate threat of the pandemic—which is in everyone’s interest of course if the disease is to be controlled globally—but it may come at the expense of increasing the secondary economic impact.

The other side of the story of inequality is also worthy of consideration. While recovery for the world’s poorest people could take over a decade, America’s 651 billionaires increased their net worth by 30% to 4 trillion USD during the pandemic.\* Following the release of massive stimulus packages, paid for by debt accruing to the general public, and with the help of quantitative easing and interest rate reductions by many major central banks, share markets returned to their pre-pandemic highs in just nine months, to the delight of wealthy investors. Distributing the COVID-19-induced wealth increase of the ten richest billionaires alone, according to Oxfam, would be enough to prevent anyone on earth from falling into poverty, as well as pay for vaccinating every human being. Instead, the pandemic marks the first time since records began that inequality rose in virtually every country on earth at the same time. It is estimated that the total number of people living in poverty increased by between 200 and 500 million in 2020 alone.†

### 3. Conclusion and Recommendations

What can be done? The World Bank has calculated that if countries were to act now to reduce inequality then poverty could return to pre-COVID-19 crisis levels in just three years, rather than in over a decade. The benefits, however, go far beyond ameliorating the present external shock of the pandemic.

When it comes to the reduction of risk and impact of disasters of all kinds and at all levels, lowering inequality is among the best strategies. A healthy and economically secure population with a high level of solidarity has the best chance of facing unexpected challenges. Indeed, the evolutionary success story of the human species is largely based on our exceptional capacity to communicate and collaborate in a systematic and rules-based manner. This is reflected in the need for moral foundations as an enabling condition for a healthy economic system, as has been argued by a long line of theorists, from Adam Smith to EP Thompson.‡ There is no real alternative. As the World Economic Forum has pointed out, the present robber baron capitalism is likely to destroy itself.§

While some national and local actors with intermediate-level resources may of course decide to adjust budgetary priorities and raise organisational preparedness so as to maximise their emergency response capability, and while they may thus seem to outperform some others who have equal or greater resources, there are many actors who simply cannot afford to adopt supportive policy measures on the scale that is required. Targeted international post-COVID-19 reconstruction aid and loan amnesties may be needed to enable and encourage all

\* <https://americansfortaxfairness.org/wp-content/uploads/12-9-20-National-Billionaires-Report-Press-Release-1T-4T-FINAL-1.pdf>

† <https://www.oxfam.org/en/research/inequality-virus>

‡ Smith, Adam. 2002 [1759]. *The Theory of Moral Sentiments*. Cambridge, New York: Cambridge University Press; and Thompson, E. P. 1993. *Customs in Common: Studies in traditional popular culture*. New York: New Press.

§ Gensler, Lauren. 2017. “Rising Income Inequality Is Throwing The Future Of Capitalism Into Question, Says World Economic Forum.” *Forbes Magazine* 1.11.2017, online. [www.forbes.com/sites/laurengensler/2017/01/11/world-economic-forum-income-inequality-capitalism/#274135505dd3](http://www.forbes.com/sites/laurengensler/2017/01/11/world-economic-forum-income-inequality-capitalism/#274135505dd3)

jurisdictions to take necessary action, such as improving public health services or supporting the unemployed, but always in conjunction with mandatory measures to curb inequality. The advantage is that these measures will improve general, long-term resilience not just to pandemics but to other challenges as well, such as climate change or food supply disruptions. This realisation, unfortunately, has not yet reached many parts of the science community with significant influence on policy. For example, the recent report by the International Institute for Applied Systems Analysis, working in partnership with the International Science Council, recently produced a 53-page report.\* The report only mentions inequality once in passing, and does not make any recommendations on this key issue.

Unless determined policy action is taken at multiple levels, inequality is set to turn into ‘structural homicide’ on a massive scale in this crisis-stricken 21<sup>st</sup> century. The ideology that likes to call on each of us personally and on each nation to be responsible for our own resilience and disaster preparedness is obviously flawed, when power, wealth and income are distributed so very unequally. But this ideology has long kept us from recognising inequality reduction as a key element of disaster risk reduction as well as general development and prosperity.

And, yes, there is much hard evidence to prove that, with sufficient political will, inequality can certainly be reduced.† Let us insist on it: Solidarity and Equality, not COVID-19-induced ‘Hunger Games’! This is not a charitable but a rational approach. Curbing inequality will benefit us all by boosting human security. As Pope Francis put it, in his recent work, *Fratelli Tutti*, “The notion of ‘every man for himself’ will rapidly degenerate into a free-for-all [attitude] that will prove worse than any pandemic.”‡ The same could be said of other crises, such as climate change or ecological collapse. A race to the bottom will destroy what little chance we have to weather the many storms that await us in the coming decades.

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\* Sperling, F., Havlik, P., Denis, M., Valin, H., Palazzo, A., Gaupp, F., & Visconti, P. (2020). *Transformations within reach: Pathways to a sustainable and resilient world - Resilient Food Systems*. IIASA Report. IIASA-ISC, December 2020. <http://pure.iiasa.ac.at/id/eprint/16822/>

† <https://theconversation.com/there-are-many-good-ideas-to-tackle-inequality-its-time-we-acted-on-them-106700>

‡ [http://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco\\_20201003\\_encyclica-fratelli-tutti.html](http://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20201003_encyclica-fratelli-tutti.html) (quote from p.10)

Society requires a robust banking system. The current private money system reflects aristocratic, wealth-concentrating capitalism. The priority of society is society, not the economic or financial system. Banks and other businesses should be focused on helping individuals and society to prosper, not the other way around.

– *Frank Dixon*, [Public versus Private Sector Money Creation](#)

The ideology that likes to call on each of us personally and on each nation to be responsible for our own resilience and disaster preparedness is obviously flawed, when power, wealth and income are distributed so very unequally. But this ideology has long kept us from recognising inequality reduction as a key element of disaster risk reduction as well as general development and prosperity.

– *Thomas Reuter*, [The COVID-19 Pandemic as a Systemic Stress Test](#)

The UNOG-WAAS report on Global Leadership for the 21<sup>st</sup> Century mentions the importance of breaking down “silos” among academic disciplines, stakeholders, and UN agencies. This “modest report on global reports” is a small step in doing so, but much more needs to be done.

– *Michael Marien*, [Report on Global Reports, 2020-2021](#)

Transformational Catalysts are an institutional innovation arising out of the inadequacy of traditional organizing forms, such as single organizations, collaborations, and even multi-stakeholder networks to bring real system transformation into being.

– *Sandra Waddock & Steve Waddell*, [Transformation Catalysts](#)

Needed social improvement will not come about if the current socioeconomic structures remain unaltered.

– *Julene Siddique & Peter Joseph*, [The Social Architect](#)

The world is beset with imperfections which stem from our short-sightedness, greed for consumption, mutual mistrust and unwise economic policies. They can be remedied if the world reorganizes itself to function according to values such as unity, totality, harmony, human security, freedom and equality.

– *Ashok Natarajan*, [A Values-based World Order](#)

Open Societies thrive on the idea of a liberal order based on a human-centered approach. They are not driven by leftist narratives’ notion of a forced equality, nor by an exclusionary ethnic identity of right-wing narratives.

– *Stefan Brunnhuber*, [Open Societies versus Autocratic Experiments](#)

A social theory of the firm is one that examines the role and functioning of business entities as a specialized category of social institution created and sanctioned to serve a social purpose, to promote the welfare and wellbeing of society.

– *Garry Jacobs*, [Transdisciplinary Theory of the Firm](#)