GLOBAL INFORMATION SOCIETY WATCH 2020

Technology, the environment and a sustainable world: Responses from the global South

ASSOCIATION FOR PROGRESSIVE COMMUNICATIONS (APC) AND SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY (SIDA)
Operational team
Valeria Betancourt (APC)
Alan Finlay (APC)
Maja Romano (APC)

Project coordination team
Valeria Betancourt (APC)
Cathy Chen (APC)
Flavia Fascendini (APC)
Alan Finlay (APC)
Leila Nachawati (APC)
Lori Nordstrom (APC)
Maja Romano (APC)

GISWatch 2020 advisory committee
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Arun M. (SPACE Kerala)
Florencia Roveri (Nodo TAU)
Y. Z. Yaú (CITAD)
Joan Carling (Indigenous Peoples Rights International)

Project coordinator
Maja Romano (APC)

Editor
Alan Finlay (APC)

Assistant editor and proofreading
Lori Nordstrom (APC)

Publication production support
Cathy Chen (APC)

Graphic design
Monocromo

Cover illustration
Matías Bervejlilo

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Introduction

This report seeks to explore some of the implications of the COVID-19 pandemic on the environmental crisis and on sustainable development goals in Zimbabwe.

Sustainable development can be defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” However, the pandemic has stalled efforts to achieve the UN Sustainable Development Goals in Zimbabwe, which were already not being met. The pandemic also occurred against a backdrop of the real impact of the climate crisis being felt in the country, such as drought.

Information and communications technologies (ICTs) offer myriad solutions for climate adaptation and mitigation, to cope with environmental disasters such as drought or floods, and to address systemic threats such as the pollution of air and the coronavirus pandemic. In this report I highlight the need for three key areas to be addressed to deal with the climate crisis, and to help meet the country’s sustainable development goals: internet access, digital literacy, and reliable information.

Context

Zimbabwe is prone to severe drought. In recent years, the effect of drought has been felt all over the country with citizens suffering from severe food shortages, and very high prices of basic food commodities such as maize meal. Additionally, the country has had seasons shifting, with a very short rainy season and limited and low rainfall patterns. The nexus between the varying climatic conditions and availability of water is something that needs to be seriously considered to ensure that citizens have access to water all year round.

Zimbabwe has committed itself fully to the 2030 Agenda for sustainable development adopted by all UN member states in 2015. The 2030 Agenda recognises that “ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.” However, the country’s food and water challenges threaten the achievement of its sustainable development goals.

Nobarro and Colombano note that if there is any lesson to be learned from the COVID-19 pandemic, it is that humans and the planet are interlinked in sophisticated and interconnected systems. However, because of its complexity, such an interconnected structure is vulnerable to sudden, catastrophic collapse triggered by events such as the coronavirus pandemic. This further undermines chances of meeting sustainable development goals.

The first line of defence against the pandemic recommended by the World Health Organization is frequent hand washing. In most urban areas in Zimbabwe, however, people do not have running water. This means that the majority of Zimbabweans are deprived of the most basic and effective measure against the pandemic.

Countries globally, including Zimbabwe, have started putting in place economic recovery plans to implement in the aftermath of the coronavirus pandemic. While the pandemic poses health and financial challenges to Zimbabwe, and affects the well-being of ordinary Zimbabweans, these economic recovery plans have a bearing on the environment and efforts to mitigate climate change. Efforts should therefore be made to include climate change mitigation and adaptation measures into the economic recovery plans.

It is also important to note that the pandemic has led to an explosion of information. This has resulted in an information overload, what others term an “infodemic”. According to the World Health Organization, an infodemic refers to “an over-abundance of information – some accurate and some not – that makes it

\[1 \text{ https://en.unesco.org/themes/education-sustainable-development/what-is-esd/sd}
\[2 \text{ https://sdgs.un.org/goals}
\[3 \text{ Ibid.}
hard for people to find trustworthy sources and relia-
ble guidance when they need it.”

The infodemic mostly affects people living in the
cities in Zimbabwe. Most information on the pandemic
circulating on social media platforms, such as Face-
book and WhatsApp, all of which depend on data for
connectivity. Due to the digital divide, Zimbabweans
have been divided into those who have been called
information rich and those who are information poor.
In Zimbabwe, social media is widely used by people in
the urban areas as they can afford to buy data for in-
ternet connectivity. The rural population, on the other
hand, has limited access, as most people cannot afford
the high costs of data to connect to the internet. While
they need accurate information on the pandemic, they
cannot access this by searching the internet. Although
one can question terms such as “information rich” in
the context of the “infodemic”, the basic information
divide in the country caused by a lack of affordable
access to the internet poses a challenge in the design
of inclusive information response strategies to the
coronavirus pandemic and the climate crisis.

The environmental crisis and sustainable
development goals in Zimbabwe

According to the United Nations Environment Pro-
gramme (UNEP):

The pandemic has exposed that gains made to
address poverty, hunger, good health and well-
being may face serious setbacks, unless the global
community also urgently addresses the global
environmental threats that have similar capacity
to gravely undermine the systems that enable
humanity and the planet to survive and thrive.6

It says that real sustainable development is only pos-
able when sound environmental responses, plans
and policies are given the importance they deserve.
In line with this, in developing post-COVID economic
recovery plans, Zimbabwe needs to ensure the inclu-
sion of environmental responses, plans and policies.

The United Nations Development Programme
(UNDP) notes that climate change is viewed as a
serious issue by the government of Zimbabwe. The
Zimbabwean government signed the United Nations
Framework Convention on Climate Change (UNFCCC)
in 1992 at the Rio Earth Summit and ratified it in
November of the same year.7 This was in an effort to
address the hazardous effects of climate change and
emissions of greenhouse gases. The UNDP further
notes that by including climate change issues in the
1996 review of environmental legislation, Zimbabwe
intends to incorporate climate change policies in its
national development plans. However, Zimbabwe,
like the rest of Africa, is constrained by its inability
to put in place appropriate measures to respond to
climate change requirements due to a lack of human,
institutional and financial resources.

Climate action and post-pandemic
recovery plans

Climate change has long-term effects, some of which
are already being felt in Zimbabwe. As mentioned, we
have already seen the effects of global warming and
high carbon emissions in the drought in Zimbabwe,
but the country also experiences climate-induced
flooding. Future pandemics are also predicted. As
noted by UNEP:

Without additional commitments to decarboniza-
tion, the planet is on track for a 3.2 degree global
temperature rise and beyond. This is linked to
an increased likelihood of pandemics, extreme
weather events, droughts, flooding and wide-
spread destabilization of global food, economic
and security systems.8

UNEP further notes that unchecked global warming
will undo gains to address almost every sustainable
development goal and will threaten post-pandemic
economic recovery plans.

The use of renewable energy such as solar and
wind energy is one way of reducing carbon emissions
from the burning of fossil fuels to generate electricity.
In Zimbabwe, electricity supply has been in shortage,
with people going for 12 to 16 hours without electricity
before March 2020 when lockdown restrictions were
put in place. Zimbabwe imports most of its electricity
from South Africa and Mozambique. The move to re-
newable energy in the post-COVID recovery plans could
therefore address the challenge of electricity shortage
while also helping to reduce carbon emissions.

At the same time, civil society organisations
and environmental activists have a key role to play
in working with government officials and relevant
stakeholders in ensuring that adaptation measures
to address the impact of climate change are included
in the recovery plans, such as in key economic sectors
like agriculture.

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5 World Health Organization. (2020, 2 February). Novel
www.who.int/docs/default-source/coronaviruse/situation-
reports/20200202-sitrep-13-n cov-v3. pdf?sfvrsn=19514010_6

COVID-19: Four Sustainable Development Goals that help future-
proof global recovery. https://www.unenvironment.org/news-and-
stories/story/covid-19-four-sustainable-development-goals-help-
future-proof-global

7 https://www.adaptation-undp.org/explore/eastern-africa/
zimbabwe

For example, the Community Water Alliance, together with other residents’ associations and civil society organisations, namely the Women’s Coalition of Zimbabwe,9 Women in Law Southern Africa and the Institute of Water, Sanitation and Hygiene, are collectively pushing for the inclusion of climate change adaptation and mitigation measures in the country’s recovery plans.

The Community Water Alliance is a grassroots-based civil society organisation that does advocacy work around water, sanitation and hygiene. I interviewed the director of the Alliance, Hardlife Mudzingwa. He confirmed that Zimbabwe is going through a severe water shortage resulting from drought. Cities like Harare, Masvingo and Bulawayo have recorded very low water levels and have been declared in a state of disaster.

Mudzingwa said these adaptation and mitigation measures that they are advocating for include wetland preservation, purification of raw water as well as provision of flood attenuation services, all of which aim at addressing the water shortage challenge in Zimbabwe. He reiterated the importance of providing running tap water in homes, as this has been identified as one of the key ways of preventing the spread of the coronavirus. He said that because of this, the coalition of organisations is also pushing for the inclusion of a budget allocation for water and sanitation as a way of ensuring that people get access to running water in their homes.

The challenge of misinformation in times of crisis

In Zimbabwe there are an estimated 4.81 million internet users with 980,000 social media users as of January 2020.10 The circulation of fake news regarding the pandemic is a key concern, and has met with a strong response. The Zimbabwean president has warned that a penalty of 20 years in jail will be levelled against anyone circulating fake news on social media.11

Some of the fake news circulating on social media includes statements such as “drinking alcohol will kill the coronavirus”, “it’s okay to share face masks”, “Africans cannot get COVID-19” and also that exercise will protect people from COVID-19.12 Other false information circulating on social media includes the claim that COVID-19 thrives in winter, and people saying that taking a hot bath will prevent them from contracting COVID-19, which is mythical and therefore untrue. Another myth circulating on social media platforms is that “mosquito bites spread coronavirus and that during seasons when mosquitoes won’t be there, the disease doesn’t spread that much.” Pamela from Mbare, one of the old suburbs in Zimbabwe, said, “Blacks rarely die due to coronavirus. It’s just a disease which infects them, just like common cold, and it disappears.”13

Organisations such as ZimFact14 are playing a watchdog role by fact checking news and information in the public sphere so that the general public can receive verified news, information and related facts in the wake of the rise in misinformation.

Similarly, Zimbabwean youth working with the development charity Voluntary Service Overseas (VSO) listen to the radio and have taken to Twitter, WhatsApp and Facebook to comb through online comments and identify and correct COVID-19 misinformation.15

The need for an open data agenda

While the work of fact checkers is vital – and while the pandemic shows how misinformation in times of climate-related crises is likely to be a challenge – a systemic response to accessing shared and reliable information is also important.

Open data is defined as data that anyone can access, use and share. Through open data policies, information critical to livelihoods, policy making and holding governments to account is publicly known and accessible.

In Zimbabwe, one of the few areas where an open data agenda is being pursued is agriculture. The need to provide better robust access to timely and accurate data for policy makers, farmers and the private sector to inform agricultural activities has been widely acknowledged. The Zimbabwe Evidence Informed Policy Network (ZeipNET)16 and Econet17 are two organisations working to achieve this.

ZeipNET has partnered with Global Open Data for Agriculture and Nutrition (GODAN)18 to promote open data in agriculture. Part of the work that ZeipNET and GODAN are doing around open data includes

9 https://www.wcoz.org
10 https://datareportal.com/reports/digital-2020-zimbabwe
14 https://zimfact.org
16 https://www.zeipnet.co.zw
17 https://www.econet.co.zw
18 https://www.godan.info
conducting research on agriculture, training and promoting online access of open data.

ZeipNET works with agricultural extension services, the Ministry of Agriculture and the Climate Change Management Department through the Ministry of Environment and Natural Resources Management. It shares agricultural-related information based on their research findings. This information – including practical information on weather patterns, choice of fertiliser, and crop variety – is then shared with the farmers.

The organisation’s director, Ronald Munatsi, said that open data is essential to the agricultural sector, as Zimbabwe’s economy is agriculturally based. Following the country’s land redistribution process, it is also important that new farmers have access to data on ways of improving their agricultural production.

Munatsi, however, said that more needs to be done to ensure that this information reaches small-scale farmers who do not have access to digital technology and the internet. One way to address this is for the government to address the digital divide in the country, so that these farmers can use the internet to access information.

Another challenge is securing the proactive participation of the government. Munatsi said that due to bureaucratic government processes it is often difficult to access information from government institutions.

Econet works on open data through its programme called EcoFarmer, a mobile farming platform that provides farmers with free maize farming advice and market and other information to help them manage the unpredictability of farming, including the risk of no rainfall, excessive rainfall and excessively dry days.

Conclusion

The COVID-19 pandemic has impacted negatively on efforts to achieve sustainable development goals as it has affected Zimbabweans’ livelihoods and health.

As already highlighted, Zimbabwe is facing acute food shortages resulting from drought, and even floods. Food shortages in Zimbabwe have resulted in an increase in prices for food and other basic commodities. This has escalated malnutrition and hunger among the poor and marginalised communities in Zimbabwe.

Power shortages resulting from the country not having the capacity to produce enough electricity for the population is a key challenge faced in Zimbabwe. Importing electricity from neighbouring countries is expensive and depletes the country’s already stretched economic resources. Severe power shortages impact industries and trade processes, slowing down efforts to revive the country’s economy. There is therefore a need to strengthen policies aimed at encouraging the shift to renewable energy use.

While local and regional travel bans can significantly reduce carbon emissions, small-scale farmers’ livelihoods are impacted as they are not able to move around and sell their produce to nearby markets. This has resulted in loss of income and an increase in poverty levels in Zimbabwe, as the small-scale farmers struggle to make ends meet.

Digital platforms offer immense opportunity for people to share information on sustainable development issues and ways of mitigating and adapting to climate change. Access to the internet and digital technologies as well as digital literacy for marginalised groups are essential in bridging the digital divide in Zimbabwe. However, civil society needs to forge alliances with the open data movement, and with the fact-checking movement globally, to ensure that the information circulated online is accurate and meaningful to Zimbabweans.

Action steps

The following steps are needed in Zimbabwe:

- Global food supply chain disruptions for major food producers and exporters coupled with border closures and trade restrictions provide an opportunity for environmental activists, policy makers and farmers to develop domestic and local food systems in Zimbabwe and not rely heavily on imported food. This would address the challenge of food shortages resulting from drought.

- Efforts to move to renewable energy should be intensified and policies that promote the use of renewable energy should be included in the post-pandemic economic recovery plans.

- Digital platforms create problems for rural women and small-scale farmers because of their lower digital access and literacy levels. Digital literacy training by relevant civil society organisations can help rural women and smallholder farmers take full advantage of advanced ICT applications to share and gain knowledge of farming practices and ways to mitigate and adapt to climate change.

- Civil society needs to forge alliances with the open data movement and with fact-checking initiatives to encourage accurate reporting on the climate crisis and its impacts, and to act against fake news circulating on social media.
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The world is facing an unprecedented climate and environmental emergency. Scientists have identified human activity as primarily responsible for the climate crisis, which together with rampant environmental pollution, and the unbridled activities of the extractive and agricultural industries, pose a direct threat to the sustainability of life on this planet.

This edition of Global Information Society Watch (GISWatch) seeks to understand the constructive role that technology can play in confronting the crises. It disrupts the normative understanding of technology being an easy panacea to the planet’s environmental challenges and suggests that a nuanced and contextual use of technology is necessary for real sustainability to be achieved. A series of thematic reports frame different aspects of the relationship between digital technology and environmental sustainability from a human rights and social justice perspective, while 46 country and regional reports explore the diverse frontiers where technology meets the needs of both the environment and communities, and where technology itself becomes a challenge to a sustainable future.