Jāṅgala

Annual Report

2020 - 2021

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Director's statement

The Covid-19 pandemic beginning in 2020 has upended every society around the world. The impact of the virus wasn't felt equally, it exposed divisions between societies and, perhaps even more tellingly, within them. In 2019, calls for universal access to broadband were often dismissed casually, today, meaningful participation cannot be imagined without internet access.

Jangala's work in 2020 was shaped by the pandemic. In early 2020, our focus was on developing and deploying our Big Box internet access system to connect schools and hospitals around the world. Although the virus halted many of these projects, we became acutely aware of the connectivity gaps here in the UK. We developed and deployed Get Box in a matter of weeks to bring internet access to low-income families with school-aged children, NHS mental health service users, and vulnerable adults in sheltered accommodation.

2021 will be an important year for Jangala as we accelerate our deployment of Big Boxes and Get Boxes, and lay the foundations to substantially scale our impact in the years ahead.

As ever, ultimate thanks goes to our supporters great and small, without you nothing detailed in this report, nor all that is yet to come, would be possible.

RICHARD THANKI

Managing Director

About Jangala

WHO WE ARE

Jangala is a humanitarian tech charity enabling vital internet access technologies worldwide. Since 2015, we have connected nearly 40,000 people in healthcare clinics, schools, refugee camps and emergency response situations in partnership with aid agencies including the IOM and grassroots groups including Care4Calais and Skateistan, as well as the NHS, BT and UK schools.

MISSION

Jangala's mission is to connect every school, clinic and community resilience project worldwide with internet access, so societies everywhere can meet the pressing challenges of today and the uncertainties of tomorrow.

VISION

Our vision is to make universally accessible technologies that help people build better futures.

LOOKING AHEAD

We are aiming to connect another 30,000 people by the start of 2022, scale our technology by 2023 and connect 5 million people by 2025.

Impact highlights

2,420

devices online

5,239

people directly connected to the internet

49,200

people impacted by improved services and access

651,387

hours online

Jangala's year: overview

Q2 2020

- Get Box created and trialled in emergency accommodation in Brighton
- Expanded Big Box network at Embo Healthcare Clinic in South Africa also goes live
- Funding received from the Lenovo Foundation

Q3 2020

- Big Box connects a library in Nepal, in partnership with Books4Nepal
- Get Box trialled in two education projects: for refugee learners in Athens with Amala and for students from low-income households in London with Clapton Girls' Academy

Q4 2020

- Get Box trials with PPR and the NHS go live, serving asylum-seeking activists and trauma patients respectively
- BT's Emergency Response Team use Big Box in the Orkney Isles to connect a community over Christmas when a subsea cable is damaged

Q1 2021

- Partnership with Cuckoo Broadband established
- Get Boxes sent out to a women's shelter in Essex, a mobile unit serving people experiencing homelessness in Sussex, a village hall in Yorkshire, and the Echo Mobile Library for refugees in Athens
- Big Boxes deployed to Roots, Mobile Refugee Support and Care4Calais in France
- Funding received from CHK Foundation and Arm

Jangala and the Covid-19 pandemic

At the start of 2020, Jangala was making great progress in our mission to empower our partner organisations to deliver essential public services such as healthcare, education and disaster response. We completed a build of more Big Boxes than ever, began testing our readiness to scale production, and deployed several systems to new and exciting partners including War Child and a healthcare clinic in Tanzania, as well to trusted partners in Kenya and Afghanistan.

As the Covid-19 crisis escalated around the world, our deployments began to stall and soon after they stopped entirely: a Big Box on its way to Nakivale Refugee Camp with UNHCR got held at their Kampala office while the emergency unfolded and in South Africa, a Big Box destined for the Embo Healthcare Clinic was held up as clinic staff responded to the pandemic.

In March 2020, we closed the office. Still, we continued to deploy more Big Boxes, but once on location, with the closure of projects and education centres for safety reasons, many weren't being used. This new challenge highlighted the need for a smaller system that could deliver Wi-Fi to tens of people rather than 100s: the concept for Get Box was conceived, designed specifically to tackle important connectivity needs at a household level.

Introducing Get Box

Leveraging similar powerful technology to Big Box, Get Box is a smaller, lower-cost device, designed specifically to provide households with secure and supported internet access. A versatile product, it can connect up to 20 people or be daisy-chained to create a larger network, giving current and future partners a new mode to deliver connectivity to smaller groups.

In June 2020, our first Get Box deployment went live, connecting 29 vulnerable individuals in emergency housing in Brighton, UK. Since then, we have connected children and their families through a London-based school so they could continue with their studies uninterrupted from home, survivors of trauma through an NHS Trust so they can access their online counselling sessions, as well as refugees in Greece, asylum seekers in Belfast, and a women's refuge in Essex.
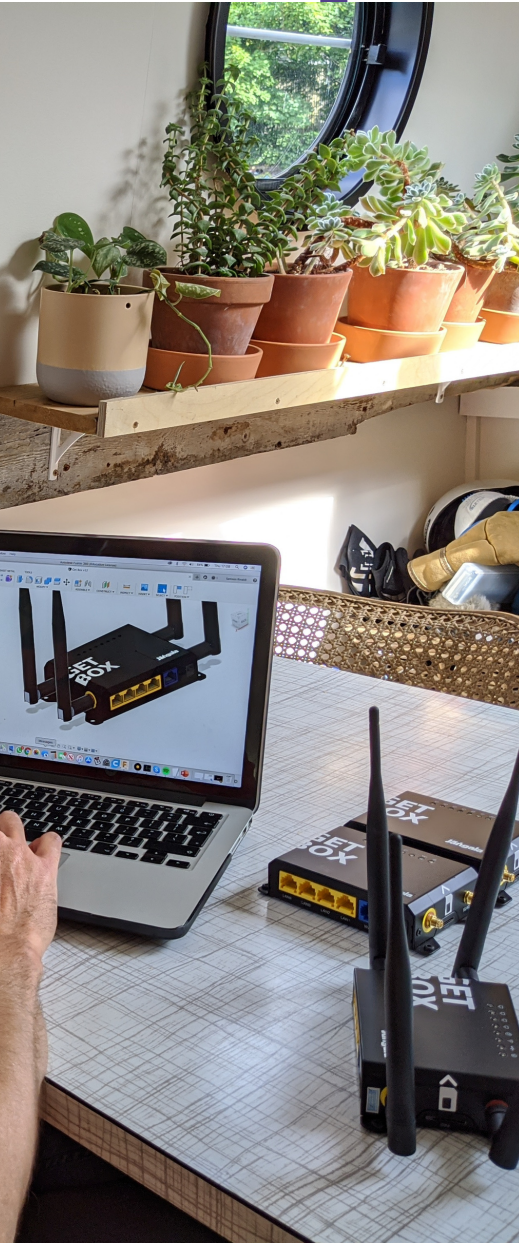
Jangala in 2021: Crisis-ready

50%

OF THE WORLD'S POPULATION STILL DON'T ACCESS TO THE INTERNET*

66%

OF THE WORLD'S SCHOOL-AGE CHILDREN HAVE NO INTERNET ACCESS AT HOME**

While people and organisations worldwide continued to grapple with the challenges posed by the ongoing global health crisis in late 2020, we began deploying Big Boxes again, starting with two of our core partner organisations serving refugees in France: MRS and Care4Calais. A Big Box was also used to bring connectivity to an entire community in the Orkney Isles with the help of BT's Emergency Response Team when subsea cables failed over Christmas.

Big Box deployments on hold also went live, including the Embo Healthcare Clinic in South Africa, where hundreds of patients, staff and

members of the local community have been able to get online to access healthcare, advice, and support.

During the pandemic, digital tools have proven critical to knowledge-sharing, the facilitation of remote working, and service provision. Connectivity is a lifeline, a fact underlined emphatically this year. Now equipped with two complementary products, Jangala has expanded the breadth of its work to provide an effective best practice response to a root challenge in the digital age.

*World Economic Forum, April 2020
**UNICEF-ITU, November 2020

Closing the educational digital divide in the UK

> "
> [Get Box] has helped to reduce the digital gap between students on free school meals. Students would otherwise not have been able to participate in online learning and would have been seriously disadvantaged in their exams.
> "

- Colin Gall, Assistant Head Teacher at Clapton Girls' Academy

The pandemic has exposed a number of societal fault lines worldwide, even in higher income countries. As many essential services have shifted online, including education and healthcare, vulnerable people and communities have been further marginalised because of barriers to access like affordability and accessibility. In terms of education alone, an estimated 700,000 children from low-income households across the UK risked falling further behind in their schoolwork because of a lack of internet at home. In early 2020, we developed Get Box to help address this challenge.

Get Box provides a secure, time-controlled, and data-efficient way to get students online to continue their education with minimal disruption. Over the last academic year, we delivered 35 Get Boxes to a Clapton Girls' Academy in London. With the school covering monthly 4G data costs, the families of the supported students have also been able to use the Wi-Fi for home working, accessing essential services, and shopping online.

In a recent survey of pupils who received a Get Box over the last year, 100% reported that their access to information and services, and ability to communicate had improved. One pupil said that it was 'really important,' and another said: 'It has helped me to stay in touch with my friends during lockdown.'

Life-saving connectivity in South Africa

"

I believe this will also limit the spread of COVID-19 because there will be no need for our driver to collect laboratory results in person.

"

- Pastor Leonard Gcabashe,
Community Leader at Embo Healthcare Clinic

In June 2020, we sent a Big Box out to the Embo Healthcare Clinic in KwaZulu Natal, South Africa. The clinic, supported by Medic Assist International, caters for 30,000 people in a community that is suffering from high - and rising - rates of HIV/AIDS, as well as a drug-resistant TB epidemic. Now, the clinic is also dealing with coronavirus.

The Big Box was deployed and set up remotely by our team, with the help of the clinic's site manager. As well as covering the clinic, the Big Box network has been expanded to cover a neighbouring care home and church, which serves as an important hub within the community. Jonesthefone Consulting (in cooperation with Against Breast Cancer) has also donated recycled smartphones for the healthcare staff in Embo to use at work.

In the first week, over 100 devices connected to the Wi-Fi.

Pastor Leonard Gcabashe, who was key in bringing the partnership together, explained how staff are using the Wi-Fi to show the local community news about the pandemic and educational programmes about common health problems. According to Pastor Leonard, '[People] are really thankful for the information that they receive from the screen,' and with programmes set in Zulu, vital information is now accessible to the wider community: 'Yesterday, they were listening to the statistics of Covid-19 in our country and [gaining] awareness of the pandemic.'

Before Jangala connected the clinic, all routine blood samples needed to be delivered via a driver to the local state hospital in Durban and returned the same way. Now, with reliable Wi-Fi, the results will be emailed to the Embo Healthcare Clinic, saving time so that patients can start treatment sooner. The clinic can also now more effectively communicate with their mother hospital regarding patients' test results. One coordinator said: 'We can't wait to start online communications with our mother clinic likewise with [the] lab to improve our service.'

And the benefits for this community of 30,000 people are already extending beyond the initial objectives in healthcare. Young students from the local area have begun accessing the Wi-Fi for their studies in the evenings and weekends. In fact, the Wi-Fi is totally public on weekends and the clinic has made it clear that 'anyone wanting information' can access it.

Big Box is withstanding the harsh conditions: '[The] Wi-Fi is doing so well...yesterday it was windy, thunder at night and our clinic is built on the hill, and I did not notice any problem [with the WiFi] at all.'

Following the success of the project, we are now preparing to connect the Embo Healthcare Clinic's mother clinic in Hillcrest, building out further infrastructure to ensure that the entire community is fully supported with high-speed, reliable internet access for their healthcare needs and more.

Jangala's impact 2020-2021

53%

of projects focused on women and girls

From April 2020 to April 2021, Jangala connected a total of 5,239 people using 13 Big Boxes and 69 of our newly conceived Get Boxes. The total number of devices online in this period was 2,420 laptops, smartphones, and tablets.

Over the past year, Jangala has worked with 15 partners across 19 projects in 8 countries across Europe, Asia, and Sub-Saharan Africa. As well as the BT emergency response team, these partners have included NGOs (Skateistan and Amala), clinics (Embo Healthcare Clinic in South Africa, Milo Healthcare Clinic in Tanzania, and the NHS Camden and Islington Trust), refugee support organisations (Care4Calais, Mobile Refugee Support, Watizat, and PPR), social housing providers (Quays Housing and Brooke House), schools (Clapton Girls' Academy in the UK and St Martins School in Kenya), and a library in the Himalayas (Books4Nepal).

Users of our systems have included schoolchildren and their families, healthcare staff and patients, rural communities, refugees and refugee learners, trauma patients, and people experiencing homelessness.

In terms of project focus, the majority of our work was in education, healthcare, and refugee support, with a growing number of projects serving people experiencing homelessness and emergency response situations.

Testimonials

❝ This is the first time I have used [Big Box] for an incident and was very impressed. Key for me was being able to log in remotely. The island is 360 miles from me and there are no engineers based there, I did have a local contact who was able to reset the kit and I was able to see it all come back into service.. ❞

— COLIN MCARTHUR

BT ERT Systems Engineer

❝ From the outset [of the pandemic], access to technical hardware and internet connectivity was identified as one of the greatest barriers to people accessing public services and maintaining contact with friends and family. The persisting view of internet access as a privilege as opposed to a right means that prohibitive computer, broadband, Wi-Fi and data costs are deepening marginalisation and inequality during the pandemic.. ❞

— DESSIE DONNELLY

PPR's Director

Key milestones : product

In the last year, we have made a number of key software and hardware developments to Big Box including:

- Introducing a new, more powerful operating system
- Developing more reliable and faster failover between different sources of connectivity
- Incorporating remote updates so that the systems can be updated and patched in the field
- Stripping back components, making the system easier to assemble
- Completing a custom-designed printed circuit board (PCB) including power protection, so that Big Box can be used with renewable energy and be protected against power surges
- Began incorporating a dual modem to improve Big Box's range in low-signal environments
- Began work to bring Big Box antennas inside the housing, to improve hardiness
- Began work on a partner metric reporting system, so that Get Box and Big Box partners will have access to live performance information including users connected, signal strength and uptime.

These product developments are already resulting in a more rugged, powerful, reliable system for our partners and their end users, across contexts.

Key milestones: organisation

WAMBUI KARUGA
SOFTWARE ENGINEER

LAMIS SERROUKH
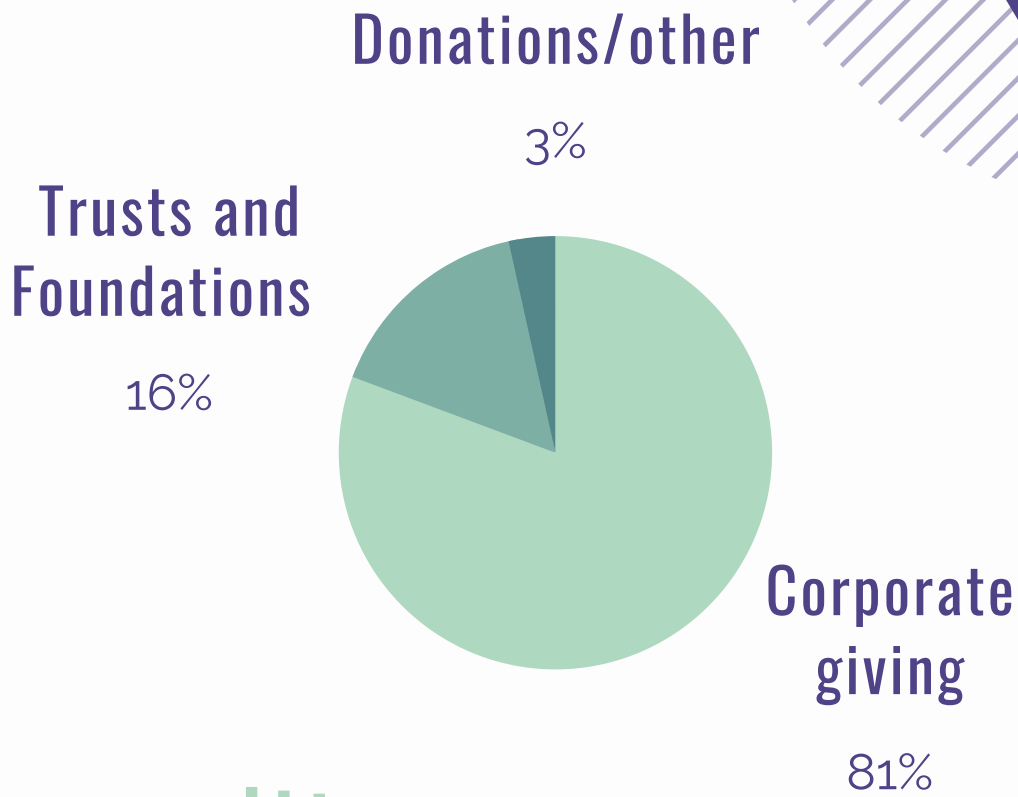HEAD OF FUNDRAISING

BEE HAYES-THAKORE
TRUSTEE

Over the last year, with the generous support of our funders, we have been able to grow our team to respond to the increasing demand for our systems. In 2020, we were joined by a new Software Engineer and Head of Fundraising, as well as our newest trustee Bee Hayes-Thakore. A technologist with a background in space robotics, AI, IoT and STEM marketing, Bee brings extensive experience of navigating technology bets and helping to fast scale start-ups.

As we grow our team and our impact, Jangala's work is gaining international recognition. Out of over 1,000 projects, Jangala has been selected as one of 25 global best practice projects to showcase our work at the World Expo 2020. Initially set to take place last year, the Expo has been postponed due the pandemic and will now run from October 2021 - March 2022.
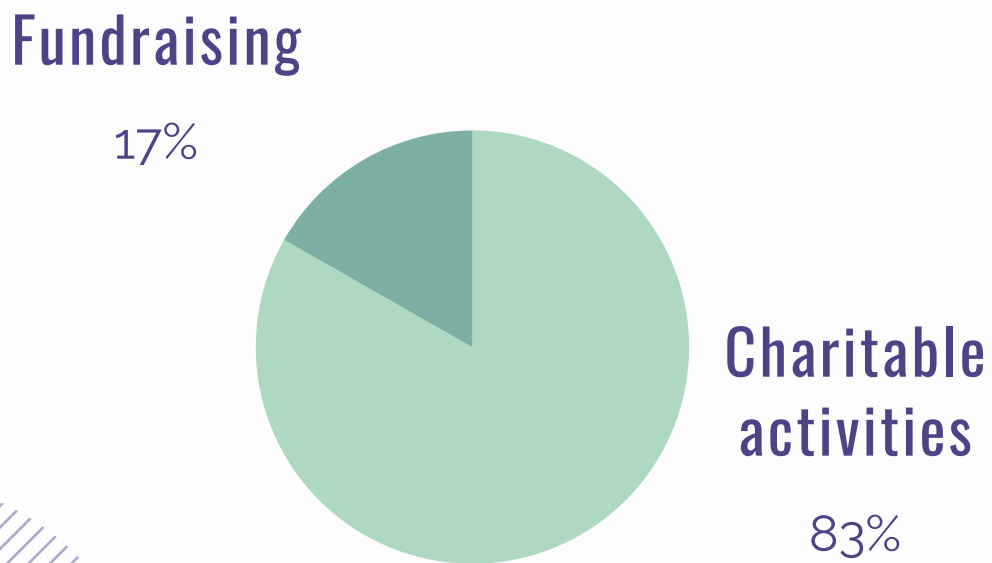
The Global Best Practice Programme aims to highlight replicable, scalable, and socially impactful initiatives making progress against the Sustainable Development Goals. The Expo will see 25 million visits and worldwide media attention, and we are looking forward to showing how internet connectivity can be a low cost and effective part of humanitarian aid delivery and development.

Income

Donations/other
3%

Trusts and Foundations
16%

Corporate giving
81%

Expenditure

Fundraising
17%

Charitable activities
83%

Looking ahead

Short term

In 2021/2022, bolstered by our growing team, partners, and funders, empowered by the significant progress made on our technology, and equipped with both Big Box and Get Box, Jangala is aiming to connect 30,000 more people through health and education projects around the world.

Medium term

The growing number of projects both in the UK and overseas marks the beginning of Jangala's preparations to scale our impact. By the end of 2025, we are aiming to connect 5 million people.

Long term

Longer term, Jangala's goal is to become the leading organisation providing humanitarian and development connectivity services globally, to use this knowledge and experience to innovate in emergency internet access technologies, to commercialise technologies we develop as appropriate to create a sustainable source of revenue for the charity, and to be a thought leader in understanding the economic and social value of closing the digital divide and advocating for coordinated public policy.

Thank you

Over the past year, we have been the grateful recipients of the generous support of a number of funders, all of whom have contributed in crucial ways to helping us connect vulnerable people worldwide.

We at Jangala would like to acknowledge the contributions of the people who have worked tirelessly to help us deliver impact where it's most needed.

Our trustees, advisors, consultants and wider supportive network of friends of Jangala.

Our colleagues from our current partner organisations from the last year mentioned in this report, as well as our longer-standing partners.

Our generous donors.

We thank you all for your continued support in our efforts to build and deploy universally accessible technologies that help people build better futures.

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