

'How do we build from the current corona crisis towards a more sustainable future?'

Introduction

The COVID-19 virus is “unprecedented”⁽¹⁾ in scale and impact. Our response will set the agenda for the next decade⁽²⁾. This decade is also critical in the world’s response to another crisis – climate change⁽³⁾. We therefore find ourselves at a crossroads in time. Either we choose now to build a sustainable future, or we revert to “business as usual”, leading to a catastrophic 3°C temperature increase^(3,4).

This essay takes it as read that the sustainable pathway is desirable; it therefore addresses how to achieve it. Let us start with a definition of terms. “How do we build” I interpret figuratively, i.e. “what actions must be taken”. The “current corona crisis” I interpret broadly: the crisis doesn’t just entail the disease itself, but all subsequent consequences, e.g. economic downturn and social isolation. To define “sustainable”, I use the common paraphrase of the Brundtland Report’s definition of sustainable development, i.e. “[meeting] the needs of the present without compromising the ability of future generations to meet their own needs”⁽⁵⁾. Thus, “a more sustainable future” is one in which global warming is limited to 1.5°C – or at most 2°C – since this is the level for global safety^(3,6) without which “future generations” may not exist at all. But it also implies improvements across factors such as poverty, inequality, education and health.

I will address all these factors, albeit with a focus on climate change. I will first clarify what we are “building” from by summarising the key symptoms of the corona crisis. I will then propose critical steps to build from that to a (more) sustainable future, across three key sectors: government, business, and civil society. Where possible, I will also highlight cross-benefits.

To narrow my scope, I use the UK as a case study. However, I believe that many of my initiatives’ principles could (and should) be adopted globally, while allowing for differing national contexts. Also, to avoid a generic “wishlist” of sustainability initiatives, I use the following criteria: each initiative must either address negative symptoms or develop positive “side-effects” of the corona crisis.

Finally, a note on my research methodology. Besides reviewing existing literature, I sought views from diverse expert stakeholders, and their feedback on my initial ideas. All stakeholders have been anonymised. Although I couldn’t include all their views, to indicate where I do include their suggestions, I mention them directly (e.g. “Interviewee X argues..”). To indicate where I found support for my own ideas, I simply cite the stakeholder(s).

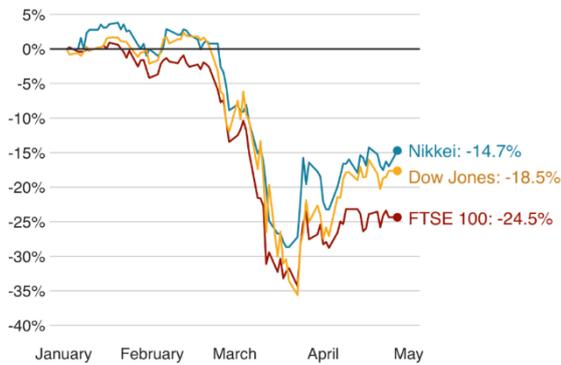
What we’re building from

Negative impacts

The pandemic has had a devastating impact on human life, with over 5m cases and 328,000 deaths worldwide, and nearly 38,000 UK deaths (as of 30/05/20⁽⁷⁾). Additional health impacts have been severe, with millions of surgeries cancelled or postponed due to limited hospital capacity⁽⁸⁾. Meanwhile, lockdown has increased domestic abuse⁽⁹⁾ and mental health challenges that are exacerbated by existing economic inequalities⁽¹⁰⁾.

Economic impacts have also been severe. Jones et al.⁽¹¹⁾ summarise them in a BBC article: falling stock markets, surges in unemployment, a crash in oil prices, and a predicted recession, with the global economy to shrink by 3% this year (Figures 1-3).

The impact of coronavirus on stock markets since the start of the outbreak



Source: Bloomberg, 27 April 2020, 07:00 GMT



Figure 1: COVID-19 impact on stock markets⁽¹¹⁾

Oil price at 21-year low

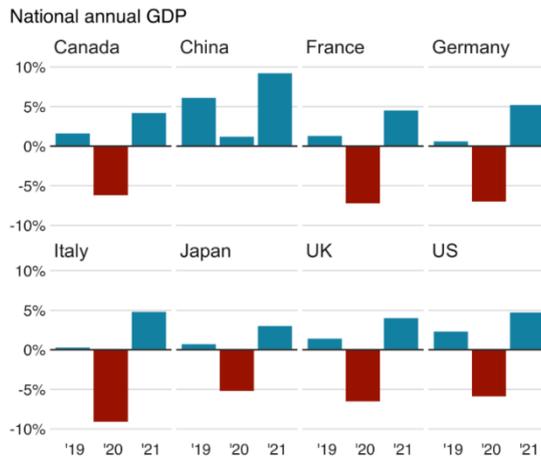


Source: Bloomberg, 27 April 2020, 07:00 GMT



Figure 2: Oil price crash⁽¹¹⁾

Many advanced economies are expected to enter recession this year



Source: International Monetary Fund



Figure 3: Predicted recession⁽¹¹⁾

Positive impacts

Despite these challenges, COVID-19 has produced unexpected “silver linings”. Greenhouse gas (GHG) emissions may fall 8% over 2020⁽¹²⁾, due to a drop of fossil fuel consumption. This has been accompanied by a global reduction in air pollution, particularly in cities⁽¹¹⁾. There is also much anecdotal evidence for rising kindness and community spirit⁽¹³⁾, and other intangible positives such as increased wildlife activity.

The imposing – but not insurmountable – challenge will be to address the negative, yet preserve the positive impacts, all the while striving for a sustainable future.

“How do we build” – the steps that must be taken

Government

There are three key steps for governments. First, minimising the probability and impact of future pandemics. Second, setting the economic agenda towards “green growth”, through green recovery packages and regulation. Third, providing leadership in setting society’s course towards a more sustainable future. I’ll now elucidate.

Future Pandemics

To achieve a sustainable future, governments must reduce the likelihood and impact of future pandemics. Were pandemics to become frequent, the costs might cripple the world. Future pandemics are far from unlikely; the World Health Organisation estimates that 60% of human

diseases originate in animals⁽¹⁴⁾, and there are as many as 1.7m unidentified viruses that could create further pandemics⁽¹⁵⁾.

Prevention is often better than a cure^(16,17). To prevent another pandemic, two simple steps address the root cause, i.e. exposure to animal pathogens. First, strict international regulation to reduce the trade in live wildlife⁽¹⁸⁾. Second, protect and restore habitats⁽¹⁵⁾; contact with animals is reduced if they have their own habitat and territory to live in⁽¹⁸⁾.

However, prevention is not fail-safe, and increased resilience is needed to minimise the impact of pandemics. Increased international cooperation to plan, fund, and coordinate pandemic responses is required^(19,20). But “cooperation has to be pre-planned to be effective.”⁽¹⁹⁾. “Pre-planning” is the most important point. The Global Preparedness Monitoring Board⁽²⁰⁾ warned in 2019 that the world was unprepared for a pandemic. Cassandra-like, it highlighted several issues, all to no avail: widespread lack of compliance with International Health Regulations designed to “prevent, protect against, control ... international spread of disease⁽²¹⁾, insufficient political will for pandemic preparation, and a lack of effective systems in place. All such issues should be determinedly addressed.

Green Growth

Economic recovery packages will be critical, either enabling a sustainable future, or perpetuating business as usual^(2,22-29). But while economic recovery is important, the growth must be decoupled from environmental degradation. Hepburn et al.⁽²⁾ analysed 196 recovery policies from the 2008/09 financial crisis, and surveyed 231 experts on “performance of...fiscal recovery archetypes across four dimensions: implementation speed, economic multiplier, climate impact potential, and overall desirability”^(2: p.3). Figure 4 displays the survey results:

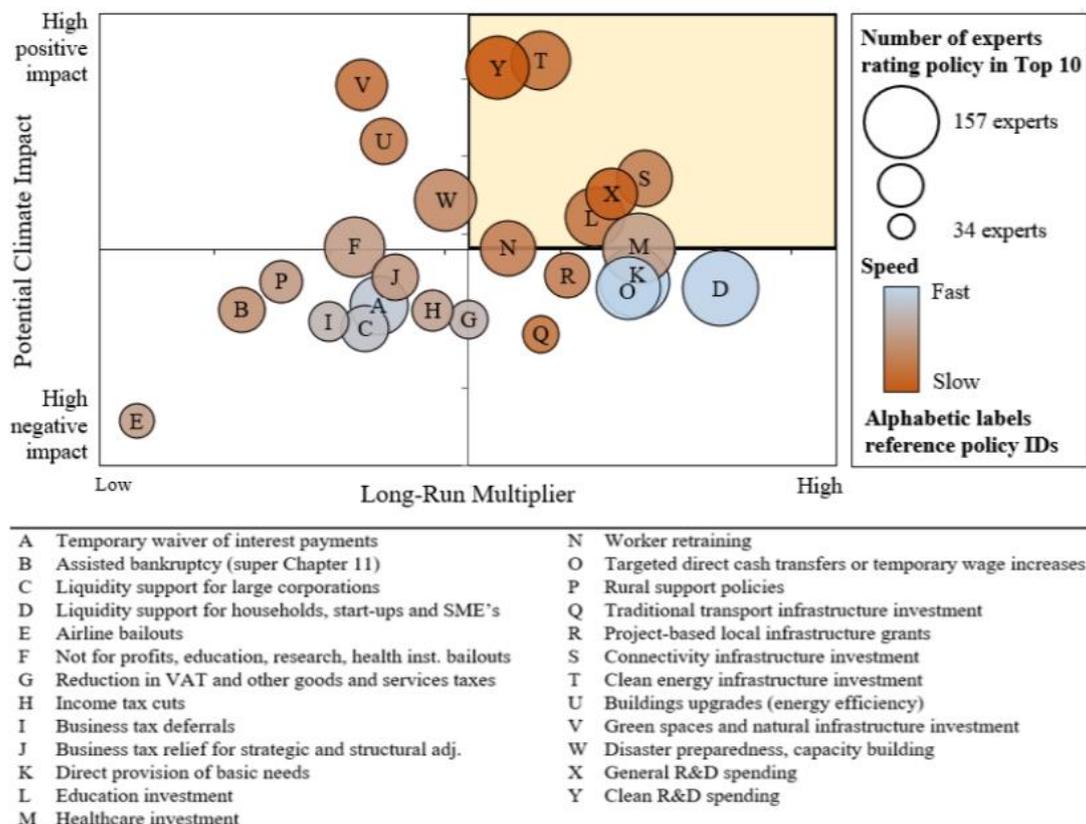


Figure 4: Survey Results^(2:p.10)

The survey, combined with their review of previous recovery policies, prompted 5 stimulus recommendations:

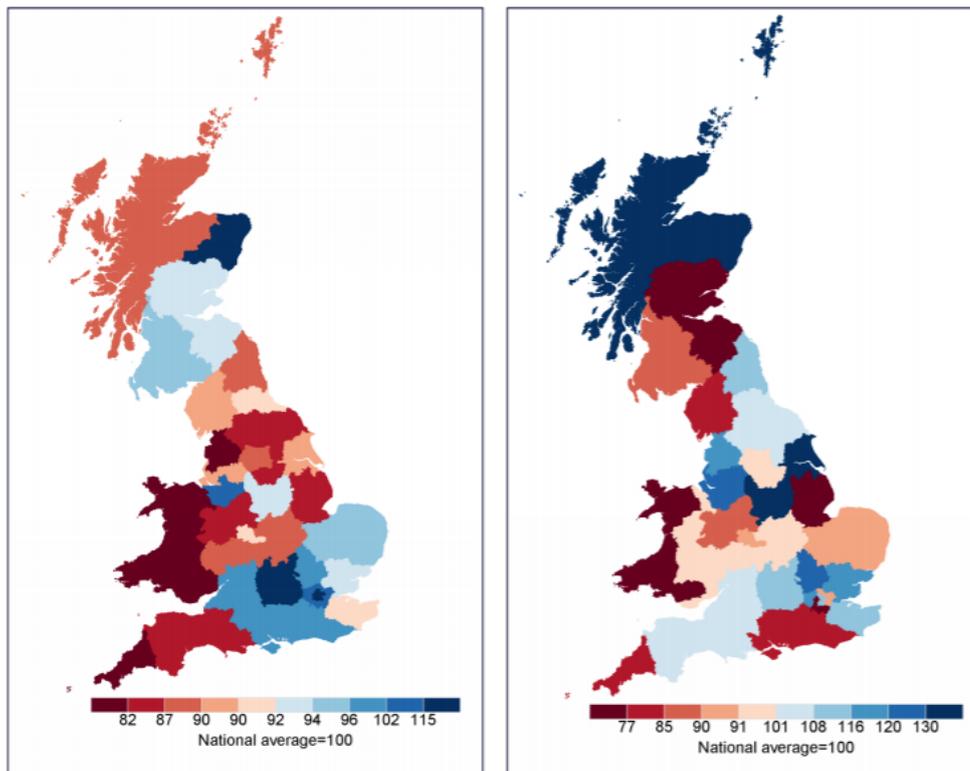
- “clean physical infrastructure investment,
- building efficiency retrofits,
- investment in education and training to address immediate unemployment from COVID-19 and structural unemployment from decarbonisation,
- natural capital investment for ecosystem resilience and regeneration, and
- clean R&D investment.”^(2:p.16)

These have strong evidence elsewhere. For example, infrastructure investment has been found to raise economic output⁽³⁰⁾ and boost employment⁽³¹⁾, and is critical for de-carbonisation, whether equipping the grid for more renewable energy⁽³²⁾ or enabling the electrification of transport⁽³³⁾. Note, “infrastructure” means more than just energy – universal high-speed internet could add £17bn to UK output by 2024⁽³⁴⁾, de-centralise economic growth and enable a reduction in GHG emissions from travel⁽³⁵⁾. Stakeholder H notes this would address the “digital divide” (e.g. 1.9m households without access to internet⁽³⁶⁾), which threatens to leave vulnerable households behind in society’s digitisation⁽²⁷⁾. Efficiency retrofits can boost employment, are vital to reach net-zero⁽³⁷⁾, and reduce fuel poverty⁽³⁸⁾.

Investment in education and skills deserves special attention, as the cross-benefits are fantastic. Done correctly, it addresses the impact of COVID-19 by reducing unemployment, builds for the future, providing the skills needed to reach net-zero, and underpins a “Just Transition”, preventing abandonment of e.g. fossil-fuel workers, like coal-miners of the ‘80s⁽³⁹⁾. The co-benefits continue: reducing unemployment is a significant way to improve mental health⁽⁴⁰⁾, while skills and education address inequality⁽⁴¹⁾. Combined with targeted R&D investment to maximise innovation spillover and productivity increase (Figure 5), the effects are multiplied.

2.9 A. Relative regional productivity (2014)

2.9 B. Relative national spillovers (2000–14)



Notes: Panel A reports an area’s labour productivity relative to the UK-wide average level (in %). Panel B reports average national spillovers (national Patent Rank) in an area, relative to the UK average national spillover level (%).

Figure 5: Targeting high “innovation spillover” areas would maximise productivity increase⁽³⁵⁾

But recovery packages alone are not enough. As Interviewee A⁽²²⁾ explained, they need to be supported by regulatory and structural frameworks. Allan et al.⁽⁴²⁾ recommend specific supporting structures (Figure 6) which will both facilitate the key actors and increase investor confidence and certainty.

Policy Items	Description
Energy generation, storage, and distribution	Invest in zero carbon energy production, storage infrastructure, and interconnection; extend and modernise the grid to support higher renewable penetration and electrification of heat and transport
Reducing industrial emissions	Introduce financial incentives (e.g. wider carbon price floor) for industrial companies to reduce net carbon emissions and increase efficiency in production
Research and development	Invest in high impact sustainability technology research and development that includes start-ups, small and medium-sized enterprises, and large companies
Building climate-smart infrastructure	Investment in low and zero-carbon infrastructure projects, such as public transport infrastructure, that are also resilient to the impacts of climate change, such as flooding
Broadband connectivity investment	Investment in broadband infrastructure to increase full fibre coverage beyond the current set of <10% of UK homes
Nature-based solutions investment	Investment in ecosystem resilience and regeneration by enhancing green spaces, planting trees, and encouraging climate-friendly agriculture and restoring carbon-rich habitats
Electric vehicle conversion	Incentivise uptake of electric cars through financial incentives and fast-charging infrastructure and improve bike lanes to encourage wider uptake of e-bikes
Home renovations and retrofits	Higher carbon standards for new-build homes; financial support for households installing insulation and other energy efficient improvements
Education and training	Funding skills and retraining initiatives, such as through digital further education, to address structural unemployment effects resulting from decarbonisation measures
Conditional bailouts	Bailouts for struggling firms, conditional on improvements against climate-positive criteria, especially for fossil fuel intensive companies such as airlines
Modified supporting structures	
Climate Change Emergency Committee (CCEC)	Rename the Cabinet Committee on Climate Change to the CCEC to ensure that COVID-19 economic recovery is achieved alongside net zero by 2050, through higher visibility and authoritative allocation of government resources
Net Zero Delivery Body (NZDB)	Establish a new NZDB to formulate and deliver a Net Zero Delivery Plan based on independent advice from the Committee on Climate Change
Green sovereign bonds	Issue national green recovery bonds to focus funding on sustainable investment
National Investment Bank	Establish a National Investment Bank to manage and reduce risk in infrastructure projects, and leverage private finance towards a green delivery pathway
Mobilised savers and investors	Direct capital towards green projects through 'recovery plan' ISAs; reducing regulatory frictions in insurance (Solvency II) and retail investment (MiFiD)
Financial instruments	Introduce new financial instruments to reduce risks involved in climate-friendly investments, such as contract-for-differences or a regulatory asset-based finance model
Global leadership	
Sustainable Recovery Alliance	Establish an informal global alliance at COP 26 to promote global coherence among recovery packages, build resilience to shocks, and interface with existing initiatives such as Mission Innovation, the Carbon Pricing Leadership Coalition, and the NAP Global Network.

Figure 6: "Supporting Structure" recommendations⁽⁴²⁾

Finally, government should tackle cities. Lockdown is a springboard to create low-emission city-centres. Since air pollution causes 36,000 annual deaths⁽⁴³⁾, and costs £2.7bn in productivity loss⁽⁴⁴⁾, let alone the carbon footprint, the co-benefits are obvious.

Leadership

Governments must lead the way to a better future. To do that, they must first envision and value it. As Interviewee K notes, this requires a significant mindset shift to look beyond normal 5-year election cycles⁽²⁸⁾, but the consequences could be powerful. Take these three examples: first, longer-term vision should divert societies from GDP growth as the dominant goal, to more holistic progress. A possible mechanism could be, as Interviewee L argued, a “real and substantive commitment to the SDGs”⁽²⁹⁾ which offer pre-defined criteria for holistic progress. Second, a concern for the long-term should lower discount rates in economic modelling, prompting more urgent action to avoid high costs of global warming, such as in the Stern Review⁽⁴⁵⁾. Third, leadership to a long-term future means empowering others to follow it; governments should create legislative and regulatory frameworks empowering businesses to act for the long-term – more on this later.

Finally, leadership includes framing the national conversation. Currently, many UK MPs are loath to speak out publicly about climate change⁽⁴⁶⁾. This must change. Politicians must resist the temptation to return public debate to Brexit and economic growth. There is a chance to reframe national priorities to “building back better”, to a sustainable future and holistic progress. The narrative of lockdown – all individuals inconvenienced for the common good – can be turned to that of climate change. This is the chance for a new social contract, where government has a larger role for the improvement of society, and civil society responds in kind. For the UK, there is also a chance to demonstrate global leadership in the build-up to COP-26. Let us not waste it.

Interviewees E and J^(47,48) challenged that people accept the need for action with acute issues like COVID-19, but not chronic issues like climate change. This challenge has merit, and I shall address it in the “civil society” section.

Business

My three key steps for businesses are: first, continue the reduction in unnecessary travel. Second, use that reduction as the basis for a paradigm shift. Third, re-define their mindset and behaviours to prioritise long-term value and resilience.

Reduce Unnecessary Travel

This is an easy win^(24,26,28). COVID-19 forced business travel to cease, yet many companies proved they could still function⁽⁴⁹⁾. Continuing this way will provide co-benefits of reduced carbon emissions⁽⁵⁰⁾, reduced business cost, improved air quality⁽¹¹⁾, and reduced employee exhaustion⁽²⁴⁾.

Paradigm Shift

But what if we redefine “necessary” travel? Large corporations have traditionally operated out of headquarters - often located in mega-cities - *necessitating* employees to live within commutable distance in order to work^(51,52). But improvement in remote working has reduced that necessity, and already businesses are questioning this arrangement⁽⁵³⁾. If businesses shift to a more distributed model, the co-benefits would be great: access to a wider talent pool for businesses, while greater access to better jobs (while remaining in more affordable areas) would distribute economic opportunities and benefits, thus reducing regional inequalities.

Furthermore, consider Interviewee C’s point: increasing urbanisation is a global challenge, pressuring infrastructures and resources, and driving GHG emissions^(54,55), but with a more distributed workforce the surge of demand on cities may slow⁽²⁴⁾. Take this further, and perhaps

office buildings could be re-purposed to provide subsidised accommodation for the key workers we value so much now, but may swiftly forget as COVID-19 fades⁽⁵⁶⁾.

Long-term Value

Finally, businesses should take this opportunity to embrace a focus on long-term purpose and value^(26,27). A culture of shareholder primacy has permitted and promoted an emphasis on maximising short-term returns⁽⁵⁷⁾; this must change to a long-term view, and promotion of environmental and social value creation. Once more, the benefits are universal. Companies themselves will benefit (evidence shows that ESG stocks outperformed through COVID-19^(58,59,60) while creating environmental and social benefits.

But businesses must be reinforced by investors. Individual and institutional investors must reward good practices – and punish bad ones – with their investment choices. There have been promising signs of “fundamentally reshaping finance” in this way⁽⁶¹⁾ – let COVID-19 be the catalyst.

Once again, stakeholder action must be accompanied by structural, regulatory and process change. Businesses must be safeguarded against lawsuits when long-term interests impact short-term returns (as permitted by current structures)⁽⁵⁷⁾. Likewise, ESG ratings must improve in clarity and consistency to be more valuable⁽⁶²⁾; central institutions should seek a vital coordinating role, as with the EU Taxonomy⁽⁶³⁾.

Civil Society

My three key steps for civil society are: first, build a framework of resilient mental health. Second, continue the good habits and sense of community developed during lockdown. Third, increase civic participation.

Mental Health

Interviewee D argued sustainability relies on a resilient populace⁽⁶⁴⁾. Mental health is implicitly necessary for a functioning society; it’s one of the “needs” of the Brundtland Report’s definition. We must build a framework of positive mental health^(23,24,26,27). Tackling unemployment will help⁽⁴⁰⁾. But the WHO adds that “community-based mental health care” must be expanded, with “self-care, informal community care, and primary mental health” as the foundation⁽⁶⁵⁾:

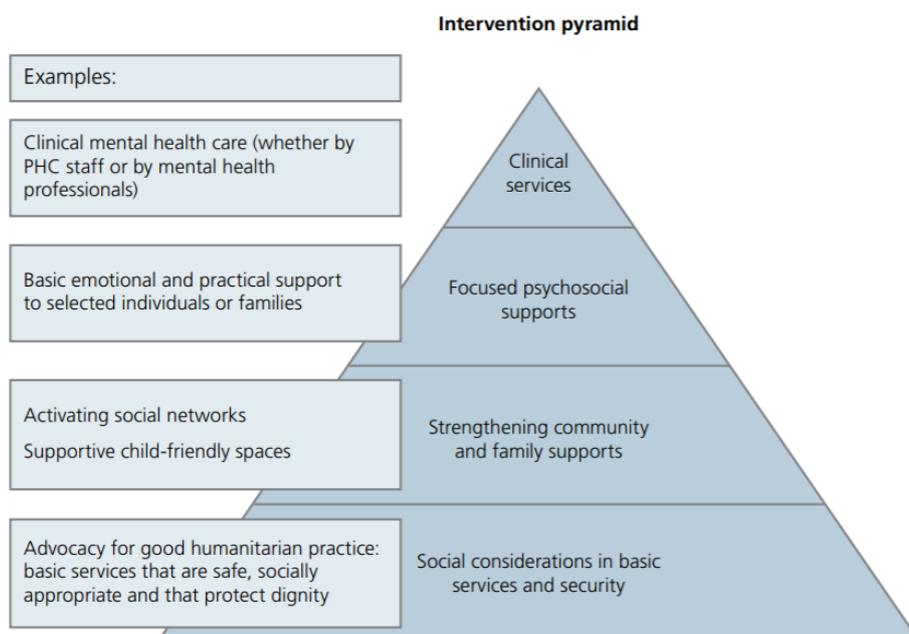


Figure 7: “Pyramid” of mental health support⁽⁶⁵⁾

Continue Good Habits

Next, continue the good habits of lockdown. Consumption has reduced⁽⁶⁶⁾, while kindness⁽¹³⁾ and community participation have increased⁽⁶⁷⁻⁶⁹⁾. Acts of kindness and community have a positive mental health impact on recipients and donors⁽⁷⁰⁾. Interviewee C argues this mindset shift lays the foundation for the lifestyle changes for a sustainable future: living simply, travelling less, with reduced GHG emissions as a result⁽²⁴⁾. Lockdown has demonstrated the effect that mass action can have – this same spirit should be applied to climate change.

As noted by Interviewees E and J above, maintaining such spirit against chronic issues is difficult^(47,48). I propose to capitalise on #clapthenhs, and leverage social marketing best practices (e.g. “EAST” framework – Easy, Attractive, Social, Timely^(71,72)) with a #buildbackbetterthursdays campaign. Figure 8 is a mock-up poster:



Figure 8: #buildbackbetterthursdays campaign

It is imperfect, and perhaps optimistic. Success depends on wide-spread engagement across citizens, NGOs, and different levels of government. But there's precedent in success for similar campaigns:

the annual “Clean Air Day” has involved 400,000 people in “clean air behaviours”, and educated 20.5m on the impact of air pollution on health⁽⁷³⁾. However, annual events don’t employ a useful force in behaviour change – habit⁽⁷⁴⁾. Annual events occur but then fade. By making my event weekly (or even monthly) I strengthen the possibility of capitalising on current momentum, keeping the promising spirit in people’s minds, and building new habits that produce long-term behaviour change.

Civic Participation

My final point is simple. Politicians respond to the voices of their constituents^(46,75). To ensure they act and pay attention to the causes we care about, we must all increase our political engagement, communicating our cares and concerns to representatives at the local and national level. Movements like Extinction Rebellion have impacted the national debate⁽⁷⁶⁾. It’s time the wider public did the same.

Conclusion

Achieving a sustainable future will require action across all three of the above sectors. In each sector, the most crucial step is the mindset shift required to proactively consider the long-term horizon. From there, the other steps follow naturally, and we can preserve hope that from this crisis, a sustainable future can emerge.

Word count excluding title and references: 2,494

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