Annual Report

LIRNEasia
Pro-poor. Pro-market.

2019-2020

Catalyzing policy change through research to improve people's lives in the emerging Asia Pacific by facilitating their use of hard and soft infrastructures through the use of knowledge, information and technology

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Message from the Chair

Change is the only constant.

LIRNEasia marked its 15th anniversary in September 2019. LIRNEasia at 15 was very different from the little organization that started off in a single room, with the conference table under a tree and the financial files in Prashanthi's house. Ways of working had changed for the better. But most significant was that our research and capacity building had also changed with the times.

In 2004, a funding agency which appeared to have resources (but actually did not) and a potential university partner wanted us to shift our priorities from infrastructure and access to the emerging flavor of the day: Internet governance. We refused. But for the last 10 years we have been gradually moving up the value chain and now cover many aspects of Internet governance. We changed because we saw the conditions on the ground had changed.

Change can be gradual, simply new leadership, the churn of researchers and the accumulations of small accommodations made while negotiating funds. Or it can be a step change. Planned. The 15th anniversary and the annual strategic review gave impetus to change. The gradual processes are being complemented by transformative actions.

We can no longer stop our work once the presentation has been made to the decision makers. We have concluded that we must now be more open to situational coordination with boundary partners who can use (or abuse) our findings. That we should add to the audiences we address. Whereas we used to focus on key decision makers and had a secondary focus on media channels that attracted their

attention, we now must engage with larger audiences in multiple languages and channels.

Why? Because societies are increasingly polarized, and the weight given to evidence is declining. Challenging the messenger used to be the last resort when the message was difficult to take down. Now, the first thing is to challenge the motivation of the speaker, her pedigree, her funding and who she sat next to at a public meeting. One must survive the attack on one's ethos, to even get the opportunity present the argument with the right balance between logos and pathos.

Research organizations draw their legitimacy from logos. That cannot change unless they anchor their legitimacy on something else. But conveying the research findings effectively to boundary partners may allow the message to get through.

The 2016 World Development Report, *Digital Dividends*, confirmed a key element that was in our approach from the very start: ICT interventions by themselves rarely yield the desired results; they have to be accompanied by the right kinds of "analog complements," at the right time. We saw this very clearly in our early work on ICTs in agriculture. Improving price information was not enough. It had to go with the institution of forward contracts and futures exchanges.

Effective solutions require holistic research and multi-pronged communication. We have always been multi-disciplinary, but we now have to be even more. We must work with more partners, letting go of control.

The Big Data for Development group that has been active since 2012 exemplifies the change. Now renamed the Data Algorithms and Policy (DAP) workstream, the intention is to increasingly integrate data-science elements into all projects, not just a subset. The efficacy of the boundary partners with whom we are working to develop

proposals related to COVID-19 will be test of a new way of doing research and new ways of getting research to policy.

Also showing the way is phase two of the work on assistive technologies for persons with disabilities (PWDs) in India. Here, research conducted on the barriers to independent living by PWDs form the basis of a pre-accelerator that will bring together developers and potential funders to hopefully establish an accelerator lab to be hosted by Vihara Innovation Network, a design and innovation focused partner. While LIRNEasia will continue to be engaged, design and operation of an accelerator lab not an area where it has any significant competencies relative to its partner. But it is how we'll actually get solutions to the PWDs.

Changes being implemented gradually at LIRNEasia include the induction of two new members to the Board of Directors. Ms Thusitha Perera is Executive Director, Camso Global Business Services Center Sri Lanka, after an international career. The other new director Ms Jeeva Perumalpillai-Essex retired in 2015 as Regional Manager at the International Finance Corporation, a unit of the World Bank Group that she served in various capacities since 1991. Mr Luxman Siriwardene, one of the founder directors who made an invaluable contribution to the establishment of LIRNEasia, retired.

Advisory boards have been formed for the disability and assistive technology projects being implemented in India and Sri Lanka, and for the Data Algorithms and Policy workstream. More intensive engagement with advisory boards is planned at the level of projects.

These gradual changes, hopefully supplemented by qualitative shifts, will transform LIRNEasia, again. And when that is done, we'll do it all over again.

Rohan Samarajiva

Message from the CEO

This financial year ends and this message is being written as most of the world is going into COVID-19 shut down. Luckily, our staff, research and policy fellows who live in different countries have always worked and interacted remotely – using a range of communication tools to interact as if we were all present in the office at the same time. The early signs are that we are able to continue much of our routine research by working remotely, from our homes and as we did before. But what of our field research?

LIRNEasia has always insisted that seeing how people live their lives and interact (or can't interact) with technology in a particular context is key to finding polices that work for them. Otherwise we wouldn't have worried about nationally representative surveys of the poor all the way back in 2005 that proved over 90% of the poor in Asia had made and received phone calls, even though multilateral policy wonks were saying the poor don't make calls. Or we wouldn't have seen that financially conscious users in the Philippines were willing to change their SIM Cards up to six times a day in order to get the benefits of cheaper on-net calling rates. This is the only way we have been able to recommend policy solutions that are useful for the context people in emerging Asia live, instead of taking "cut paste" recommendations from more advanced economies.

In the coming few months, we have to grapple with how to study the people we care about the most: persons with disabilities, women, gender-nonbinary persons, ethnic and religious minorities, those at the base of the socio-economic pyramid. Because they are also often digitally disconnected, and because digital research methods pose their own challenges, we are grappling with how to conduct field research. Indications are that international travel could also grinding a halt, and it will challenge

how we will interact with policy makers, regulators and other stakeholders in the region. This is the time to rely on and truly test the limits of digital connectivity. And to build on existing and long-term partnerships that don't rely on face to face interactions.

We had already started thinking of partnerships differently. With our earliest recommendations, our work of catalyzing policy change ended after we disseminate our results to those who can act on it. But most recommendations we make need to be developed further before they can be implemented. So over time, we moved into not just finding the problems through research and presenting policy solutions, but also prototyping possible solutions. This has brought new partners, such as those who use design thinking, into our orbit. It has also increased the measurable impact we can have – as we saw with the creation of concrete assistive technology solutions for disabled persons in Nepal that were implemented by teams we worked with, and what is happening with the accelerator lab we are running for innovators in India. This year we decided to further integrate partnerships into our work – not at the end, but bringing in implementation partners early, at project design and conceptualization stage, and working with them more closely throughout the research life cycle.

This year LIRNEasia turned 15. We celebrated with a focus on Sri Lanka, with a public panel that questioned and discussed the policy priorities and policy instruments the country should be developing. It was followed by a small gathering of our staff, long term partners and former colleagues. We always say there is no such thing as a former colleague – one leaves LIRNEasia for other jobs or to pursue education, but one usually comes back or ends up collaborating with us in some way). This was certainly true in the faces at our 15th anniversary, and certainly true of the additions and departures from the LIRNEasia team.

Sriganesh Lokanathan who was instrumental in setting up and leading the Data Analytics Policy thematic research at LIRNEasia, left to start work at the UN Pulse Lab, Jakarta as a Data Scientist. This was his second departure from LIRNEasia (previously to pursue work in the USA, followed by policy school in Singapore). Tahani Iqbal was also on her second iteration at LIRNEasia and left to start her job at Facebook. Shazna Zuhyle left to take care of a family business venture, but is back part time, helping manage the Data Alorithms Policy (DAP) team. Thavisha managed many projects at LIRNEasia and left to take care of family, while Samali joined her (new) husband in Australia.

Firaz and Yashothra went to pursue other employment, while Lasantha left to pursue his PhD. The revolving door continued when Ramathi, who had worked with us as in intern while she was still in school returned to Sri Lanka upon completing her Masters and joined the DAP team. Gayashi is the latest team member to join us just before we had to shut down the office due to COVID-19. Researchers weren't the only people to join the LIRNEasia family – Tharaka and his wife welcomed their son Tharul, and we are looking forward to welcoming him to the office.

Helani Galpaya

About LIRNEasia

What we do

We want to see life improve for people in the emerging Asia Pacific.

We believe that one pathway is through better access to and use of knowledge, information and technology.

Our mandate is to help facilitate the use of hard and soft infrastructures in the region through research that catalyzes policy change.

Over the years, we gradually transitioned from thinking about telephones and mobile phones to the broader sphere of digital life. We outlined in our last annual report how looking more closely at smaller and smaller groups of people turned our attention to softer issues such as privacy, rights and marginalization.

We explored new knowledge through 3 Journal Clubs and 11 Colloquia this year

We always tackled these issues as closely on their heels as possible, almost always studying them before they became part of the broader conversation.

With the megatrends work that is the core of this annual report, we set our gaze at yet another angle, looking much further ahead than we ventured to before – 15

years, to 2035. It is important to mention that we identified during the course of this research, that climate change and rapid urbanization would increase the threat, severity, and frequency of outbreaks of unknown tropical diseases, possibly leading to pandemics. Needless to say, we were not happy to have been right, when COVID-19 hit.

At the end of this financial year, as we put this Annual Report together, all our work is shifting focus, to revolve around COVID-19 responses. Be it connectivity, big data, digital literacy, online privacy and rights, disability, or any other aspect of digital life – how do we respond, how do we adapt, and how do we prepare for something similar if the need ever arises?

We will continue to maintain a close view of the ground, today, while looking ahead, to prepare. We are still always working towards catalyzing change in digital policy to improve the lives and livelihoods of those in the emerging Asia Pacific.
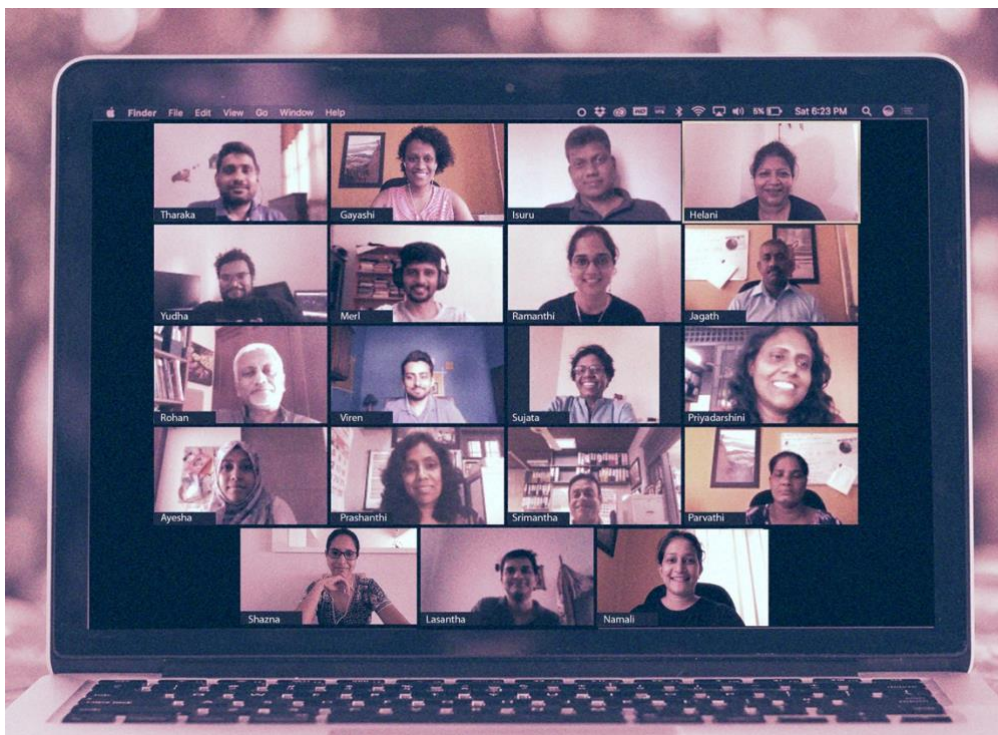
We have always given our teams the option of working remotely if needed but did always try and come together for our annual photograph. This year, lockdown made that also impossible. A video conference with all the teams was the closest we could get.

People and Culture

LIRNEasia's principal strength is its integrity. And integrity cannot be maintained without people who value it. The LIRNEasia family comes from different backgrounds and different arenas of practice and are connected by a few common tendencies.

Annual Trip to Ella

Left: Helani with her son Maithree, Shazna's daughter Atiya and Sriganesh

Below: Sriganesh

with Yudhanjaya

We question everything. We read and re-read. We work to strike the best balance between what would be ideal, and what are practical solutions. We want to keep the best of all the different systems that help make this world better. We value creativity. We encourage debate. We will never stop learning. We change our minds and opinions when presented with new and credible evidence.

LIRNEasia works in teams – flexibly, effectively – helping each person reach their full capacity.

From the beginning, we have aimed to build a virtual organization that could effectively work from any location. Our physical presence is concentrated in Colombo, as is our administrative core, but our staff and fellows work from countries in the region and globally.
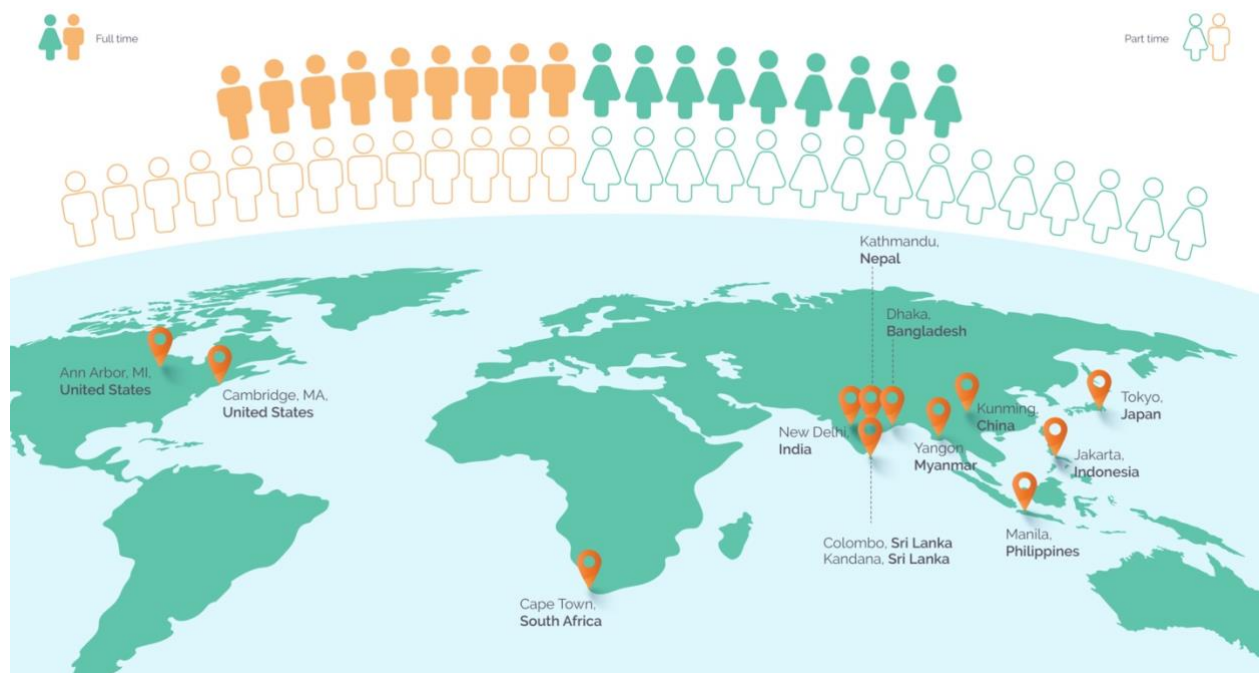
Our People

Helani Galpaya | Chief Executive Officer | Colombo, Sri Lanka

Abu Saeed Khan | Senior Policy Fellow | Dhaka, Bangladesh

Ashwini Natesan | Research Fellow | Colombo, Sri Lanka

Ayesha Zainudeen | Senior Research Manager | Colombo, Sri Lanka

Ayumi Arai | Research Fellow | Tokyo, Japan

Babu Ram Aryal | Policy Fellow | Kathmandu, Nepal

Christoph Stork | Senior Research Fellow | Cape Town, South Africa

Danaja Maldeniya | Research Fellow | Ann Arbor, MI, United States

Dilshan Fernando | Research Fellow | Kandana, Sri Lanka

Erwin Alampay | Senior Research Fellow | Manila, Philippines

Gabriel Kreindler | Research Fellow | Cambridge, MA, United States

Gayani Hurulle | Research Fellow | Singapore

Gayashi Jayasinghe | Researcher | Colombo, Sri Lanka

Grace Mirandilla-Santos | Research Fellow | Manila, Philippines

Htaike Htaike Aung | Policy Fellow | Yangon, Myanmar

Isuru Samaratunga | Senior Researcher | Colombo, Sri Lanka

Jagath Perera | Office Assistant | Colombo, Sri Lanka

Lasantha Fernando | Researcher Fellow | Colombo, Sri Lanka

M Parvati | Office Assistant | Colombo, Sri Lanka

Merl Chandana | Researcher | Colombo, Sri Lanka

Mohamed Firas | Researcher | Colombo, Sri Lanka

Namali Premawardhana | Communications Coordinator | Colombo, Sri Lanka

Nirmita Narasimhan | Policy Fellow | New Delhi, India

Nuwan Waidyanatha | Senior Research Fellow | Kunming, China

Payal Malik | Senior Research Fellow | New Delhi, India

Phyu Phyu Thi | Research Fellow | Yangon, Myanmar

Pradeepa Jayaratne | Research Fellow | Colombo, Sri Lanka

Prashanthi Weragoda | Senior Manager, Finance | Colombo, Sri Lanka

Priyadharshini Liyanage | Accountant | Colombo, Sri Lanka

Rajat Kathuria | Senior Research Fellow | New Delhi, India

Ramathi Bandaranayake | Researcher | Colombo, Sri Lanka

Samali Perera | Research Manager | Colombo, Sri Lanka

Shazna Zhuhyle | Research Fellow | Colombo, Sri Lanka

Sriganesh Lokanathan | Policy Fellow | Jakarta, Indonesia

Srimantha Katukurunda | Office Manager | Colombo, Sri Lanka

Sujata Gamage | Senior Research Fellow | Colombo, Sri Lanka

Suthaharan Perampalam | Research Fellow | Colombo, Sri Lanka

Tahani Iqbal | Senior Research Manager | Colombo, Sri Lanka

Tharaka Amarasinghe | Statistician | Colombo, Sri Lanka

Thavisha Perera | Research Manager | Colombo, Sri Lanka

Vigneswara Ilavarasan | Senior Research Fellow | New Delhi, India

Viren Harindra Dias | Researcher | Colombo, Sri Lanka

Yashothara Shanmugarasa | Researcher | Colombo, Sri Lanka

Yatanar Htun | Policy Fellow | Yangon, Myanmar

Yudhanjaya Wijeratne | Researcher | Colombo, Sri Lanka

Yuhei Miyauchi | Research Fellow | Cambridge, MA, United States

Board of Directors

LIRNEasia was incorporated under the Sri Lankan Companies Act as a non-profit organization in 2004. The company is governed by a Board of Directors that represents both the private and non-profit sectors.

- Rohan Samarajiva |Chair, Board of Directors, LIRNEasia
- Anoja Obeyesekere |Consultant, Telecom/Technology Business
- Jeeva Perumalpillai-Essex |Development Economist
- Lakshaman Bandaranayake |Chairman, Sarvodaya SEEDS
- Luxman Siriwardena (resigned July 2019) | Executive Director, The Pathfinder Foundation
- Mervyn de Silva | Consultant, Renewable Energy Development
- Vinya Ariyaratne | General Secretary, Lanka Jatika Sarvodaya Shramadana Movement
- Vishaka Nanayakkara | Senior Lecturer, University of Moratuwa
- Shaheen Cader – Former CEO The Nielsen Company (Sri Lanka)

Scientific Advisory Council

Our Scientific Advisory Council consists of international experts from a variety of domains. They help hone our research agenda and bring in new ideas. They provide important perspective to our ongoing work, strengthen our networks, and facilitate collaborations.

- William H. Melody (Chair) | Managing Director, LIRNE.NET | Holte, Denmark
- Alison Gillwald | Executive Director, Research ICT Africa | Cape Town, South Africa
- Ashok Jhunjhunwala | Professor, Department of Electrical Engineering, Indian Institute of Technology (IIT) Madras | Chennai, India
- Hernan Galperin | Research Fellow, Annenberg School for Communications, University of Southern California | Los Angeles, CA, USA

- Johannes M. Bauer | Professor, Department of Telecommunication, Information Studies and Media, Michigan State University | East Lansing, MI, USA
- K. F. Lai | Co-founder & Chief Executive Officer, BuzzCity | Singapore
- Partha Mukhopadhyay | Senior Research Fellow, Centre for Policy Research |New Delhi, India
- Randy Spence | Director, Economic and Social Development Affiliates (ESDA) | Toronto, Canada
- Robin Mansell | Professor, Department of Media and Communications, London School of Economics and Political Science | London, UK
- Sam Paltridge | (formerly) Directorate – Science, Technology and Industry, Organization for Economic Co-operation and Development (OECD) | Paris, France
- Shalini Kala | Independent Consultant | New Delhi, India
- Sherille Ismail | Senior Counsel, Federal Communications Commission (FCC) | Washington DC, USA
- Tim Kelly | Lead ICT Policy Specialist (Transport and ICT), World Bank Group | Washington DC, USA
- Visoot Phongsathorn | Independent Regulatory Expert | Bangkok, Thailand

LA@15

LIRNEasia opening in 2004

Rohan likes to remind us that he was surprised LIRNEasia lasted five years. In September 2019, we celebrated 15. Fifteen. What was five people jostling (literally) for space in a tiny room at the Sri Lanka Institute of Development Administration, is now a 50-person team of researchers and subject experts in the digital arena, working on digital policy or infrastructure policy in the emerging Asia Pacific. We've not just impacted telecom policy in developing Asia, but become an integral part of global conversations on all things data and digital – infrastructure, policy, rights, inclusion, privacy.

We decided to celebrate. Sri Lanka, where we are based, was in the middle of proposing a number of laws and policies related to digital activity at the time, so we decided to locate our celebration here. The main event was a panel discussion on "Digital Policies for Sri Lanka: Doing better than cut and paste".

Helani moderated the conversation between independent policy experts, representatives from government, civil society and the private sector, extracting views on what is needed to aid digital development in Sri Lanka, what has been done right, and what should be done and what should be avoided based on the learnings and experiences of other jurisdictions that have addressed these digital issues already. Panelists also debated the merits and demerits of adopting the

National Digital Policy, the Strategic Roadmap on Internet of Things (IoT), and legislation related to cyber security and data protection in their current form.
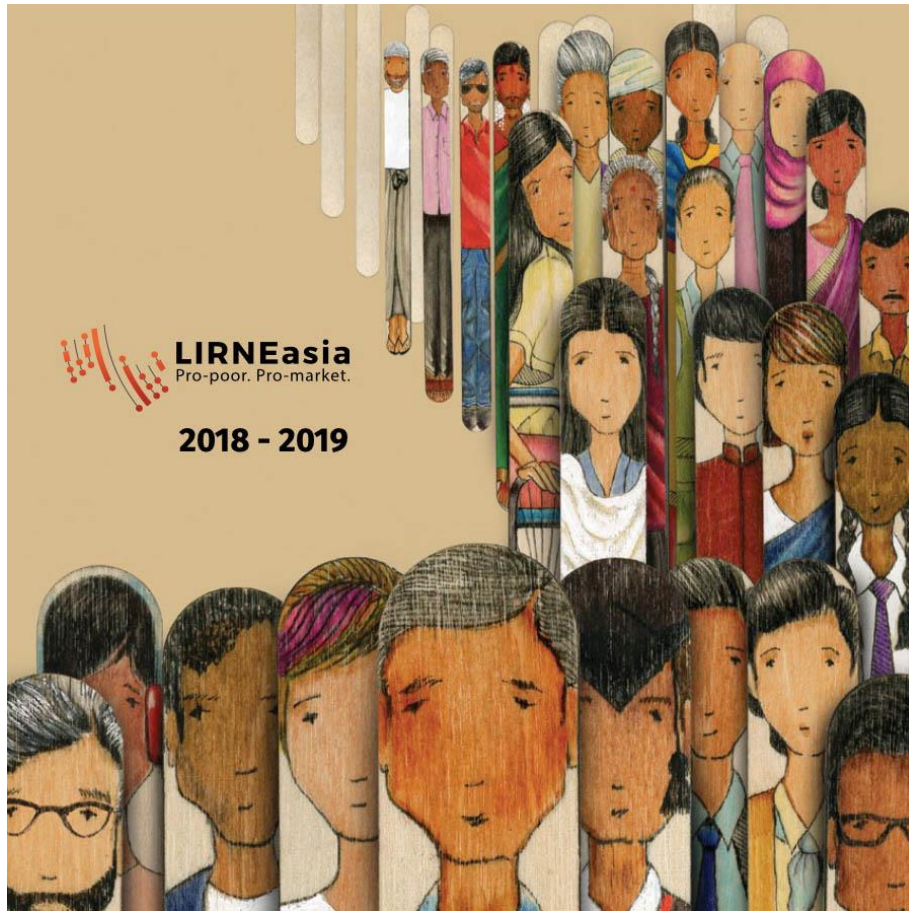

Above: The expert panel at our 15th Anniversary celebration event ""Digital Policies for Sri Lanka: Doing better than cut and paste".

Below: Full house of participants from government, industry, civil society and media.

The event coincided with the launch of our Annual Report for 2018-2019, and also a new logo for the organization.

The "Inclusion" cover. We used AfterAccess data to generate "identities" for different groups of users and non-users of the internet in South Asia. The people were then drawn on lollypop sticks and photographed individually.

At 15 years, we are almost reaching adulthood. We felt it was time to refresh our logo. After much debate, we came up with something new, but also rooted in things old. The new logo spells out L-I-R-N-E-a-s-i-a in the dots and dashes of Morse code - one of the oldest yet still most widely used forms of code. After all, our work is all about codifying information and knowledge. The stylised dots and dashes are arranged in the shape of a map of the South and South East Asian countries we work in. Red (in our previous logo) is now more prominent, as an auspicious color across the region we work in.
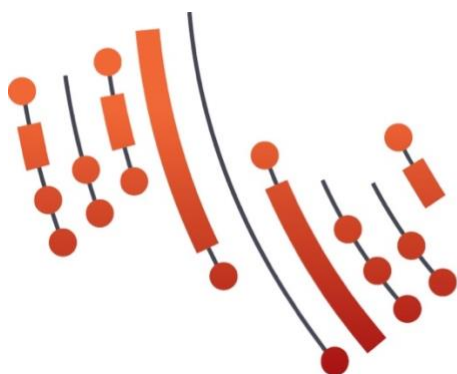
Afterwards, we partied. As many of LIRNEasia's extended family as could attend spent an evening wining and dining, walking down memory lane and reminiscing the good old days.

A key reason we've managed to outlive our founder's expectation is our ability to keep evolving. Through we have grown and formalized some of our processes, we remain a relatively small and versatile organization. We like this.

The plan is to forge ahead into new territory, tackling new questions using new methods, with new partners, constantly. Not abandoning our core networks and competencies but building on them.

We look forward, to the next fifteen years.

Megatrends[*]

The Ocean of Change

There is a tide in the affairs of men.
Which, taken at the flood, leads on to fortune;
Omitted, all the voyage of their life
Is bound in shallows and in miseries.
On such a full sea are we now afloat.

– Julius Ceasar, ACT III Scene IV

In 2019, LIRNEasia was commissioned by the UNDP Regional Innovation Center to perform a grounded work of speculation as to what the next decade might look like, especially for South and South East Asia. The resulting report - the Ocean of Change - examines policy documents and research to project a complex, intertwined tale of both the unavoidable and the weak signals - from megaslums, economic shifts, and AI to pandemics, resource wars and green cities.

Throughout history, there have been sequences of events that are absolutely inevitable, beyond the control of any emperor or tyrant. If we, like Shakespeare, insist on seeing them as tides, one could say that the task of historians is to study little wavelets from the past and try to piece together the biggest tides that shaped

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the day; and what we manage to cobble together we call history, as we know and study it.

These tides are not things relegated to retroactive wisdom and stage tragedy. The Office of Strategic Services (OSS) – the forerunner of today's CIA – and John Naisbitt – formerly of IBM and Eastman-Kodak, later heavily involved with the US administration in Washington – famously took to the analysis of content in order to influence both war and public policy. Naisbitt, in particular, brought together the word 'megas' (Greek: great) with Old English trendan, turning it into a word that captures these long-term shifts in our geopolitical, macroeconomic and environmental reality – a suitable word for describing future-facing tides of Shakespearean import. Today, the United States National Intelligence Council expends enormous effort on imputing the shape of these megatrends ahead; likewise, Europe has its own bodies, and Australia has CSIRO.

The problem is that most approach this question from the perspective of some first-world country or the other, and usually miss out on perspectives from the Asia-Pacific region that we play in. Which is, in our opinion, a mistake: not only does the APAC region host some 4 billion people, but from the story of China's metamorphosis to become an economic powerhouse, to the evolution of Singapore as a lab, the APAC abounds with experiments that have led to significant social change. The development challenges that we face, ranging from inequality to climate change and global warming – are complex and devastating. The response from states ranges from laconic to full-on tactical combat with the beast at hand. There is a need for a much more nuanced conversation: for futurism that merges existing projections with deeper insights on the state (and nonstate actors) driving strategic innovation on our side of the pond; for scanning that sheds some light on under-the-radar players doing things that might lead to very different versions of our future.

What follows, then, is the result of our first attempt at mapping the tides of this full sea. As a think tank engaged in public policy, we have a particular narrative framing. Some element of rationalization has been performed; certain types of information privileged over others; therefore, we borrow from Alford Korzybski and advise caution: A map is not the territory it represents, but, if correct, it has a similar structure to the territory, which accounts for its usefulness.

This is, therefore, a map of the future of the APAC region. We hope that it may be useful.
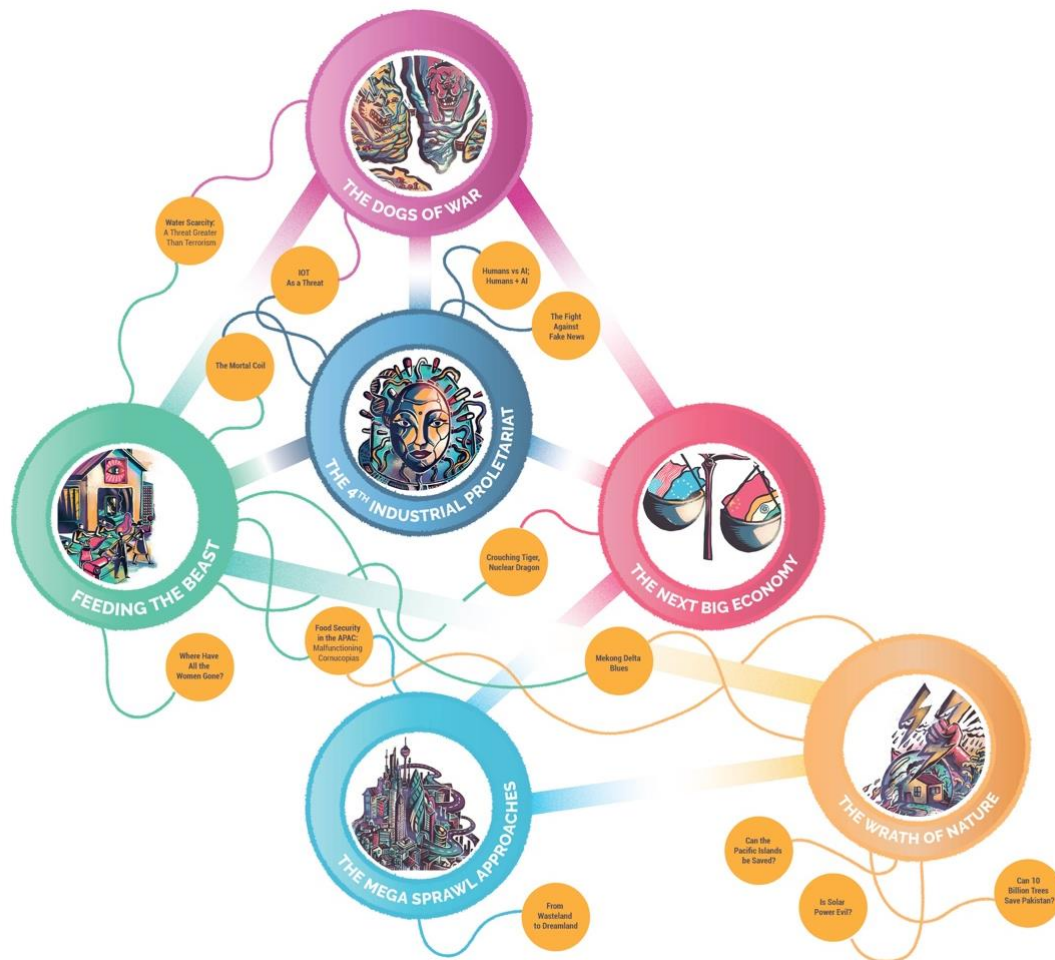
Of course, this kind of top-heavy analysis – especially with established gaps in information – comes with caveats. Of trade movements between the BIMSTEC countries, for example, we have little to say. Internal migration and rapid urbanization affect every country here, but we must focus on India and China, as the elephants in the room. Of indigenous movements, there is almost no mention, save for when something becomes large enough to be reflected in government policy.

And while hindsight is always 20/20, no act of foresight can be ever said to be completely accurate. As Thomasina, the child prodigy in Arcadia, notes: if you could stop every atom in its position and direction and if your mind could comprehend all the actions thus suspended, then if you were really, really good at algebra you could write the formula for all the future. . . although nobody can be so clever as to do it.

We have neither the skill to stop the universe nor the wisdom to compute such transcendent math.

But we hope that we may see the tide before it engulfs us. We believe that the

continued exercise of such will lead not only to better futurism, but better lessons for policy change and governance models. After all, as the Mahabharata says:

Change is the law of the world.

In a moment you become the owner of millions,

In the other you become penniless.

Feeding the Beast

The APAC region is still in the grip of an uneven population change. Historically high infant mortality rates have been reducing, while overall lifespans have been increasing, adding more people to the system. Meeting the basic needs of this burgeoning population will be a challenge – the region needs more energy, more food, and water is increasingly becoming a national security issue. Unless this situation is addressed – and there seem to be very few solutions for many of these problems – large portions of Afghanistan, Pakistan, India, Nepal, and China will be home to legions starved of the most basic needs for human life. READ MORE

The Next Big Economy

The economic center of gravity of the world has until now been between America and Western Europe, those two economic powerhouses of the world. However, that pendulum is swinging back. The academic literature suggests this will be somewhere between India and China by 2050. This brings about a reshuffling of the world economic order as we know it, with China and India ahead of the US, and Indonesia poised as a respectable player in terms of economic size. Uneven population growth forces different countries to react in different ways – especially in the face of rising GNI coefficients and a burgeoning of the middle class, threatened by advances in automation and machine learning that can adversely impact both white- and blue-collar jobs across the board. READ MORE

The Mega-Sprawl Approaches

One of the problems of increasing populations and increasing economic activity is that more and more people tend to flock to economic centers. This sparks urbanization, forcing these areas to grow both vertically and horizontally. This urbanization will preoccupy the minds of the APAC region for some time, since two billion urbanites already live in the region – half the entire world's population of urban dwellers. This number is expected to increase by another 700 million by 2030. Governments across the region are creating policies to attempt to maximize the benefits of urbanization whilst minimizing the costs – some are less effective soft responses; others are harder. READ MORE

The 4th Industrial Proletariat

The Fourth Industrial Revolution (4IR) does not appear in statistical projections, but significant interest from the World Economic Forum has led to research mapping out both its promises and pitfalls. On the one hand, as global economic power shifts towards countries in the APAC region, the technologies underpinning 4IR could allow countries to capitalize on this change faster and close skill gaps. On the other hand, greater automation could stymie the export-oriented model prevalent in large parts of APAC, hitting both white- and blue-collar jobs. Then comes the question: if data becomes the principal capital du jour, who owns the data, how to protect and govern its use and prevent winner-takes-all economies – while balancing this against the need to support innovation? READ MORE

The Dogs of War

In all this talk about APAC, it would be a mistake to overlook the turbulence in the region: between India and China, between India and Pakistan, between regional blocs trying to get along together, and the technologies changing the visible face of this conflict. As economic power swings towards the APAC region, various nations become uniquely positioned to flex their muscles in ways that have powerful consequences – whether in conflict over resources or simply over vastly conflicting ideals of what the world should look like. READ MORE

The Wrath of Nature

The scientific consensus is clear: climate change is real, and humans are the biggest driver of recent climate change. The global symptoms are well-known – sea level rise, increases in surface temperature, glacial and ice caps melting, and the increasing frequency and severity of extreme weather events. But such statistics and language hide the full weight of the hammer-blow – the Asia Pacific is trapped between meeting the needs of its population and growing cities, under pressure to capture the economic windows of opportunity, facing environmental stress – all in the face of drought, flooding, and the collapse of agricultural regions. Thus, impeding climate change becomes the one megatrend to impact them all. READ MORE

Research in Review

AfterAccess

Helani at RightsCon in Tunis

The full body of AfterAccess data is vast. 38,005 interviews conducted in 23 countries of the Global South to create what is currently the most comprehensive dataset on access to and use of mobile phones and the internet in the region. We just scratched the surface of the insights the data has to offer when we disseminated the top-level findings in each country. Now, we – and other like-minded researchers–

have begun analyzing the data in more detail, and statistically modeling it to understand better what the data is telling us.

Out of these efforts came a paper on "Information sharing behavior on social media in the Asian Global South", written by Ayesha and Tharaka, and presented at ITS in Bangkok, October 2019. The data was also presented at RightsCon in Tunis, June 2019, by Helani at sessions on "Decolonising Cyberpolicy: Developing a Cyberpolicy Framework Relevant to the Global South" and "Business for Better Cybersecurity: How the private sector can promote economic growth and digital rights". Ayesha also spoke at RightsCon 2019, sharing AfterAccess findings at a workshop on "Designing a More Inclusive Digital Economy"
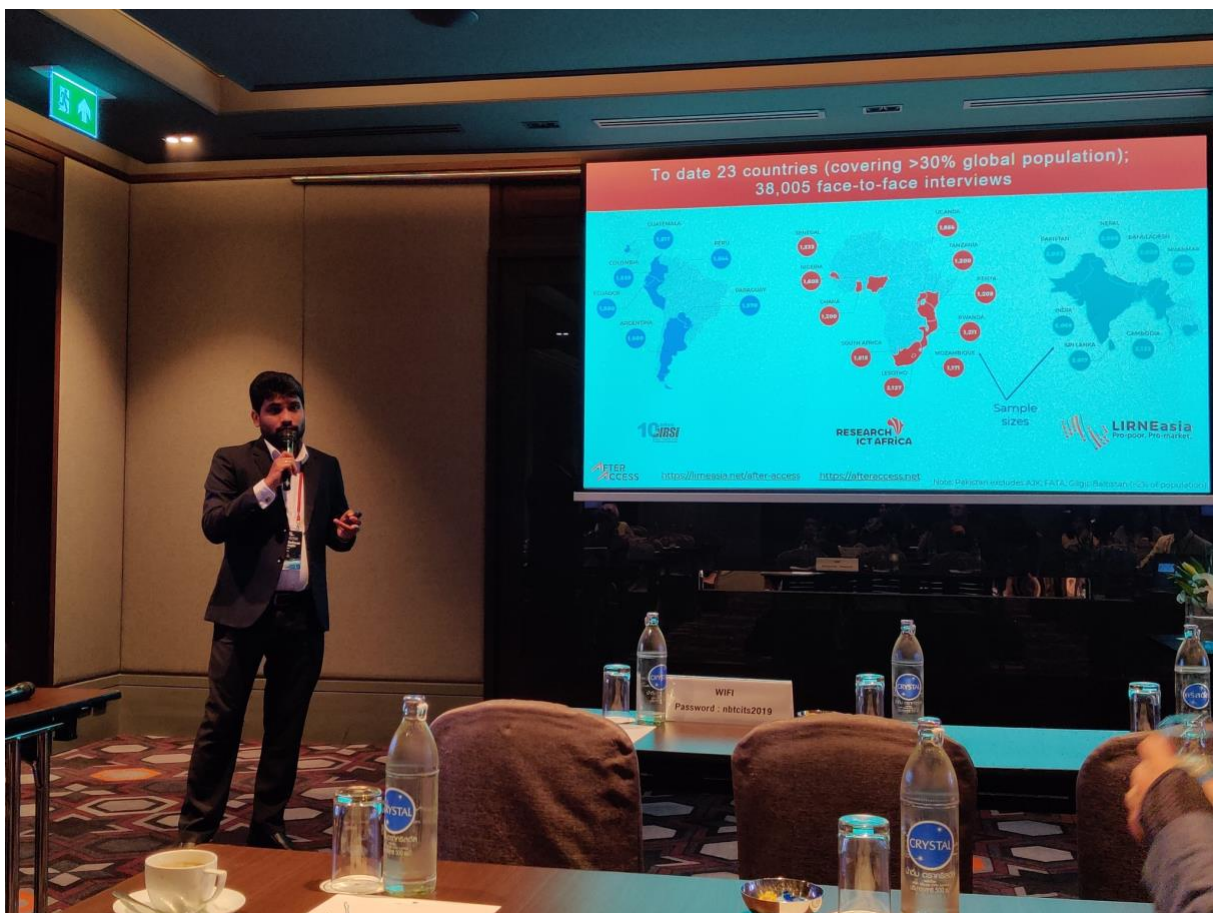
Tharaka at ITS in Bangkok

In November 2019, Tahani shared data on the gender gap at a panel on "Why IT Matters? Gender Digital Divides in Asia-Pacific" organized by the United Nations University Institute in Macau. The panel was a side-event to the Asia-Pacific Ministerial Conference on the Beijing+25 Review, held in Bangkok. Tahani also

shared the gender gap data with the 2nd Physical Research Group Working Meeting of EQUALS@KAIST in South Korea, in December 2019.

An updated report, AfterAccess Asia (version 3.0), was launched alongside the dissemination of Sri Lanka-specific findings in Colombo. Conversation at the dissemination event centered on the social media blocks carried out by the Government of Sri Lanka earlier in the year (March 2019) following the Easter Sunday Attacks.

As with dissemination of the data in other countries in the region, the media really caught on to the data, questioned and wrote in-depth on issues we raised, repeatedly. Most encouragingly, the then Minister of ICT and Digital Infrastructure, Ajith P. Perera – who was also the Chief Guest at our dissemination event – dug into the data and published a number of policy-relevant opinion pieces based on our findings.

Expert panel at Sri Lanka release of AfterAccess data and launch of AfterAccess Asia 3.0 report

AfterAccess

ICT access and use in Asia
and the Global South

A report based on nationally representative surveys of households and
individuals conducted by DIRSI, LIRNE*asia* and Research ICT Africa

VERSION 3.0 — APRIL 2019

Above: The cover of the AfterAccess Asia 3.0 updated report published in May 2019. Below: An information leaflet summarizing the AfterAccess Sri Lanka data on Small and Medium Enterprises and the opportunity presented by use of digital solutions to improve business prospects was disseminated among chambers of commerce in Sri Lanka.
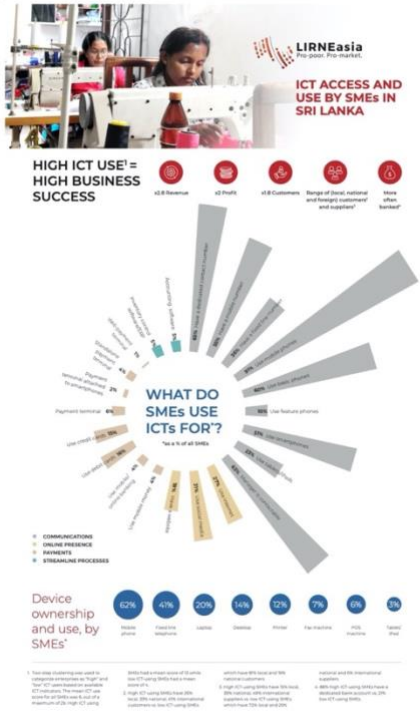
AfterAccess in Sri Lanka included two special components – the first on persons with disabilities, and the second on small and medium enterprises. The data on access to and use of ICTs by small and medium enterprises in Sri Lanka gave us two useful insights. First, SMEs that had relatively high use of ICTs for business had higher revenue, higher profit, more customers, a more diverse range of customers and suppliers, and were more often banked. Second, those SME owners who weren't online said there was "no need" for them to use ICTs for business. We saw this as a lack of awareness among SMEs about the benefits of using ICTs.

The data was disseminated among the Sri Lanka Chamber of Small and Medium Industries, the Federation of Chambers of Commerce and Industry in Sri Lanka, as well as other national and regional chambers of commerce. Since the

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audience was diverse and geographically widespread, we chose to disseminate in the form of policy recommendation documents supplemented by an information leaflet.

Less than half of all households with children in Sri Lanka can avail of e-learning opportunities

48% of households with children (age less than 18) have a smartphone* or computer

34% of households with children (age less than 18) have an internet connection

Household availability of internet connection, smartphones & computers (% households with children)

Internet via mobile phones/dongles
Internet via fibre , ADSL or wireless internet
Availability of smartphones*
Availability of laptops
Availability of desktops
Availability of tabs

3%
4%
7%
15%
34%
35%
48%
48%

* Based on statistical modeling of survey data

Q1: How many working computers (desktops, laptops or tabs) does your household have?
Q2: What type of mobile phone do you own?
Q3: Does this household have a working Internet connection, if so what type? (one that is exclusive for the household and is accessible to all household members)

Base:	Sri Lanka
Households with children aged 18 or below	1,301

Survey data collected between 2017-2019

#AFTERACCESS

LIRNEasia
Pro-poor. Pro-market.

www.lirneasia.net/AfterAccess-COVID19

Above: We used the AfterAccess data in social media campaigns that set the usefulness of digitally-powered COVID-19 relief and recovery in context of access to and use of the internet and digital devices.

 COVID-19 hit soon after dissemination and changed the issue completely. Because of curfew imposed across the country starting on the 14th of March, businesses without the capacity to take orders using phones or the internet, ground to a halt. Awareness is no longer a problem. What we must now tackle on the SME front are issues of digital literacy (how does one set up an online channel for taking orders?), payment gateways (how are payments to be collected?) and analog complements such as delivery.

Since the pandemic and the resulting increase in dependency on digital solutions for everyday activities (more work from home, more e-learning, more e-commerce, need for contact tracing etc.), the AfterAccess data has become more relevant now than ever. We look forward to working deeper into the data to understand how Asia can respond and recover efficiently and effectively.

Data | Algorithms | Policy
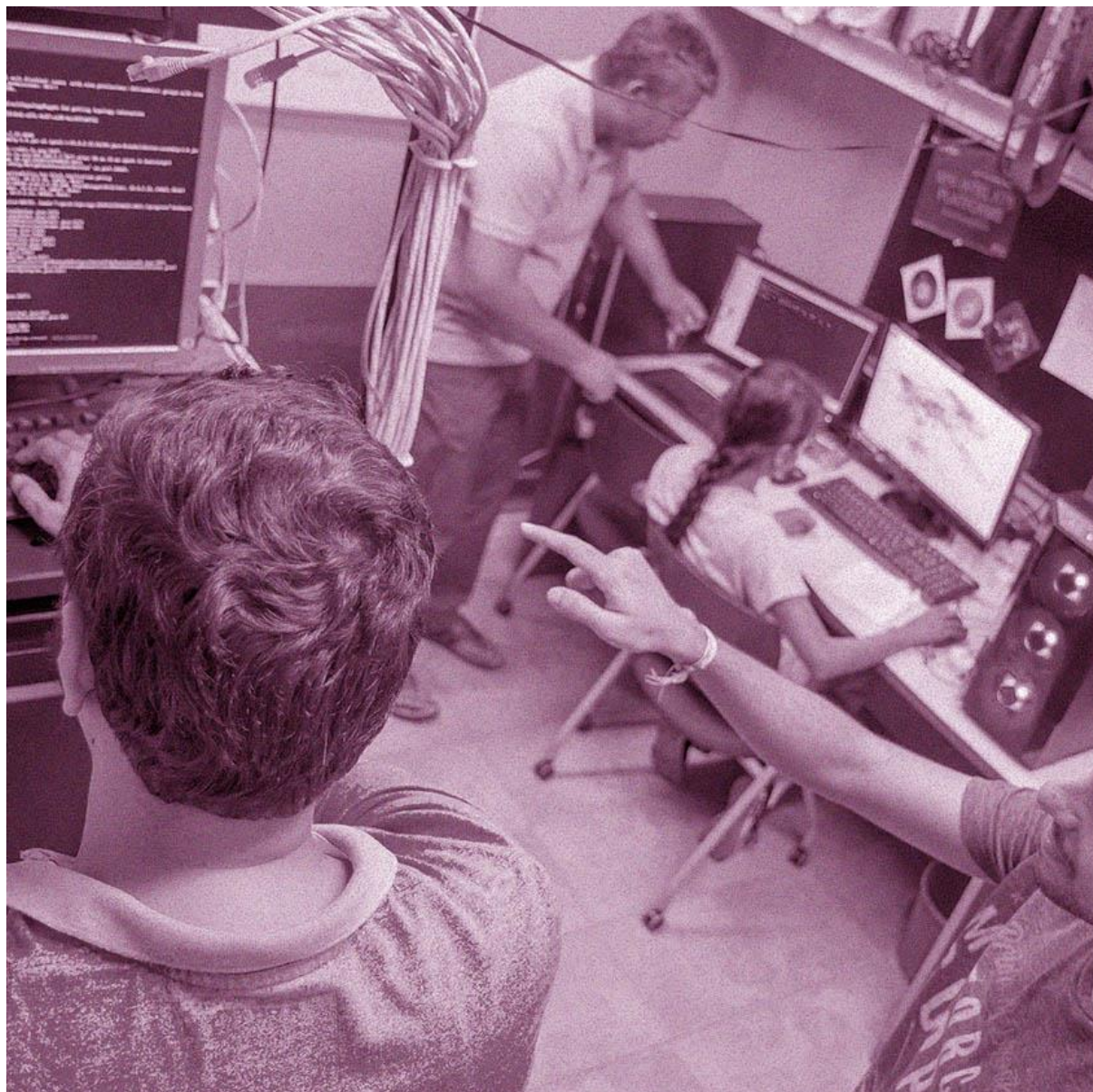
The DAP team at work in the LIRNEasia cluster room

The LIRNEasia DAP team is the continued form of the Big Data team. Established in 2013, the Big Data team pioneered in the use of large datasets for policy in the Global South – particularly using call data records to great effect. As times change, however, and as computing advances, we found ourselves engaging with increasingly sophisticated algorithms and their effects just as much as with the underlying data they operated on, and expanding beyond the analysis of data into questions of algorithmic bias, the ethics of machine learning, and ever-more nuanced economic and social science into our work. The name Data, Algorithms and

Policy thus reflects the implicit scope of our work as well as our end goal: to channel the fruits of computer science into better policy outcomes.

Privacy is still a key issue when it comes to data for development. Often, comparison across multiple datasets can render any measures taken to mask or remove identification of individuals, redundant. In one particular case of our ongoing partnership with the University of Tokyo, though, Viren and Lasantha dabbled in some data generation to overcome the issue. It turned out to be harder than we expected but we kept trying. In July 2019, we submitted a paper on the findings which was accepted as a poster, to NetMob in Oxford.

In July 2018, Lasantha and Viren also started looking at internal migration. Initially, the exploration was focused on ego networks (the connectedness of an individual), based on the hypothesis that the more connected an individual, the more likely they are to engage in positive migration and vice versa. This later evolved to include other characteristics available in the dataset. We derived some parameters from other work on social and spatial diversity and entropy and are developing our own entropy-based parameters, in order to predict internal migration.

As a by-product of the migration work, we also developed a socio-economic index for Sri Lanka. This was based on the national census of 2011, and replicated work done in the UK, Europe, Australia, New Zealand, and the UNDP 2019 Global Multidimensional Poverty Index, among others.

Privacy is one part of a larger global discussion on ethics related to data, algorithms, and artificial intelligence. And like much of the conversations on ICTs and digital life, the conversation is skewed
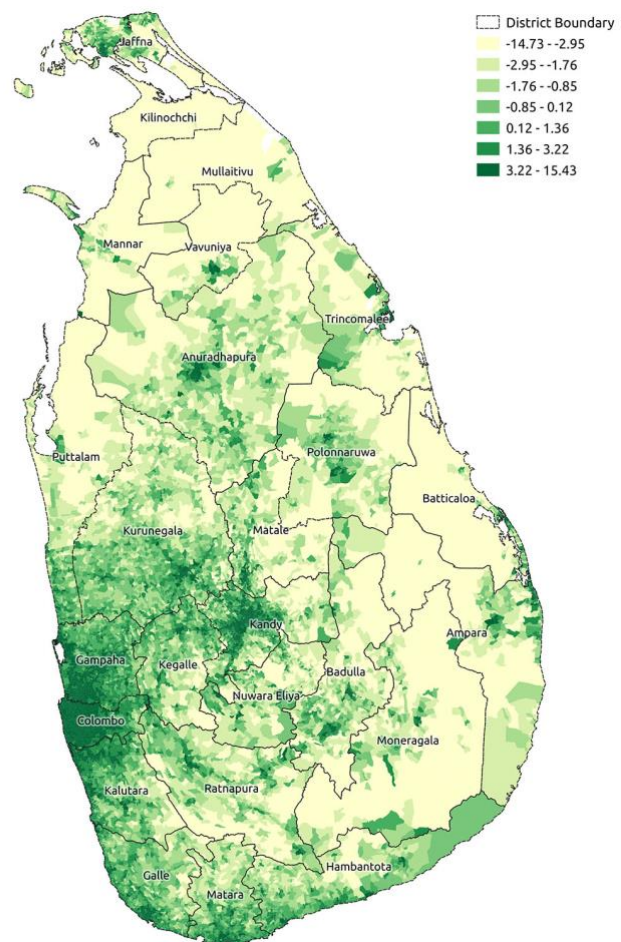
towards the global north. In July 2019, Ramathi began studying debates around the ethics of data, AI, and algorithmic decision making, specifically how these issues may be different in the global south vs. the global north. How does the context of development influence and change debates around ethical questions such as bias, fairness, and accountability? The exploration has given us a base on which we hope to continue building a global south-focused discourse, similar to what we have been doing now, for a while, with the use of data for development.

Much of our work over the years has followed technological development to understand their impact on the bottom of the pyramid and their potential for supporting development goals. We took a completely different turn, when we embarked on another new journey of looking ahead. In December 2019, we were commissioned to conduct a horizon scan to identify the megatrends that would affect the Asia Pacific region leading up to 2030. What we found is detailed in Chapter Two of this Annual Report (see page XX). The work was primarily a synthesis of research that was already conducted in the area by a variety of stakeholders including government bodies, management consulting firms, leading global economic publications and think tanks.

In May 2019, the Department of Census and Statistics (DCS) in Sri Lanka appointed a Committee for modernizing its activities. Sriganesh was appointed as an advisor to this committee. There was interest in using satellite imagery for crop yield prediction, to which we responded with a proposal. This built on work that was already being done in collaboration with DataSEARCH at the University of Moratuwa. In October 2019, Sriganesh also detailed comments on the priorities identified by the appointed committee to modernize the department's activities.

 We continue to explore the use of publicly available remote sensing data and open-source analytical tools to understand agriculture, patterns of urbanization, and changes in land use and land cover. We also continue in our efforts to shape the discourse around data for development, through engaging with others who are

interested in the field. In October 2019, Sriganesh and Thavisha addressed the Global Shapers community of the World Economic Forum at the Shape of South Asia 2019 session on "Igniting innovation through data".

Documenting our work in Myanmar

Participants at the Myamar book meeting in Galle.

We went back this year to a very important and memorable chapter in LIRNEasia's life, to work on another large project: a book on Myanmar.We didn't actively do research in the country, but felt the importance of documenting over six years of research already done. Our work alone is an incomplete picture, and so we also invited others who were truly immersed in the digital developments of the country to contribute. These included David Madden (founder of the Yangon-based innovation hub Phandeeyar), Andrea Calderaro from the Center for Internet and Global Politics at Cardiff University and Rajiv Aricat from Nanyang Technological University.

The publication will be a synthesis of all the work we've done in Myanmar, from old-school telecom regulation policy influence, to platform work, to online rights, hate speech and disability. LIRNEasia was one of the first civil society organizations to study and help guide the liberalization process of the telecoms sector in the country. Outside of research reports and other dissemination output of specific research

project, we never really spent the time to document the process. We believe the work we have done in the country is of immense value, and so, a book.

Enabling the Disabled

A respondent from our PWD surveys

Our work on disability – specifically the use of ICTs to enhance independent living for PWDs – has grown, not just in terms of the number of countries we've worked in and people we've spoken to, but also in terms of the scope of our work.

At the end of the last financial year, we had completed qualitative research in Nepal (to complement the quantitative work done in late 2018) and conducted a solution development workshop to identify eight key issues faced by PWDs that were amenable to digital solutions. In May 2019, we followed up on these key issues with

an awareness event on national ICT day, and one-on-one meetings with stakeholders. The event saw good participation from stakeholders in government, media, the tech community and the PWD community. Secretary to the Ministry of ICT, Magendra Man Gurung, noted that the short- and long-term recommendations we made "can quickly be acted on".

Secretary to the Ministry of ICT in Nepal, Magendra Man Gurung

One-on-one meetings were held with more than 10 stakeholders over **four** days. While they helped stimulate discussion on PWD issues, the key win for us was establishing relationships with between government and stakeholders from the PWD community. We know from experience that these relationships are what bring about meaningful policy impact.

Soon after dissemination closed in Nepal, we began fieldwork in India and Sri Lanka (August 2019 – November 2019). In India, we spoke to roughly 90 respondents in Lucknow and New Delhi, while in Sri Lanka we spoke to over 100 respondents in Colombo, Monaragala and Jaffna. The qualitative work in Sri Lanka is complemented by the quantitative work we did in 2018-2019, as part of the AfterAccess surveys.

While the work in Nepal built on the work in Myanmar, the work in India and Sri Lanka builds on the work in Nepal, with added aspects of focused ethnographies to really tell the stories of how PWDs in these countries get through their day-to-day. We also used the Sri Lanka fieldwork as an internal training opportunity and send our own researchers out to conduct focus group discussions, focused ethnographies and in-depth interviews following a three-day intensive training course.

The overarching objective of the work is to understand whether the built environment of PWDs in our region enables independent living, and whether they have a decent range of choices when doing the things they want to do. Can they communicate with the people they want to communicate with? Can they cook for themselves the kind of food they want to eat? Do they have choices when it comes to education and employment?

Now that we have some understanding of what the issues are, we are focusing, zooming in on particular concerns.

We are also looking at disability from childhood versus disability acquired later in life: another factor which drives home the point that we cannot consider all PWDs a homogenous group when developing solutions. A person who was blind from birth/early childhood is more likely to have developed a keen sense of hearing and therefore be able to easily recognize a visitor by their voice, than someone who acquired blindness later in adult life.

In Sri Lanka, we are looking at movement from private spaces to the public sphere. For example, what are the differences between learning something at home, you're your parents or siblings, versus learning something at school? Are the schools accessible, do the teachers know how to work with students with disabilities?

What remains for India and Sri Lanka are pre-accelerator programs that, like in Nepal, will introduce the specific issues faced by PWDs and potential solutions, to developers. And just as in Nepal we went a step further than Myanmar, in Sri Lanka and India, we will go a step further, and support developers to scale up beyond a pilot product.

Field notes from Buttala: Indika's Story

Monaragala district, Uva Province, Sri Lanka

We are walking, 5km off the Wellawaya-Buttala road. The village is surrounded by higher land. The road to Indika's home winds through sugar cane fields along both sides of the road – sugar cane farming is the most common livelihood among villagers in this area. Chapa, our sign language interpreter, makes a video call to Indika – we are not certain how to find his house. A few minutes later, we meet a tuktuk coming towards us. Indika is driving. I don't understand anything of the conversation between Chapa and Indika. Apparently, they first met at a conference in Colombo, long ago. We get into the tuktuk and Indika drives us to his house. We see Wandinaheala Rock from his garden and, at the top of the rock, a huge flag waving in the breeze. Indika tells us it was his younger brother who – like Indika and his wife – has been deaf from birth that placed the flag on the rock. The younger brother lives with his parents, a few houses away.

I can hear the blue-brow flag flapping in the wind.

We sit in the living area and talk about Indika's day-to-day activities. Indika studied sign language at a special school, so he and Chapa have no difficulty communicating. We learn about Indika's vegetable cultivation. He takes the harvest to market in the town in his tuk tuk. Initially, he had trouble negotiating prices with buyers. He'd have to write his prices down on pieces of paper and show the other person. Now, he just opens up the calculator on his phone and types the amount in for the buyer to see. The buyers know him well now, and Indika believes he gets the best prices from them.

Indika's mother joins the conversation while we roam around the chena. I'm captured by the speed and apparent fluency of the sign-language conversation between mother and son. I ask her how she learnt to sign.

Indika was two years old when she realized that her son had a problem with his hearing. She sought remedies through various rituals performances and ended up spending a huge amount of money on them. Then at about seven years old, Indika was enrolled in a special school. His mother took him to school everyday, and while waiting for her son, she also learnt sign language. It was a tough task for her. She thought of giving it up. But then her younger son was also born with the same impartment. She was determined to learn sign language. She sat for the final

examination with sign language schoolteachers. All the other parents who were in the class with her had dropped out. Today, she is pleased about her effort since she is the bond of the family. Indika, his wife and his brother depend on their mother when visiting public places, such as hospitals.

"Every time I take Indika to hospital, I tell him that he only has to fill up his name and age in the registration form, but he is afraid to go there alone," she tells me.

"Recently he had a pain in the stomach, and was admitted to hospital. I had to be there in the hospital the whole time, to communicate with doctors and nurses. He couldn't even explain where exactly the pain was".

We chat a little bit more while exploring the chena and head back to Buttala town. Chapa and I talk about how good it is that Indika's mobile phone enables him to work and conduct business independently. I also can't help but wonder about the contrast in his engagement with the hospital. In almost every focus group discussion we have had in Sri Lanka with people with hearing disability, the issue of communicating at hospitals has come up. I hope that this is an issue we can help provide a solution to.

Isuru Samaratunga

Future of Work and Workers

Tahani at an AMCHAM event on the Future of Work

Following our first exploration of online freelancing or platform work in Sri Lanka in 2016, we've expanded the work by looking at more countries (Myanmar, India, Bangladesh, Pakistan, Nepal and Cambodia) and by digging deeper into specific issues (competition, labor automation, conditions of work, worker rights, analog completements, social perceptions etc.). We now have a large body of research, which we have disseminated through country-specific channels and at global forums.

Ramathi and Tahani went back to the transcripts from our qualitative work in India and Sri Lanka to produce a paper titled "Now we are independent: Female online freelancers in India and Sri Lanka," which builds on the previous work done by Helani, Laleema and Haran. The paper was submitted to and accepted by the 3rd International Conference on Gender Research, which was to be held in Reading, UK in April 2020, but will instead be a virtual conference held in July 2020 due to the COVID-19 pandemic. The paper was also published in the conference proceedings.

Tahani also shared the findings at an AMCHAM hosted program on "Modern workplaces" in August 2019, as a panelist at a session on "The gig economy and flexible workplaces".

In September 2019, the Center for Poverty Analysis hosted an open forum on 4IR and jobs "Transformative or same-same?", where Helani presented our research on online freelancing from Sri Lanka, India and Myanmar. At the event, she emphasized our stand, that platform work remains precarious for those unable to constantly upskill because prices are being driven down, yet remains a really important income source and a solution to underemployment in Sri Lanka.

"In the long-term most of our jobs will be a mix of part-time employment and web-based gig work. People who learn to learn are the most likely to survive the 'gig economy.'"

HELANI GALPAYA - LIRNEASIA

Transformative or same-same?
The 4th Industrial Revolution and Jobs

cepa
centre for poverty analysis

SOUTHERN VOICE

Helani speaking on 4IR and jobs at CEPA event. Photo courtesy CEPA.

Ramathi also presented takes on both the precariousness of platform-mediated work and the regulation of platforms on our blog.

Much of the fears around the automation of jobs are based on data about jobs and workers in the US and Europe. Hardly any of the predictive models have been attempted with data from Asia. We decided to try. Unfortunately, Research Fellow Vignesh Ilavarasan's

deep dive into Indian labor data showed that while some level of analysis is possible, data from our region – even a country like India – is not detailed enough to do the kind of modelling that others have done. What this points to, is the need for better data, which governments must collect and make public.

In the absence of data, we also tried other avenues. In December 2020, MerI negotiated and began analyzing data from popular job boards in Sri Lanka to identify the ground truth with respect to the skills demanded by Sri Lankan employers. As a part of this project, we hope to develop a publicly available tool that can be used to monitor jobs markets at scale, to identify shifts in demand and transversal skills for a wide variety of work situations.

Following the March 2019 launch of the *Future of Work in Sri Lanka* report by the International Labour Organization (which drew from our previous writings on platform work), TANDEM Research developed issue briefs on two "bright spots" for Sri Lanka. We were invited to a closed-door session in December 2019 where Ramathi engaged on these "bright spots" (tourism and green jobs) towards a roadmap and strategy to prepare Sri Lanka's workforce for the future of work.

Is all platform work precarious?

Short Answer – It Depends

Precarious work, or precarious employment, is a term with multiple meanings. In the ILO's 2011 symposium "Policies and Regulations to Combat Precarious Employment," the following framework was used:

"Although a precarious job can have many faces, it is usually defined by uncertainty as to the duration of employment, multiple possible employers or a disguised or ambiguous employment relationship, a lack of access to social protection and benefits usually associated with employment, low pay, and substantial legal and practical obstacles to joining a trade union and bargaining collectively."

A pervasive characterization of online platform work is that such work is inherently precarious. The ILO Country Office's 2019 "Future of Work in Sri Lanka" report goes on to state:

"The platformisation of work will increase, rendering irrelevant conventional labour protection mechanisms. The platformisation of work has far-reaching implications, particularly in terms of restructuring the employer-employee relationship. Though the 'gig-economy' offers new job opportunities to part time and casual workers, it is also likely to reveal new inefficiencies and inequities. There is concern that the platform economy will create new forms of precarious work, eroding worker's livelihoods and rights in significant ways."

The above report is not alone in this characterization. The Fairwork Foundation's report "The five pillars of Fairwork: Labour Standards in the Platform Economy," notes: "The picture that emerges [of platform work] is one of a highly conflictual but precarious work environment that requires wide-ranging global approaches to counter the negative aspects of platform work."

There is certainly some truth to this. Platform workers usually work without legal contracts in a market that is heavily skewed towards the buyer. They lack many of the protections afforded to the formally employed. They work for multiple clients and do not always know where their next gig is coming from. However, the characterization of platform gig work as precarious implies that this work is inherently dangerous, with workers especially vulnerable to poor payment and other forms of employer mistreatment. Is that always the case?

In some instances, yes. For example, a 2019 Overseas Development Institute (ODI(report on the gig economy in Kenya and South Africa noted that gig workers in Kenya in jobs such as ride-hailing and domestic work could face difficulties in expressing grievances to employers out of fear of losing their jobs. However, these types of dangers are not universal to all gig workers.

In LIRNEasia's own study of online freelancing in Sri Lanka, Myanmar, and India in 2015-17, it was found that many online freelancers worked part time, and often used their freelance earnings to supplement their regular income. As a result, they were not always wholly reliant on gig work to be self-sufficient. Furthermore, we encountered workers who willingly chose to freelance fulltime because they enjoyed freelance work more than regular employment, including the freedom of work time and workplace. We found that part time freelancers in Sri Lanka could earn LKR 15,000 – 20,000 per month while some could earn up to LKR 100,000 – 200,000 per month – well above the competitive market rates for similar jobs in traditional establishments. Reports of client difficulties (for example, clients taking work and refusing payment) were present but comparatively rare. The freelancers we encountered worked gigs in various jobs such as data entry, transcription, translation, graphic design, event planning etc.

It is important to note that just because work is *uncertain,* this does not mean it is uniquely "dangerous". Gig work is always uncertain because the worker usually does not know when their next gig is coming. However, highly successful workers are able to build up networks of regular clients, and as they build up their reputations, they are able to attract more clients. Hence, it is possible for gig workers to earn good incomes, even if work is irregular. Many in fact accept this uncertainty as a trade-off for the flexibility of their work, and are aware of this trade-off when opting for this work. We did find in our research, however, that gig workers faced difficulties that the regularly employed did not face. For instance, freelancers found it difficult to get bank loans because they could not show salary slips. The same could be said for those who are likely to face difficulties in applying for visas, when they are unable to provide letters from employers as proof of a full-time job or regular income.

In sum "gig work" is an extremely broad category, including different types of work, differing earnings, and different service provider-client relationships. Gig work comes

with a multitude of risks and benefits, which come in varying degrees of magnitude depending on the circumstances of that particular work. Simply because work is uncertain and lacking in conventional job structures and protections, we cannot automatically assume that it is dangerous or undesirable work. This is true of some types of gig work, and less true of others.

Ramathi Bandaranayake

Gender

Ayesha at RightsCon in Tunis

We're building on our previous research on platforms, specifically from a gender point of view, asking how they are enabling and expanding work opportunities for women. The work involves studying different types of digital platforms in India and Sri Lanka and examining whether women are benefiting from them – are they working, are they earning, what are the difficulties they face, what are the enabling factors? Women's participation in the traditional labor force is low in these countries and we are trying to understand if platforms – not only for tech-related microwork and other tasks, but also for promoting home-based businesses – are helping or *can*

help change that. We are also talking to men who use these platforms, to see if there is truly a difference in the way men and women approach and use them.


Gender Action Learning workshop

The Gender Action Learning team, commissioned by the IDRC, is helping us look at our research (not only on gender-related topics), and our approaches to research, through a gender lens as well. The process began with a two-day workshop in September 2019, where the whole organization was introduced to the feminist research approach. All our researchers have now had multiple opportunities to learn about feminist research methodology, and are being pushed to ask if our ongoing research, our work processes, or even our management methodologies can improve via this lens.

Globally, the AfterAccess data continues to attract attention from the conversation on digital rights and the gender gaps. Ayesha presented findings at a panel on Designing a More Inclusive Digital Economy, organized by the AfterAccess global team and the UN Secretary General's High-level Panel on Digital Cooperation at RightsCon in Tunisia in June, 2019. Later on, a poster based on the same data was accepted by the International Conference on Gender Research, scheduled to be held in Reading, UK in April 2020, but will instead be a virtual conference held in July 2020 due to the COVID-19 pandemic.

Human Rights Online
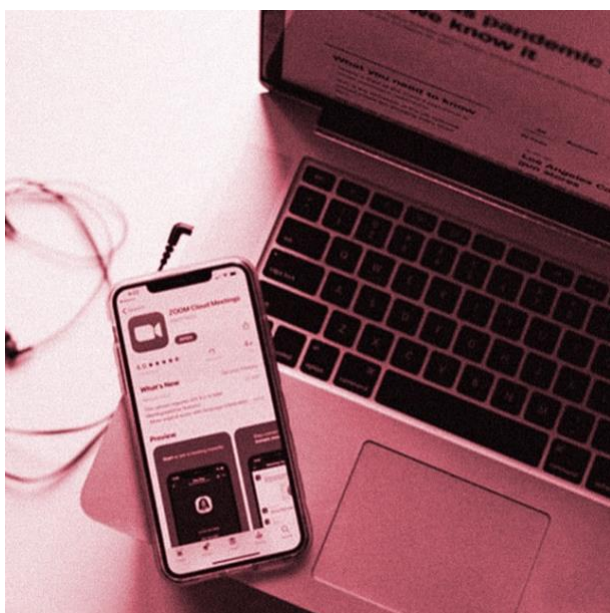
Following on rights-related work we did in Myanmar in 2017, in September through November 2019 we undertook work in Sri Lanka to examine the perceptions and experiences of online security among marginalized communities. Focus group discussions and in-depth interviews were conducted among roughly 220 male and female respondents from urban and rural areas; as well as from the LGBTQI community in the Western, Northern and Central provinces.

The range of awareness of and responses to privacy and security violations was varied. Particularly in Jaffna, where conditions of war had restricted access to and use of ICTs, internet and social media until recently, we saw a parallel with what we'd seen in Myanmar two years before – people were getting online for the first time on smartphones.

Generation Z (*born after 1995*) internet users in Sri Lanka find it easier to make use of the internet than Generations X *(born between 1965 – to 1980)* and Y *(born between 1981 – 1995)* internet users. Generation X and Y females progress the slowest, while males in the same generations are somewhat better.

User perception of the internet depends on access devices (desktop, laptop, tab or smartphone), time of day of use and the intensity of social media use. Most use was highly skewed toward social media platforms. Different social media platforms have unique value propositions for users; for example, the location-based search functions of Grindr were seen as a useful feature for those who identified as gay and trans (transgender, transsexual, and other transitional identities) internet users in Sri Lanka to find other people nearby from the community.

Awareness and understanding of the concepts of privacy and security of personal data is needed across all age groups; internet users need to be made aware of the implications of platforms, companies, governments etc. collecting data on them, in order to make informed choices in relation to their internet use. Most privacy notices are too long and written in legalese that make little sense to most internet users. The lack of understanding is exacerbated when users are non-English speakers.

Policy and Regulation

Helping shape Sri Lanka's digital future

With the foundation of Sri Lanka's apex body on ICT policy, ICTA, in 2013, an ICT Act was also written for the country. A requirement of this Act, which Rohan helped draft as Board Member of ICTA at the time, was a national digital policy for Sri Lanka. The policy itself never was drafted, and when Rohan returned to ICTA as Chairman of the Board of Directors in April 2018, he set out to fill the gap.

Tahani and Gayani supported this process. They benchmarked other countries, not only in developing Asia but also Singapore, Malaysia, UK, Canada etc., and how they had approached digital policy. We also looked at Sri Lankan policies on economics and other cross-cutting sectors that made mention of or would affect digital policy. The material we provided to ICTA was an overarching document that made recommendations as to how the government of Sri Lanka should adopt digital policy. We recommended an inclusive policy that considered the disabled, the ageing and otherwise marginalized communities. We recommended an open-source approach and we recommended transparency. We also recommended that the policy be an umbrella document that cuts across sectors, identifying basic policies for all sectors and guiding them in the creation of sector-specific digital policies, for consistency.

Sri Lanka's National Digital Policy – Proposed framework
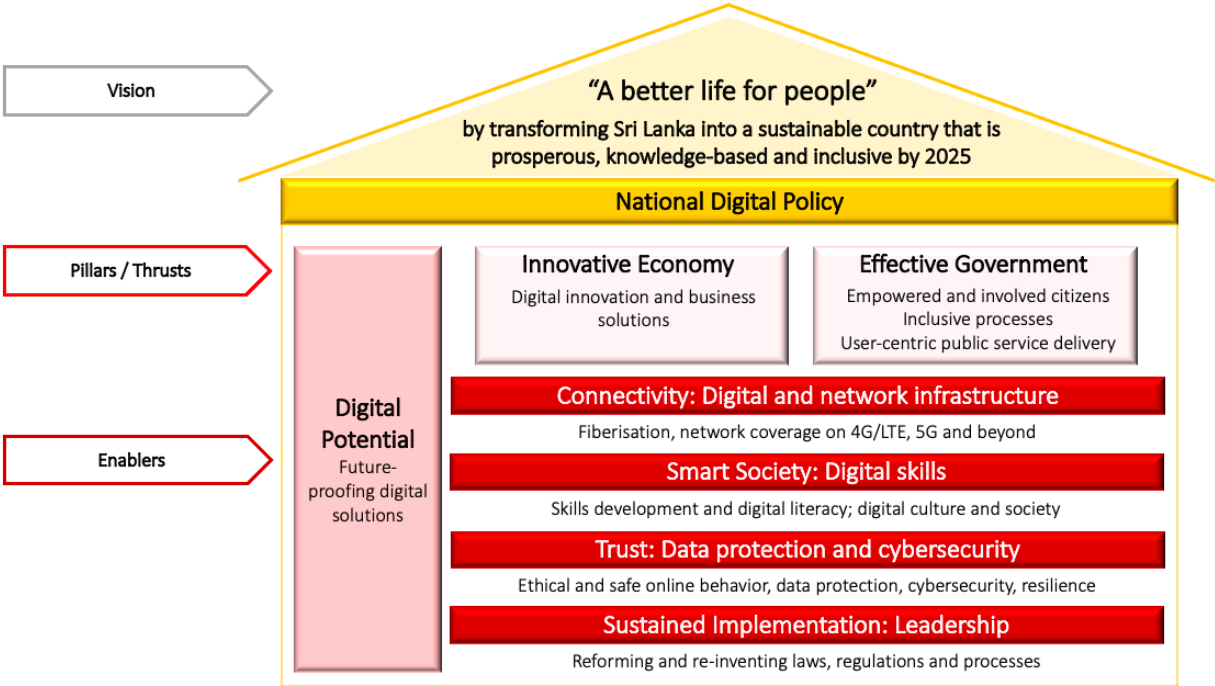
The final policy itself, drafted by ICTA, was released for public consultation in August 2019, and incorporated much of our recommendations. The document has now passed the inter-ministerial committee approval and remains to be presented at cabinet.

We also provided extensive formal input on two separate laws proposed by the Government of Sri Lanka: the Data Protection bill and the Cybersecurity bill. The first draft of the Data Protection bill prohibited automated decision making, which we believed was problematic. The final draft now contains a revision that now allows with a data subject retaining the right to seek an explanation for any automated decision. The Cybersecurity bill proposed an institutional structure which contained many new institutions which would complicate implementation and accountability. The proposed definition of Critical Internet Infrastructure and the process for classifying these was also problematic. Our comments in each of these areas was taken on board and reflected in changes in the newer version.

Broadcasting Regulatory Commission Bill

In January 2018, the Minister with responsibility for Media requested Rohan Samarajiva to serve as chair of the Working Committee to Regularize Issuance of Radio and TV Licenses. As is usual in Sri Lanka, the Committee had no research

capacity. LIRNEasia supported the work of the committee by engaging the services of Ms Sabina Fernando, a LIRNEasia alumna with considerable experience in legal drafting and media policy. Following an intense effort of seven months, a complete draft of an Act and a cover memo were handed over to the Ministry. Unfortunately, progress was stalled by changes in Ministerial responsibilities. However, the draft re-emerged in the aftermath of the 2019 Easter Bombings. It was translated and made ready for public consultation. It was reported that it had been submitted to Cabinet by the new government.

Media regulation is perhaps one of the most sensitive and difficult policy problems. In the absence of licenses with any meaningful conditions or even fees, electronic media firms can do more or less anything they want. They may also be shut down at any time without due process. The iron triangle supporting the status quo is strong. Rapid technological and market changes, usually described as convergence, make the design of regulatory instruments quite challenging. The Committee did come up with an innovative solution that we hope will be implemented when the conditions are right.

Broadband policies and universal service for Asia

The ASEAN-USAID Inclusive Growth in ASEAN through Innovation, Trade, and E-Commerce (ASEAN-USAID IGNITE) co-hosted a consultative workshop with the International Telecommunication Union (ITU) and the Indonesian Authority on Accessibility and Telecommunications (BAKTI) titled :Approaches to ASEAN Next Generation Universal Service Obligation (USO 2.0). The meeting took place on 25 and 26 July 2019 in Jakarta, Indonesia. The meeting provided a platform for ASEAN regulators and policymakers (primarily from Indonesia, Malaysia, Brunei, and Cambodia), regional telecommunications industry representatives, academics, researchers and USO experts to discuss the status of national broadband policies in ASEAN and share insights on international best practices in USO funding to address connectivity and inclusion in the region.

LIRNEasia representative, Tahani Iqbal, participated in two panel discussions over the two-day workshop. The first session she spoke in focused on "Overview and Examples of Broadband Policies: Lessons and Considerations for Developing New Frameworks", Drawing from the findings of the AfterAccess surveys, she highlighted

the need for policymakers to address challenges related to affordability, relevance, readiness, as well as access. For example, even where comprehensive national broadband plans existed and internet connectivity and access were available, the 2018 AfterAccess research findings showed that actual internet use was in fact still low (36% in Cambodia among 15-65 aged population). This was due to poor awareness and digital literacy and low smartphone ownership (only 30-50% of the 15-65 aged population had access to an internet-enabled device across emerging Asia). These findings were appreciated as the proposed ITU USO 2.0 framework also emphasized the need for USO funds to consider demand-side activities such as digital training and capacity building programs as part of their efforts to get more people connected and online.

During the second session titled "Updating and Enhancing Universal Service Funds and Funding a New Universal Scheme", Tahani shared the findings from Samarajiva and Hurulle's (2017) research on select USOs in the region. In essence, the paper suggested that USO funds, if left undisbursed, remained an ineffective tax on the telecommunication sector, and asserted that the success of USO funds should be evaluated, through identification of outcomes (for example, how many people who would not be connected through market mechanisms were connected as a direct result of universal-service subsidy programs?) and through outputs (for example, were the funds utilized as intended by the legislation/policy?). A necessary condition for these measures of success was that the funds should have indeed been disbursed. The ensuing discussion focused on how USOs could be revitalised to be more effective and relevant in the region.

Continuing global engagement with broadband quality of service experience

September 2019, Shazna was in Geneva again as part of the ITUs Expert Group on Telecom Indicators to present the revised methodology on broadband quality of service experience measurement and data that had been collected based on the revised method, for the years 2017 and 2018. The Expert Group on Telecom Indicators recommended that the methodology be again revised, for the September 2020 meeting. The Sub-group on ICT indicators was therefore reinstated and the work continues.

Helani Galpaya and participants of the 'Dialog on Digital Innovation' organised by the Konrad Adernauer Stiftung, at the German Chancellery

Presence

Media Coverage

The April 2019 Easter Sunday Attacks in Sri Lanka sparked communal violence in the country, again, and the government engaged in another social media block. Our physical presence there meant that multiple media reached out to us, to understand if and how social media was contributing to the violence, and whether blocking these platforms was an effective form of management. Later in the year, Bangladesh cut mobile internet access in Rohingya camps. So we found that Abu, Rohan and Yudhanjaya were quoted repeatedly, in local and international media outlets including Foreign Policy, The Globe Post, The Straits Times and WIRED magazine.

We saw another spike in coverage towards the end of May 2019 when we launched version 3.0 of the AfterAccess Asia report, alongside released of the AfterAccess Sri

Lanka findings. Unexpectedly low smartphone and internet use numbers meant that reporters engaged fully with the data, writing in-depth stories on our findings. The then Minister of Digital Infrastructure and Information Technology, Ajith P. Perera, cited the data in multiple opinion pieces published in national newspapers. A science writer Nalaka Gunewardene also published a series of stories based on the data.

In September, when we celebrated our 15th Anniversary, there was more coverage in Sri Lanka. The panel discussion on policies and laws proposed in Sri Lanka at the time was timely and relevant, and we hope it served to stimulate further conversation among decision-makers.

Financial Statements

Download LIRNEasia's Financial Statements for the year 2019-2020 [here](#).