(In)equitable knowledge systems: before, during and beyond a pandemic

Jon Harle, with illustrations by Hamsi Evans

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Introduction

Earlier this year we launched our new strategy – built on an ambition to support more equitable ecosystems of research and knowledge. But we launched the strategy into a rapidly unfolding pandemic, which has shown even more strongly the inequities of our world, and of our knowledge systems.

It is much too early to make firm statements about what the enduring legacy of the pandemic will be, but it forces us to think again about those inequities in new ways, and what we need to do to address them.

Many of the inequities which COVID-19 has exposed have been with us for a long time. Setting aside for a moment the very stark inequities in access to fundamental health services, and in the ability to maintain decent livelihoods, the pandemic has shown us how the ways in which we produce, communicate and use knowledge are riven with injustices and exclusions. And those injustices and exclusions extend to the ways in which different communities come together to agree priorities, and to generate and appraise evidence. They also extend to how that evidence is incorporated into decision making, policy and operational responses to a whole host of social, environmental and economic questions.

The injustices and exclusions point to inequities in infrastructures, and of voice – whose ideas and knowledge are valued - and access to the spaces of discussion, learning and work. As many have noted (and the graphics in this blog post from Heather Marquette, Peter Evans, designed by Hamsi Evans, who also illustrated this paper, have shown), COVID-19 may exacerbate existing cracks in the system.

There have been many calls to “build back better” from the current crisis – and the same must be true for “knowledge systems” work. Critically, any “better” future will need to unsettle, and even overturn, some of the ways in which the powerful and prevailing processes and structures for creating, contesting and deploying knowledge are developed in the North and are directly or indirectly pushed into Southern systems.

This piece can’t do justice to all of these questions. My aim here is to identify some of those inequities, to think aloud about what they mean for knowledge, and to continue the discussion with others to help us understand better what needs to be done and the role we can play.

1. Whose knowledge counts and what types of evidence are valued?

Perhaps inevitably, COVID-19 has shown us how different groups have better or worse access to the basic knowledge needed to protect themselves. Evidence from Asia, for example, suggests that women have had less access to essential information about the virus. But, as importantly, it has exposed how different types of evidence and knowledge are valued. That is both in disciplinary and geographic terms.

In many countries the biomedical sciences have received more attention than the social sciences. In the UK they are better represented on official working groups. The expertise of medical professionals and scientists has been vital, but it also shows the extent to which our understanding of disease and of health come to be framed by certain disciplines, neglecting other sources of important knowledge.

Researchers responding to our early-career researcher survey in April were concerned that COVID-19 would not only reduce research funding overall, but would swiftly divert it to areas more obviously related to global health. Similar concerns were echoed by On Think Tanks’ survey, as well as the challenges of
transitioning their current research efforts, or, in some cases, the struggle for more immediate survival.

It is not only a question of disciplinary weight either. Others – reflecting their experiences of other crises – have pointed to the danger that “big name” researchers, easily able to access the funding being pumped into the system, may displace experienced, locally-based teams, who have carefully developed partnerships and methods that engage with contexts, or that, in the process, big theoretical models prevail over slower observation and data gathering.

The source of funding, and the origins of researchers, also influence the methodologies used, and what comes to count as knowledge. As Budd Hall and Rajesh Tandon argue, these tend to be those established by the more powerful academic and scientific communities of the world. Dealing with the biomedical aspects of a global pandemic, as with many issues of global health, obviously requires fidelity to global scientific standards but can also lead to what Hall and Tandon label “epistemicide”, the killing off of other ways of knowing. Paul Richards and colleagues in Sierra Leone demonstrate this clearly in their account of how a “people’s science” helped turn the tide of Ebola in Sierra Leone (and argue that it has much to teach us about the current pandemic). When we rely so much on digital networks for our knowledge and evidence this becomes ever more pronounced: whose knowledge is rendered invisible, by its lack of digitalisation? In what languages is and isn’t our knowledge digitized?

COVID-19 has also shown us how the question of “whose” knowledge has a darker side, and one that connects instantly to the racism that infects much of our discourse on knowledge. As Dr Simukai Chigudu has explained, a pandemic “outbreak narrative” set in early, which, amongst other things, painted Africa as a continent of impending tragedy, and the West as the source of expertise and science. There has been a rush of Northern experts offering policy prescriptions to Africa. Meanwhile, within the continent, Ghanaian scientists have sequenced the genomes, new prototype ventilators have been developed by Kenyan and Ugandan engineers, Senegalese scientists have been acknowledged for developing a low-cost testing kit, and the African Academy of Scientists has rapidly crowd-sourced a continental research agenda. While variations in surveillance and reporting mean it is too early to know the true impact in each region of the world, it is manifestly clear that in the UK at least, rigorous science and a panoply of experts has not spared us from a significantly politicised response.

2. Equity of access to digital infrastructure and tools

Contemporary knowledge systems rely on digital connections, whether that is to access and communicate information and ideas, or to perform daily work tasks. COVID-19 has thrown digital capacities into sharp relief, and particularly as many previously face-to-face and physical aspects of work have moved online. In some cases, that has opened up new opportunities for inclusion – participation is no longer restricted by the time and financial ability to travel, or it becomes possible to participate in professional spaces alongside domestic responsibilities.

But it also creates new exclusions. Those in better resourced institutions or systems with better digital infrastructure can continue work more easily, but it’s much harder to participate when your connectivity is poor or comes at greater personal expense if you can’t use office facilities. As this visualisation shows, those who live in Malawi and Benin pay upwards of $27 per gigabit, compared to $4 in Germany or $1.39 in the UK (it’s lowest of all in India, and less than 10 cents). And even for those that can connect online, digital work in a pandemic brings its own pressures, as choices must be made about which meetings and webinars and learning opportunities to prioritise. My colleague Ravi Murugesan explains that if you ask a learner to watch a 10-min YouTube video (at 480p quality) you are also asking them to pay for it with 100mb of data. In Malawi that would be about $2.7 – in Ethiopia it’d be 24 cents and in Uganda 16 cents.

While public officials, academics or researchers – especially those in
major cities – may have reasonable access to data and wifi connections, students sent home from
campus or officials in local government may struggle to continue work or learning (something South
African and Ghanaian universities have sought to address for their students by persuading telecom
companies to zero-rate academic and educational sites). As Zimbabwean researcher Bothwell
Mussett Chitengu notes, the pandemic has exposed the gaps between those who have digital access
and those who don’t, and their ability to keep learning as a result.

The problems are not simply connections of course, but the digital skills and confidence to study and
learn remotely and at a distance without the support systems that may be available on campus. Only
39% of respondents to a Mawazo Institute survey had access to e-learning. Many learners are also
fee-paying, whether enrolled in private or public institutions, and will struggle to pay fees if parents or
sponsors are no longer working.

The quality of those digital tools matter, too. For online learning to be effective – whether that is for
students or for professionals – it is not simply a matter of uploading course materials or lecture notes
for students to download. Learning must be curated, with deliberate learning pathways designed by a
skilled learning designer, who understands the pedagogy of an online environment.

3. Who is able – or enabled – to produce knowledge,
or to continue work and study?

We know that there are big
differences in an individual’s ability to
produce and use knowledge – based
not on their own abilities, but on the
organisation in which they work, and
the opportunities that their location,
gender, language, identity and
background are likely to afford them.
The same inequities are exposed by
COVID-19.

Policymakers and officials in capital
cities or principal offices are likely to
be better equipped than their
colleagues at district level or in
secondary towns. Think tanks closer
to those they want to influence,
either physically or socially – in
terms of educational background or
other affiliation – may be better placed to get an audience for their ideas. Researchers in better
resourced institutions with good labs and digital libraries, and geographically or structurally closer to
funders, are in a stronger position to secure the funding available. That might be research in response
to the pandemic, or simply to continue work that, unrelated to COVID-19, has lost none of its prior
importance.

Publishing data has already indicated a drop in in submissions from women researchers while men’s
publishing has kept steady (for a Northern account see here); a survey by the Mawazo Institute in
Kenya indicates that women in their network have experienced greater disruption to their study and
research.

Anecdotal evidence suggests that “flagship” research institutions may be better able to respond to the
new and evolving knowledge needs of the pandemic, as a result of better existing facilities or stronger
funding bases, or through their stronger connections to Northern funders, Northern research
institutions and NGOs. In some cases, this strength has been undeniably positive, and shows the
importance of supporting leading research institutions across the world – as the Ghanaian genome-
sequencing work attests. But there are other institutions who are not only less able to respond the
knowledge needs of the pandemic, but are also less able to meet the cost of moving their work or
learning online, and in some cases may struggle to survive as income streams dry up. This is likely to
be a concern for the many non-profit private universities which have emerged in recent years to meet
the demand for higher education, and who have pioneered new models of learning.
Digital connections are not the only features that enable or prevent individuals from continuing to work or learn. For many people, the closures of workplaces, university campuses and libraries mean that access to work-space is likely to be a real challenge to daily work and study. And many people – and it is typically women – must juggle professional and family lives. That is often challenging under normal circumstances – from the obvious demands of shorter days to accommodate childcare or school pick-ups, to the inability to put in the extra hours which, in competitive systems, enable professional and career progression. As schools have closed, knowledge workers trying to continue from home have had to play dual roles of teachers and carers, whilst also trying to continue work. This seems to be the experience of women responding to a survey amongst early-career scientists early in the pandemic. The Organization for Women in Science in the Developing World surveyed its network specifically to understand the impact on women and found that nearly half had their working hours curtailed by family responsibilities, and over half were spending more time on household duties, were taking on more of the childcare, and were responsible for more of home-schooling – though flexibility of working hours had been a more positive result too.

And it is not simply time, connectivity, or space, but the impact of restricted movement and health and financial concerns on individual’s mental well-being, and their ability to simply carry on working or studying in difficult times.

4. How we think about evidence and its use

Conversations often focus more on the supply of ideas and knowledge, but the means to use it – and most critically the demand for evidence often receive too little attention. COVID-19 has brought this into sharp relief. The ability to respond to the unfolding pandemic, and to use the knowledge and evidence available (or to generate the knowledge needed to fill evidence gaps) exposes the strengths and weaknesses of existing evidence systems. And grappling with a public health crisis is a difficult time to be trying to strengthen those very systems.

The pandemic has focused attention on the role of evidence in governance processes, and more than ever before, science and evidence are in the news daily, as are discussions about the respective roles of scientists, civil servants and political leaders. It has also shown governments why they may need to invest in their evidence systems for the future.

Connections to those who can produce or synthesise evidence to answer a problem can prove challenging at the best of times, and it is especially so for a challenge that is shifting as rapidly as and is as poorly understood as a new virus. Weaknesses in evidence systems can mean that certain types of evidence and knowledge dominate the conversation. Experts who are already better connected to policy spaces, or to the media, are likely to be privileged in the debate and evidence-use processes, as are particular types of evidence (e.g. biomedicine and economics often trumping other domains). And often differing needs according to gender, age, ethnic background, socio-economic status or ability/disability are missing from the evidence. There is probably much to learn from the humanitarian system, and the mechanisms it has developed to
bring evidence to bear when dealing with more rapid-response crisis situations.

Inequities on the policy and decision-making side are often revealed when looking at a sub-national level, and the extent to which county or district officials have the evidence they need — or the powers to act. An account from colleagues in Ghana suggests that district-level policymakers have been ill-equipped to respond, lacking the powers to enforce the measures that the evidence suggested were needed. While these may be significantly about structures of governance, inequities are at play too, with local officials unable to access disaggregated data on which to base their own local decisions, or perhaps lacking the resources and capacities to generate their own.

In the last few months, many existing evidence synthesis services have sought to respond to the demand — such as HEART or the Social Science for Humanitarian Action Platform — and other organisations have created spaces to curate evidence, information and commentary related to the pandemic, such as the new EdTech Hub’s rapid reviews or the International Network for Government Science Advice (INGSA)’s COVID platform. While created and offered as “global” public resources, the fact that many of these have been created and curated in the North, or with donor funding, points back to the inequities of global knowledge systems.

But it is not only Northern systems responding. Notable is the Africa Evidence Network which has curated a collection of both evidence and of the ways in which evidence is being used from its base in Johannesburg — and ranging across health, education and economic aspects to the use of evidence by digitally-connected citizens. And while many have taken a knock, Southern think tanks have also responded to the challenge. Chalani Ranwala in Colombo writes about a virtual parliament leaders’ forum convened to enable the COVID-19 response to be debated, and filling the gap of a suspension of parliament — and Annapoorna Ravichander in Bangalore writes about the provision of data analytics to the state government. In Pakistan, the Sustainable Development Policy Institute has convened more than two dozen virtual policy roundtables since the pandemic took hold and curated a regular news briefing.

Unsettling the dominance of Northern expertise and of Northern systems

As some of the examples above have already shown, the pandemic has also revealed much which is positive, and which may challenge the status quo beyond the immediate crisis. Among these, perhaps, is that fact the advantages usually enjoyed by Northern researchers and experts — with relatively easy access to travel and thus to research sites — has been disrupted, opening up new spaces for Southern researchers and experts to work in the meantime. There have been myriad examples of Southern professionals organising remotely to debate issues and discuss solutions, and many using existing mechanisms or projects to provide support in online teaching and assessment, such as the Kenya-based Pedagogical Leadership in Africa initiative or the e/merge Africa initiative. Researchers have created new mechanisms and methods for gathering data through phone surveys and virtual dialogues (see, for example, Gitta Shrestha’s discussion about remote research on gender and social justice in water resource governance in Nepal and Sairana Ahsan’s reflections on adapting her public health research in Bangladesh to remote working).

In the process of adapting research processes, some researchers have exposed the extent to which Northern researchers and “capacity builders” are needed — or not as may well be the case. Some have used this as a moment to commit to continuing the positive disruptions.
But further disruption is needed too. Too often Southern knowledge producers and users are explicitly or implicitly constrained by the norms and metrics which measure and pronounce on “excellence” and quality that are developed in and for Northern knowledge systems. For Southern researchers to prosper, and for the knowledge that they produce to be of greatest value to their communities and societies – and to the world at large – we need new ways of measuring and valuing research as Erika Kraemer-Mbula and colleagues argue in their book *Transforming Research Excellence: New Ideas from the Global South*.

The norms and requirements of funding and of international collaborations, and the promotion systems in their own institutions, too often require that researchers pursue work that puts a paper in a high-ranking academic journal above knowledge that is relevant and useful to those who might stand to benefit most. This requirement often determines the questions that are researched in the first place.

As IDRC’s *Research Quality Plus* has shown, when judged against relevance as well as rigour, much Southern-produced research outperforms that done by Northern teams.

What might this mean for INASP and for equitable knowledge systems?

The economic impact of the pandemic and associated lockdowns are already becoming clear. A global recession is anticipated, and the budgets of funders, national and international, are already being reduced – government funders as national economies contract (and with the merger of the UK’s foreign affairs and development ministries likely to shift spending priorities), and philanthropic foundations as their investments take a hit. To cite just one example, *Kenya has already cut funding to public universities by $400 million* in the next financial year. Those reductions are likely to hit the less well-off organisations and individuals first and harder, and makes it all the more important that we think about equity in the response. For INASP this probably means a few things:

**The way we partner**

Firstly, it makes our partnerships – and our ambition to work as part of a global coalition – more important than ever. These issues are too complex, too connected, and too big for any single organisation to address alone. It is this observation that leads us to think in terms of a **global coalition**. And with that recognition we need to bring a good dose of humility, as a small organisation – albeit with a large network – based in the North.

In many cases we can probably make the best contribution by co-convening spaces for discussion, co-creating learning opportunities, or co-developing tools that can help those who are seeking to tackle these issues – such as our partnership with the Uganda National Council for Science and Technology to address gender inequities in the Ugandan knowledge system. We can also engage more directly in the North, and do more to influence the approaches taken by Northern funders and research institutions, who are increasingly engaged in “capacity building” work in Southern research systems.

**Harnessing the digital shift**

Secondly, it’s evident that we need to not only extend our online and digital work, but ensure that it is designed to reach and support individuals that are excluded, and to support organisations that are currently less well able to mount their own online services. As the pandemic has pushed colleagues to find new ways to continue their work, we’ve rapidly moved our support to East African faculty online, and ramped up the number of facilitated **online courses and self-paced online tutorials** available.

In the process we’re learning what more we can do from a distance (as well as what we can’t). We need to explore the possibilities that new technologies, including AI, have to offer us here – and to do so collaboratively with partners and community members – but as we do we need to ensure we keep learning and change as both our starting point and our goal, with technology harnessed to support not to drive the process.

**Championing Southern knowledge**

Thirdly, we need to continue to champion Southern knowledge and the institutions that produce it – through training and support to Southern authors, to working with partners to build and grown their own research publishing platforms, and by harnessing the potential of new technologies and communities to ensure that Southern knowledge is more visible, more easily accessible, and is better valued, and that more Southern voices are heard in global debates. Doing so also means
championing new metrics and measures, that shift the way quality is understood and open up space to create and value knowledge that is more relevant and better connected, as well as rigorously produced.

It also means championing higher-education institutions forging new approaches to teaching and learning – demonstrating that there are transformative pedagogies created in the South, and championing the Southern policy communities who are creating new ways of bringing evidence to bear on policy and decision-making processes, and from which we have much to learn.

**Thinking deeply about privilege and inclusion**

Fourthly, we need to build on our existing work that has sought to put gender at the heart of our programme design and decision-making (and to progressively move us from gender sensitive to gender responsive and ultimately transformative programming) to think more deeply about further dimensions of privilege and exclusion/inclusion that we need to consider at each stage of our work.

**Grappling with power and politics**

Fifthly, and perhaps most critically, we need to recognise that inequity is not an accident and tackling it requires that we challenge power and politics. The inequities we see are not simply the result of inadvertent errors, where the needs of one group have been regrettably overlooked. The distribution of opportunities and resources are fundamentally about power and are often determined by structural inequalities within knowledge systems, and within society at large. It follows therefore that addressing these inequities will also require those structures to be challenged at a number of levels, and by a number of actors. That means that as “capacity developers” we must be prepared to disturb those asymmetries in power – and to be aware of, and be ready to change, our own role.

These changes won’t be easy to make – not least given the limited room for manoeuvre that the funding environment allows us, and many others with whom we work across the world. But difficult as they will be, they are changes that we need to commit to working to make, if we are going to play our part in supporting more equitable ecosystems of knowledge.

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