Innovating in an Uncertain World: One Year of Learning and Breakthroughs

2020 Annual Report

UNDP accelerator labs

Co-building the Accelerator Labs as a joint venture with:

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UNDP Core Partners

"With the Accelerator Labs, UNDP taps into the power of wider and richer sources of innovations by exploring the inventions of the women and men closest to poverty, the impacts of climate change, and most recently, this global pandemic."

Achim Steiner, UNDP Administrator
High-level Political Forum on Sustainable Development, July 2020

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In a world shaken by the COVID-19 pandemic, getting the 2030 Agenda for Sustainable Development back on track requires a whole-of-society approach. Collective action towards the Global Goals is needed more than ever.

As UNDP's 2020 Human Development Report points out, we are at an unprecedented crossroads in history. How should we react to this new age?

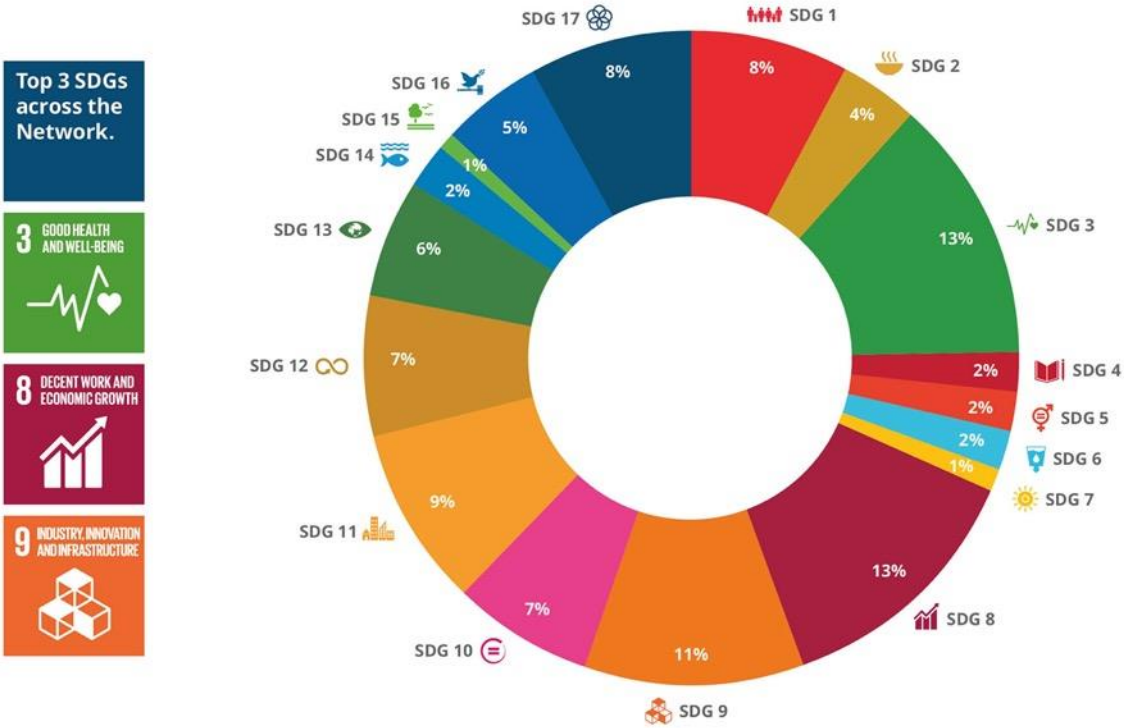
We believe a great transformation in how we live, work, and cooperate is needed to change our path for the better. This systemic change requires speed, agility, and a bold new approach to development. UNDP, through its Accelerator Labs, is uniquely positioned to lead on this transformation.

A fully operational network

All 60 Accelerator Labs became fully operational in 2019, bringing new talent and skills into UNDP. 72% of Accelerator Lab team members were new to the UN system, 65% brought experience from the private and non-profit sectors, academia, and government, and 24% of them returned to their home countries to take up their new positions.

In 2020, the 60 Accelerator Labs addressed **147 development challenges covering all 17 SDGs.** They introduce a new way to work within UNDP that consists of identifying key learning questions and a roadmap of activities (e.g., experiments, explorations, mapping grassroot solutions and partnerships) to understand sustainable development challenges better and generate learnings **faster**. Last year, the Accelerator Labs also documented over **1,700 grassroots solutions** and used **48 different innovation methods** and approaches.

Work of all UNDP Accelerator Labs by SDG in 2020



Reporting on our learnings in a new age

This report presents the progress made by the UNDP Accelerator Lab Network in its first year and shows how the Labs have powered UNDP for faster learning about today's toughest development challenges, supported governments with actionable insights, and acted as a catalyst for COVID-19 recovery.

The report follows the structure of the results framework established in the UNDP Accelerator Labs Project Document (https://open.undp.org/projects/00116178) and is organized as follows. *Chapter 1* presents progress, key highlights, and impact stories across the Network. *Chapter 2* reports on findings generated through our partnerships. *Chapter 3* concludes with a look ahead.

Chapter 1
Strengthening capabilities, accelerating learning, and adapting to change

Output 1: UNDP Country Offices and partners will have increased capability for scanning, sensemaking, and experimentation for sustainable development solutions in 60 developing countries.

One of the primary goals of UNDP Accelerator Labs is to make sense of our rapidly changing, complex, and uncertain world – dynamics the pandemic compounded. This objective is part of a wider mission for UNDP to develop new capabilities to improve how we understand problems and find solutions to drive forward sustainable development with national counterparts.

To build and strengthen these new capabilities in 2020, the 60 UNDP Accelerator Labs focused on:

- Accessing more diverse and better data
- Listening to those who are closer to the problems
- Embedding new innovation methods within UNDP

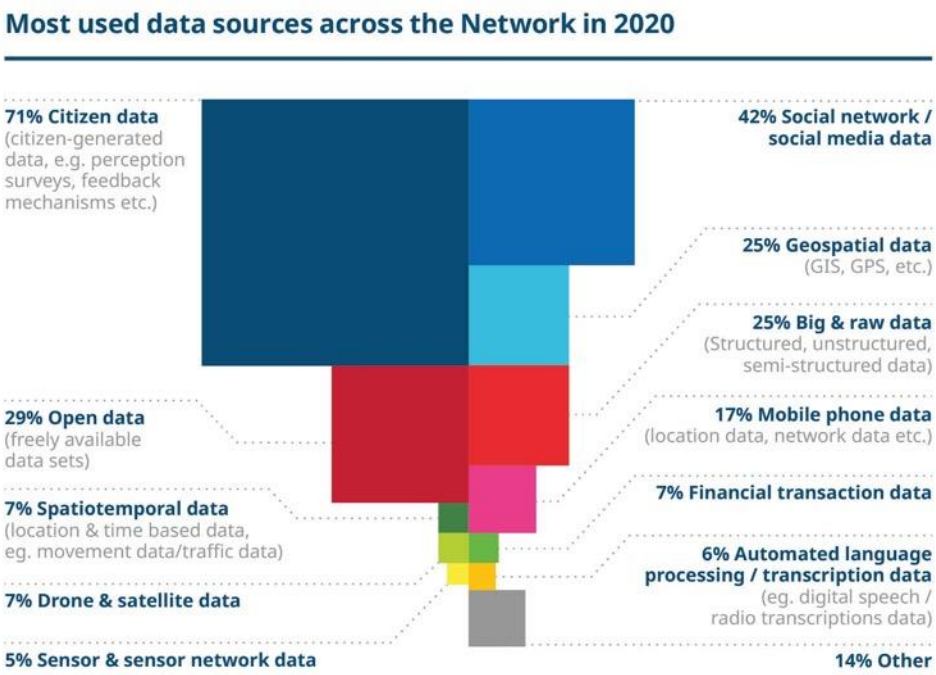
” Thanks to the Accelerator Lab, we were able to do surveys and collect information when nobody could.”

Carole Flore, Resident Representative, UNDP Côte d’Ivoire

1.1. Increasing and diversifying our data sources

UNDP Accelerator Labs have diversified how UNDP captures information in 2020, such as using satellite data to combat deforestation and employing ethnography to understand the impact of COVID-19 on vulnerable communities. By tapping into new data sources, we can better understand sustainable development problems. In 2020, each Accelerator Lab used on average **7 data sources**, such as geospatial data, social media data, or citizen data.

With the onset of the pandemic, many traditional ways for UNDP to gather data (such as door-to-door surveys) were no longer possible nor effective in providing an accurate picture of the multidimensional global crisis. UNDP Accelerator Labs not only overcame restrictions imposed by social distancing, but they used the pandemic as an opportunity to innovate data collection as a whole and **tripled the data sources used from before the pandemic**.



In **Bosnia-Herzegovina**, the Accelerator Lab developed an online portal for small businesses to access real-time economic data during the pandemic’s initial phase. This portal also allowed SMEs to submit their suggestions and information so that government officials could take action, bringing to life **citizen data**. ♦ Read more [SDG 8, 11]

In **Togo**, radio is the main source of information, with a reach of approximately 5 million people. UNDP Togo, powered by its Accelerator Lab, partnered with the Web Analysis Center (COWEB) to develop **speech-to-text data** analysis of radio conversations in 5 local languages. By better understanding the opinions of Togolese about the pandemic, they curated health content for communities that can’t be reached via TV or social media. ♦ [SDG 3]

Affected by the inability to collect data in person due to the pandemic, UNDP **Cambodia**’s Accelerator Lab, in collaboration with its socio-economic team, combined traditional and less-used data sources such as phone calls, survey data, **social media data**, and mobile phone **GPS data** to better understand the economic challenges faced by informal workers across the country during the COVID-19 pandemic. ♦Read more [SDG 8, 10, 11]

Ecuador Case Study

Satellite data for climate action [SDG 13, 15]

Like many countries in the Amazon region, Ecuador is losing hundreds of hectares of rainforest each year due to non-sustainable agriculture activities such as cutting trees to create pastureland for livestock farming.

In 2020, UNDP Ecuador, via its Accelerator Lab, decided to tap into the power of geospatial data to identify sustainable practices for cattle farming, with the goal of finding seeking local solutions to deforestation. This work supports ProAmazonia, an ambitious five-year program run by UNDP and the Ministries of Environment and Agriculture of Ecuador to reduce CO2 emissions by mitigating deforestation and promoting sustainable land-use.

Data-powered positive deviance

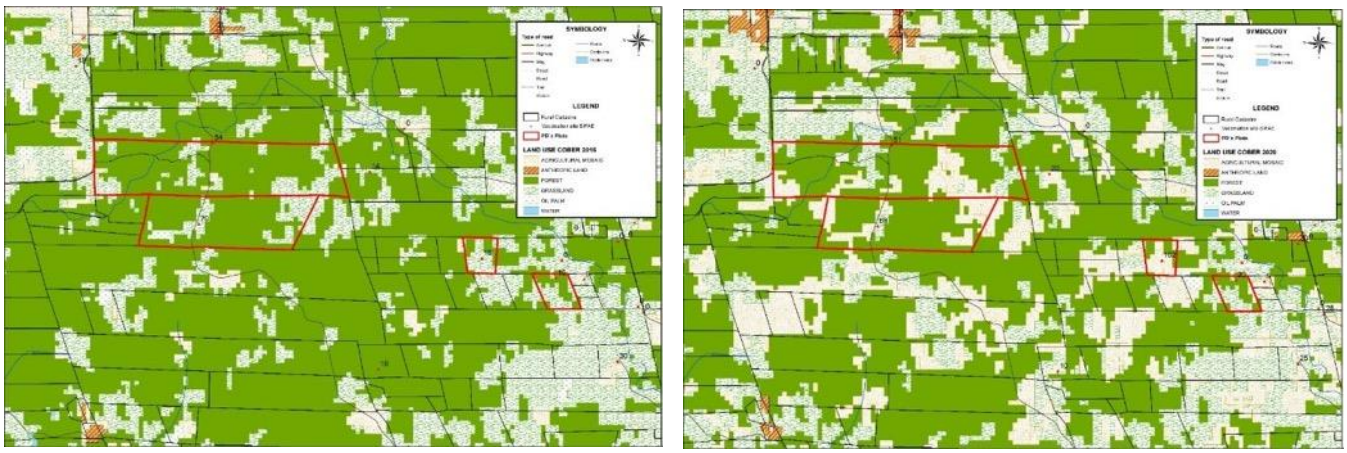
The Accelerator Lab in Ecuador also benefited from the partnership between the UNDP Accelerator Lab Network and the GIZ Data Lab, piloting data-powered positive deviance in 4 countries. This novel approach combines uncommon and diverse data sources like open-source satellite images, cadaster data, and national cattle vaccination registers, to find farmers who outperform their peers with similar resources. Once these farmers are identified through quantitative analysis of the data, qualitative field research is done to understand uncommon behaviors or coping mechanisms that enable them to find efficient and sustainable cattle raising practices.

Ecuador Case Study

In less than five months, the UNDP Ecuador Accelerator Lab and GIZ Data Lab were able to analyze the **evolution of the forest coverage of 240,000 hectares between 2015 and 2020** and generate maps of land use for a total of 11,033 farms in the Joya de los Sachas and Sucúa counties.

New government response to protect the Amazon

For the first time, the Ecuadorian government can now track deforestation and cattle efficiency **at the farm level**. These land cover maps and new data sets such as national cattle vaccination registers offer new insights about the drivers of forest loss and farmers' land use (percentage of soil used for crops, pastures, and how much of it is resting for the next cycle of production). In addition, data-powered positive deviance unlocks new opportunities for climate action as it helps identify farmers that are actors of change, understand their ecologically sustainable practices, and map their behaviors, motivations, and solutions.



The maps above show the evolution of the use of soil for each farm in Joya de los Sachas between 2015 and 2020 and illustrate the threat of deforestation (+18.6%) and the increase in pastureland areas (+13.1%) at a farm level.
©UNDP Ecuador

As a result, important efforts are being made so that the Ministries of Environment and Agriculture take up this work to reinforce the national strategies aimed to protect nature and wildlife and promote sustainable production. In 2021, ProAmazonia will include these actionable insights to help other farmers transition to more sustainable practices.

♦ Read more

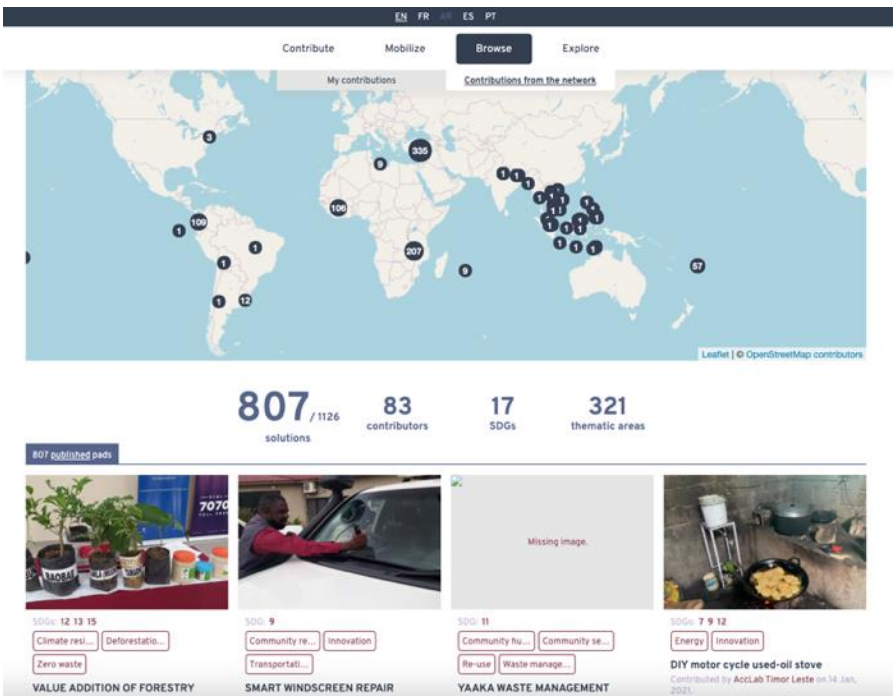
1.2. Building collective knowledge with grassroots innovators

With only a decade of action remaining for the 2030 sustainable development agenda, UNDP is looking beyond business as usual, towards radical new approaches. One of those new approaches is learning from women and men who have managed to solve problems through ingenuity and simple, frugal means. These **grassroots innovators** often face the effects of climate change directly, live in poverty, and have a lot to contribute to putting the planet on a more sustainable path.

As we continue to see these grassroots innovations emerge and recognize their value, UNDP has begun to mainstream what happens in the margins by embedding Solutions Mappers across 60 UNDP Country Offices. The role of Solutions Mappers is to systematically identify grassroots initiatives and surface **newly understood, unmet needs** of the women and men UNDP serves to inform programming and policy making. ♦ Read more

Creating a global platform for Solutions Mapping

In 2020, UNDP Accelerator Labs **documented over 1,700 grassroots-led solutions covering all 17 SDGs**. They are aggregated in **263 different thematic areas** such as waste management, health, protecting the environment, digital transformation, and education.



Building an inclusive and participatory global Solutions Mapping platform

The global team developed a global Solutions Mapping platform to document, share, and analyze all the solutions identified. Thanks to this knowledge management hub, the Labs can identify replicable or scalable solutions and draw additional learning from patterns across solutions and the unmet needs they are signaling.

As an extension to this work, UNDP partnered with Hyundai Motor Company to source solutions from the wider public and make them openly available. We will explore this partnership in more depth in Chapter 1, output 3.

Palestine[1] Case Study
AI & the Internet of Things to reduce lost water [SDG 6, 8, 11]

Engineer Issa Dababat, the Executive Manager of the Joint Water and Sanitation Services Council in Tubas district, Palestine, cares and knows a lot about water, a very limited resource in the region. His role is to ensure that high-quality water is properly distributed to the local population and wastewater is correctly treated.

In need of real-time data

Every day he faces two harsh realities. First, water is scarce. Many Palestinians survive with only 73 liters/capita/day – well below the 100 liters/capita/day recommended by the WHO. Second, physical leakages in the public water networks, metering inaccuracies, theft, and other issues cause US$45 million of water loss every year.

Engineer Dababat checks the water meter of a family in the Tubas district, Palestine. Thanks to a local innovation identified by the UNDP Accelerator Lab, Dababat can now fix any faulty water meter quickly and cheaply.

Mr. Dababat needs to know where issues are in the water infrastructure in real-time so he and his team can fix them quickly and minimize losses. But tracking a water leakage in kilometers of pipelines can be like finding a needle in a haystack.

When local also means frugal

In 2020, the Accelerator Lab at UNDP Programme of Assistance to the Palestinian People identified FlowLess, a local start-up with a solution tailored to the Palestinian context.

FlowLess's solution is smart and affordable: It uses the Internet of Things (IoT) and Artificial Intelligence (AI) to detect water loss. Smart sensors are installed across the water network and feed into a dashboard with new information every 15 minutes. This means that Mr. Dababat can immediately spot irregularities in the water flow and know where to act. This solution is not just fast and reliable – it used to take Mr. Dababat several months to spot the exact location of issues and it also **reduces public costs by 78%.**

This is an example of the value the Accelerator Labs are providing to decision-makers – supporting critical work by identifying innovative practices and linking up unlikely partnerships.

"FlowLess's smart and local system was easily installed on the existing water infrastructure without any major investment. Its adaptability and ability to integrate between different technologies is remarkable," concludes Mr. Dababat.

♦ Read more

[1] PAPP, Programme of Assistance for Palestinian People

Highlight: Grassroots Solutions

Meeting the people closest to the problem

Ibrahim, promoter of the circular economy in Ghana [SDG 5, 8, 11, 12]

In Accra, Ghana, Bari Alinko Ibrahim collects 2 tons of plastic waste every week, keeping it out of the city's landfills and drains and, ultimately, the ocean. He developed "plastic wood" by upcycling this waste into a sustainable wood replacement. Creating plastic wood is also employing 30 people, mostly women, who could otherwise be destitute or further marginalized. ♦ **Watch the video**

The UNDP Accelerator Lab Ghana team documented this solution and connected the community of waste pickers (led by Ibrahim) with city policymakers to help them recognize the tangible contribution of these waste pickers to a cleaner, more sustainable and equitable city.

Zephyrin brings frugal innovation to Congolese farmers [SDG 1, 2, 8]

In the Democratic Republic of Congo (DRC), Zephyrin Ndombi Ndombasi saw an opportunity to improve cassava farmers' income and productivity. This crop is critically important in the fight against hunger, but fewer farmers are cultivating it due to the intense efforts required for production. To solve this challenge, Zephyrin invented Zongo III, a cassava peeler that improves productivity by 67% and reduces costs by 75%. ♦ **Watch the video**

The UNDP Accelerator Labs in DRC provided Zephyrin with business coaching, mentorship, and media visibility, which has brought in many networking opportunities with strategic stakeholders to help scale his solution.

Piso-gadgets providing essential services to low-income communities in the Philippines [SDG 1, 10, 11]

In the Philippines, the UNDP Accelerator Lab identified local innovators building one-piso coin-operated vending machines made from hacked electronic gadgets and wooden boxes that resemble a 1980s-era arcade game. Some of the services provided by these vending-machines are as essential as water by the glass or 5 minutes of internet connection. Without these piso-gadgets, the most vulnerable communities of Quiapo, a very poor area of Manila, wouldn't be able to afford these goods and services. ♦ Read more

UNDP Philippines Accelerator Lab partnered with the Department of Science and Technology to map this type of grassroots innovations and is sharing findings with policymakers so that they can better understand the nation's needs.

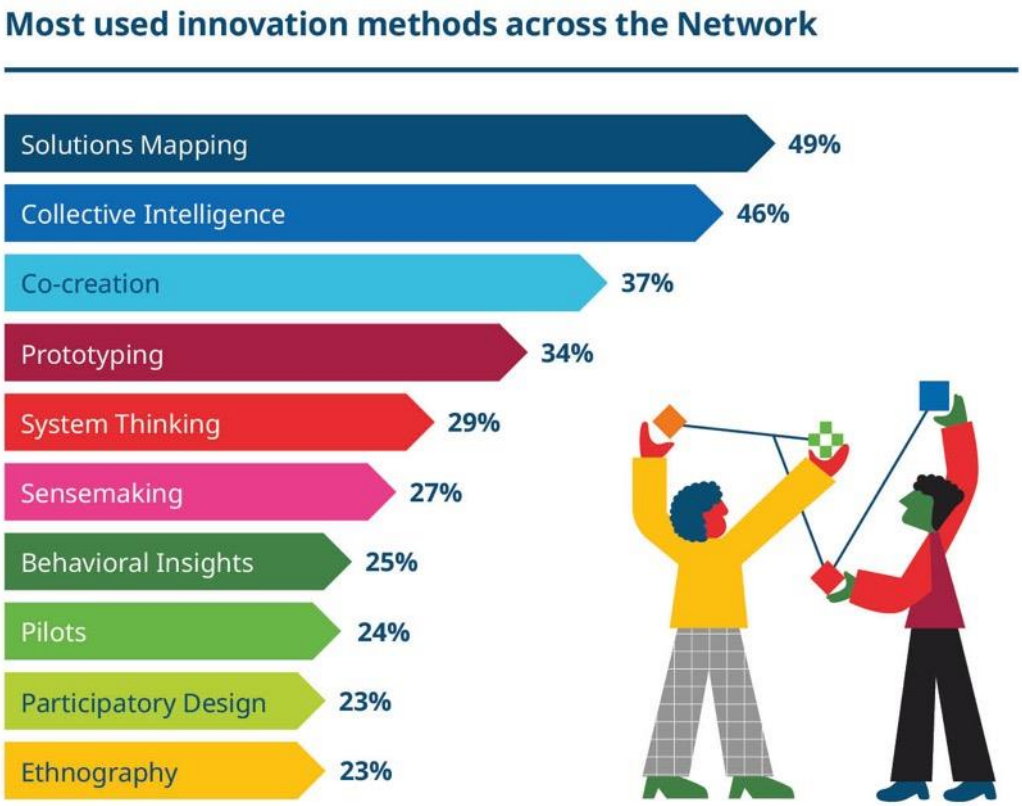
1.3. Bringing a wide variety of methods to find, test, and iterate solutions

By introducing innovation methods such as participatory design, futures analysis, or prototyping, UNDP Accelerator Labs are finding new ways of making sense of complex challenges. In 2020, the Accelerator Labs used **48 different innovation methods** and approaches in their learning cycles.

Innovation methods in practice

Solutions Mapping is the most widely used innovation method in the Accelerator Labs Network. The Accelerator Lab at UNDP **Iraq** has gone the extra mile by mapping solutions not just for their use but making the database of solutions available to the wider community through an open platform, allowing innovators to connect amongst each other.

♦ Discover their platform



Citizen Science is a method that promotes the participation of the general public in scientific research or data generation. The UNDP **Argentina** Accelerator Lab partnered with a local municipality to collect real-time air pollution data through sensors attached to commuters' bicycles. As citizens ride their bikes, they produce valuable information about the city's air quality.

♦ Read more

Hackathons bring new energy and open the door for citizens to solve problems. UNDP **South Africa**, powered by its Accelerator Lab, organized a 3-day hackathon to co-design and build COVID-19 response gear like Oximeters, or small devices that clip onto a patient's finger (or other body parts) to measure the level of oxygen in the blood. They also developed affordable contactless hand sanitizers.

♦ Read more

Output 2: Scaling new sustainable development solutions at the country level as part of UNDP's country program and operations, national policy and/or local markets

As the Accelerator Lab Network continues to learn and surface solutions, one key objective is to embed our suite of innovation practices and methods into UNDP country programs and as part of the toolbox for the wider development community. To deliver on this output, in 2020 the Network worked through three areas of action:

- Sharing learnings on sustainable development challenges with the public by working out loud and leveraging multiple digital and traditional media channels. In 2020, the Accelerator Labs published **360 blog piece – one a day – on key development challenges and learning processes.**

- Providing government partners with tools to explore and grow **portfolios of development solutions**. This has proven particularly relevant in the wake of the pandemic, as governments and other partners have adopted some of the Accelerator Labs' tools to help deliver their COVID-19 response and recovery efforts. In 2020, 18 government counterparts adopted a selection of Accelerator Lab's tools and methods, and we present some examples in this section.

- Finally, the Accelerator Lab Network aims to **influence how UNDP Country Offices think about and deliver development by embedding innovation**.

Supporting financially excluded individuals with the development of training courses in municipalities of Buenos Aires, Argentina.

Highlight: COVID-19

Enabling agile government & UNDP country-level responses [SDG 3, 8, 11]

In response to the COVID-19 crisis, the majority of Accelerator Labs rapidly pivoted to agile socio-economic response and created, in a matter of a few weeks, 70 new action learning plans. The aim was to drive forward UNDP's Integrated Response to mitigate the crisis, protect people, and encourage socio-economic recovery. In so doing, the Accelerator Labs:

- Boosted UNDP's capacity to deliver on its mandate of leading socio-economy recovery across the UN system, and
- Enabled governments to respond more effectively to citizens' needs during the crisis.

Empowering policymakers to make better data-informed decisions

The Accelerator Labs catalyzed UNDP's capacity to collect data – more rapidly and from new sources – and provided razor-sharp insight into socio-economic impacts through mapping the constantly shifting terrain of the crisis.

UNDP **Bosnia and Herzegovina** powered by its Accelerator Lab launched Economic Pulse, a dashboard that crosses monthly survey data from 1,000+ companies with government data to provide a close-to-real-time assessment of local economies. Thanks to these data UNDP is now focused on targeted private sector support mechanisms and assisting the government to design improved budgetary allocations. ♦ **Read more [SDG 8, 11]**

Highlight: COVID-19

UNDP **Philippines** through its Accelerator Lab spearheaded two rapid response socio-economic surveys to guide government recovery efforts. Leveraging artificial intelligence, machine learning, and data visualization platforms deployed through social media, these surveys reached a qualified audience totaling 4,700 individuals. As a result, the Departments of Trade & Industry and Social Welfare & Development are using the data to inform their decision making. ♦ **Read more here and here [SDG 1, 8, 10]**

Digitizing informality

Social assistance accounts for nearly 90% of government COVID-19 response measures in low-income countries, with cash transfers the most popular tool, totaling 429 programs in 166 countries (World Bank 2020, via Ugo Gentilini). While social assistance measures included a planned reach of 1.82 billion people, they only effectively reached 1.28 billion – allowing over 50 million people to fall through the cracks, notably due to financial or digital exclusion.

UNDP Accelerator Labs stepped in to help solve this critical challenge by using digital tools to create financial solutions for excluded groups and boost income streams for informal businesses.

In UNDP **Argentina**, the team launched the #CashWithNoAccount campaign to promote tools for unbanked people to access ATMs and emergency income, such as familiarizing people with how to use debit cards to purchase goods and withdraw cash. ♦ **Read more [SDG 10]**

Vendors in an informal market in Uganda practicing social distancing. Unlocking mobile money and e-commerce can help them access cash transfers and get new income sources.

The UNDP Accelerator Labs in **Kenya** and **Uganda** mapped the integral role of mobile money not only in supporting social distancing efforts but also in allowing unbanked people to access cash transfers and mutual aid schemes. By identifying creative ways to plug excluded groups into the financial system, the labs helped governments catalyze digital transformation in times of national crisis. ♦ **Read more [SDG 1, 8, 10, 11]**

The UNDP Programme of Assistance to the Palestinian People Accelerator Lab piloted a digital platform connecting women-led Micro Small and Medium Enterprises (MSMEs) with consumers. As a result, UNDP established a formal program with UN Women, FAO, and WFP to mitigate crisis impacts on women-led businesses. ♦ **Read more [SDG 1, 5, 8]**

Florence Nadunga, Forest Supervisor in Eastern Uganda, is a critical actor in the fight against deforestation.

Uganda Case Study

Combatting deforestation, the portfolio approach [SDG 7, 9, 13]

Deforestation as a multidimensional issue

Due to human migratory patterns, Uganda is at risk of losing its forests in the next 40 years. When forests are endangered, other issues loom: reduced biodiversity, increased risks of natural disasters, and weakened food security for millions.

The UNDP Accelerator Lab introduced thfe Ugandan National Forest Authority (NFA) to collective intelligence, sensemaking workshops, field visits, and experimentation to enable an enhanced analysis of the problem and reframe their response.

New experiments

The Accelerator Lab organized an Innovation Challenge to source bottom-up solutions. The team was pleased to receive a submission from the National Electricity Regulatory Board (Umeme) to experiment with a new electricity fee attractive enough to encourage people to move away from charcoal. The experiment will start with Umeme and a major hospital to identify the best tariff for electricity, which is currently not affordable for most individuals and large institutions.

New data for faster and more reliable decision-making

With the support of UN Global Pulse and the UN data working group, the UNDP Uganda Accelerator Lab developed a platform to collect real-time data of the forest coverage. This platform is fed by satellite imagery and pictures taken by local forest guards like Florence Nadunga (see photo) via a mobile app. The synchronizing of on- and offline data and a real-time dashboard **helps the government get reliable maps within a month, instead of 1 year.**

Illegal logging in the Mabira Forest, Uganda.

Our impact

The Ugandan authorities have traditionally relied on outdated data to understand the scope of deforestation or sending soldiers to deter illegal loggers. **Since implementing a portfolio approach inspired by the Accelerator Labs, the NFA is now taking into account wider socio-cultural factors leading to deforestation.** Through this and other measures, the impact potential is immense: authorities will be able to track illegal tree cutting activities much more accurately. They will also be able to incentivize and monitor tree-planting activities and other policies in real-time. The project will also show an accurate picture of refugee activities and help prevent natural disasters.

♦ **Read more here and here**

Highlight: Portfolio approach

What do we mean by adopting a portfolio approach?

A portfolio approach entails more than lining up a set of activities on a single topic. It involves moving from funneling activities to layering them.

Funneling activities is like planting as many "seeds" (start-ups, solutions, new partnerships) as possible and waiting to see which one grows. It entails a process of elimination. We believe this approach is not the best one to address complex problems because a single activity only tackles one dimension of the problem. Resources are wasted in accelerating activities that may not be implemented in the end.

Layering activities as per a portfolio approach allows multiple learnings to be developed simultaneously. The benefits of gathering a critical mass of options are mutually reinforcing and include:

- Addressing the different dimensions of wicked or complex problems,
- Allowing for better learning over time,
- Easier adoption by relevant (and multiple) stakeholders; and
- Providing decision-makers with a broader set of options to act upon.

To learn fast in this complex world and equip decision-makers with actionable insights, the **UNDP Accelerator Labs move away from linear planning and single-point solution and adopt a portfolio approach**.

Highlight: Government adoption of Labs' methods [SDG 17]

In 2020, we observed **18 instances of government adoption of our methods**. Examples range from Paraguay's Ministry of Labor hosting the "Participatory Informal Employment Lab" to the national government of the Democratic Republic of Congo's full uptake of the UNDP Accelerator Lab methods and the establishment of thematic labs such as a "City Lab" in Da Nang, Viet Nam.

Co-building the "Participatory Informal Employment Laboratory" in Paraguay

In response to elevated levels of unemployment, the Paraguay Ministry of Labor, Employment and Social Security launched one of the first public innovation labs in the country in July 2020, supported by the UNDP Accelerator Lab and ILO.

UNDP Paraguay powered by its Accelerator Lab and ILO has been instrumental in setting up the new Lab, which aims to innovate social security policies by generating learning loops – building on Accelerator Lab methodology. The new Lab's activities kicked off with a series of training sessions on human-centered design, value chain analysis, field experiment methodologies for public policy, and value chains in Paraguay's entrepreneurial ecosystem. ♦ **Read more [SDG 8, 9, 10, 17]**

Helping the government in the Democratic Republic of Congo (DRC) develop a technology and innovation framework [SDG 17]

In 2020, the Ministry of Research and Technological Innovation requested the support of the Lab to provide training, coaching, and support to experts from sectoral ministries on how to run a portfolio of experiments as well as the innovation protocols of sensing, solutions mapping, ex ploration, and collective intelligence.

UNDP Accelerator Lab in DRC co-organized an innovation workshop with the Vice Minister of Research and Technological innovation for public servants from different ministries, November 2020, Maison de la France, Kinshasa.

These capacity-building workshops led to the signing of an MOU articulating the transfer of knowledge and methods from the UNDP Accelerator Lab to the government partner. This collaboration will:

- Help set up the National Directory of Congolese Innovations;
- Create a certification procedure for local innovators in DRC; and
- Develop a National Innovation Policy for adoption in 2021.

The Dragon Bridge, an iconic symbol of Da Nang City in central Viet Nam.
© Shutterstock/ Tang Trung Kien.

Highlight: Government Adoption

Working with Da Nang city, Viet Nam, to shape their new "City Lab"

Da Nang is one of Viet Nam's largest cities and a major tourism destination. Tourism provides critical revenues, but the sector's potential is limited by a quiet nightlife.

To take advantage of this opportunity to generate jobs and income, the UNDP Accelerator Lab in Viet Nam signed an MOU with the Municipality of Da Nang to set up a "City Lab."

As part of this strategic partnership, the Accelerator Lab is drawing on lessons learned in Mexico City and London on how to design a nightlife environment strategically. The "City Lab" drives the redevelopment of a night economy in Da Nang City through an integrated approach that includes transportation, activities and events, campaigns, public-private initiatives, technology, novel services, public policy, and security.

♦ **Read more** [SDG 8, 11, 17]

Output 3: Establishment of a global learning and scaling network

Over the last 15 years, the number of social enterprises, impact hubs, and innovation labs created in the public and private sectors have increased. We have also seen iterative approaches like design thinking and adaptive management become more widely adopted in the business and social spheres. While these efforts have generated meaningful learnings, their collective impact is restricted by a lack of scale and limited uptake in the places that need them the most. The Accelerator Lab Network was set up and equipped to fill in the gaps of previous efforts to forge collective impact rapidly.

We measure our progress in this area in four ways:

- Size and density of the network effects among the Accelerator Labs;
- Number of new models, approaches, and insights documented and disseminated throughout the Network;
- Engagement of the broader development ecosystem with shared learnings from the Accelerator Lab Network; and
- Degree of influence the learnings and methods of the Accelerator Lab Network have on the broader development ecosystem's discourse.

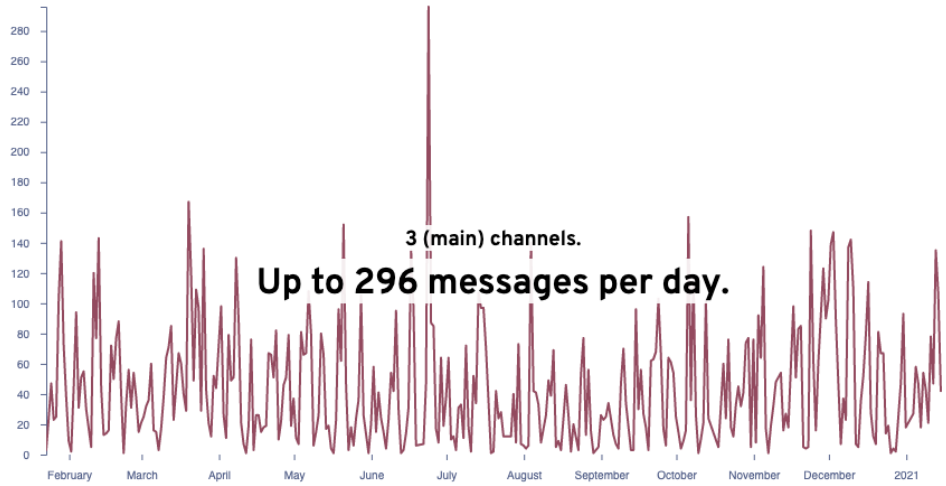
A dynamic (virtual) global learning network

One of the original intentions of establishing the UNDP Accelerator Labs Network was to provide space and time for collaboration and exchange of lessons and insights across sectors, borders, and time zones. Due to the pandemic, most physical exchanges were not possible, but we were able to create a **vibrant virtual learning network**. The global team hosts curated video calls weekly, providing all 200+ team members worldwide a space to share their work and learnings while also inviting guests from inside

and outside UNDP to deepen the Network's knowledge in specific thematic areas.

Additionally, Labs interact with each other through **self-emergent conversations and exchanges** in WhatsApp groups and more formal channels on Microsoft Teams. The global team, with the support of its data scientist, put together different social listening mechanisms to surface learnings across myriad diffuse conversations and identify patterns in a round-the-clock stream of information.

These interactions are heterogeneous, transcend regional boundaries, and promote thematically and geographically diverse conversations.



Data across the main 3 WhatsApp channels used to understand, support, and learn from the Network. In 2020, up to 296 messages were exchanged per day.

Influencing the development ecosystem's discourse

Simultaneously, the Accelerator Lab Network engages directly with the broader ecosystem of development. Our practice of "working out loud" and strong social media presence enable us to reach the general public effectively and around the clock.

The Accelerator Lab Network's global audience grew by a monthly average of **5% on Twitter** and a **60% on LinkedIn**. We also observed an increased **presence of leaders in the development and innovation sectors** following our accounts and amplifying our messages.

Various publications featured our work in 2020, showcasing the Accelerator Labs' ability to influence the development and innovation ecosystem. These international publications,

such as *MIT Sloan Management Review* and *Fast Company*, with audiences primarily in the private sector (traditionally thought to be the hotbed of innovation), profiled our work as exemplary for the public and private sector alike – helping to mainstream our efforts and build a cross-sector movement. This helps mainstream our efforts and build a cross-sector movement.

Also reflecting on network effects, we received numerous incoming collaboration requests and offers from universities, research centers, and other innovation institutions (described in Chapter 2, Partnerships).

UNDP Timor Leste powered by its Accelerator Lab worked with social media influencers to promote the game which reached 170k young people.

CoronaChampion Case Study
Knowledge transfer & ripple effects across the Network [SDG 3, 5]

Tapping into the trends in the **gaming and digital industries**, the UNDP Accelerator Labs in India, Morocco, Cabo Verde, and Timor-Leste saw an opportunity to address a major challenge of 2020: the spread of misinformation about COVID-19.

CoronaChampion 1.0: combatting misinformation playfully

Together with IPE Global Centre for Knowledge and Development, the UNDP **India** Accelerator Lab developed **CoronaChampion 1.0, a game aimed at debunking myths around COVID-19.** It enables active social media users, **youth** groups, community champions, students, and civil society organizations to access life-saving information on COVID-19.

The mobile game is **intuitive and educational**, thanks to its simple user design experience and engaging avatar, the CoronaChampion boy. Users are asked to answer true or false to ten statements about COVID-19 and receive immediate feedback with a brief educational explanation.

When the UNDP Accelerator Lab team in India shared the CoronaChampion initiative, the **learning network effect was immediate. Within a matter of weeks,** the UNDP Accelerator Lab teams in Morocco, Cabo Verde, and Timor-Leste adopted the idea and embedded it into their activities.

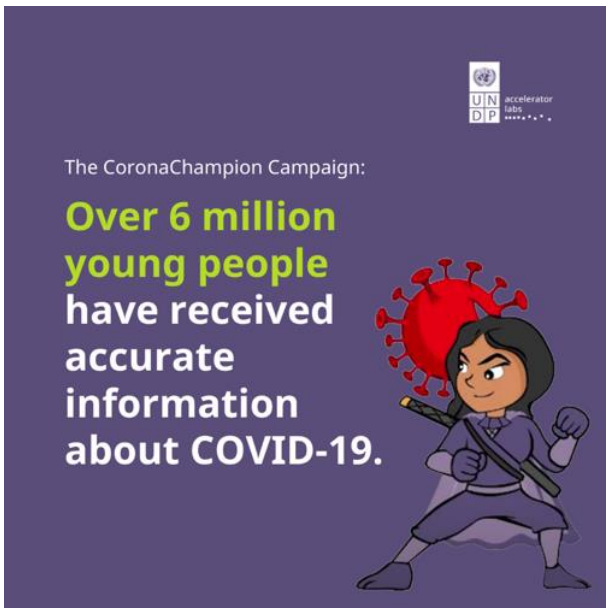
CoronaChampion Case Study

Adoption and adaptation in the Accelerator Lab Network and government

In **Morocco**, the team launched the CoronaChampion 1.0 game as part of a UNDP initiative called AKID2030 - COVID-19 (Arabic for "certainty"). The UNDP **Cabo Verde** Accelerator Lab deployed the game at schools and universities to reach more children and teenagers. In **Timor Leste**, the UNDP Accelerator Lab launched the game together with the Ministry of Health. Director-General Mrs. Odete Da Silva Viegas saw it as a way to provide life-saving information and help reduce panic and anxiety in communities. Since then, the Ministry of Health promoted the CoronaChampion 1.0 through their newly developed Whatsapp ChatBot, supported by Catalpa International, an international NGO. To date, the chatbot has been used by over 10,000 people in Timor Leste.

Addressing gender inequalities

To explore the **pandemic's disproportionate impacts on women and girls** affected by extreme poverty, precarious economic security, unpaid care duties, and domestic violence, the UNDP India Accelerator Lab decided to launch a second version of the game, CoronaChampion 2.0, this time with a female avatar. The team promoted CoronaChampion 2.0 on social media, which helped **reach 6 million young people** and expose them to accurate information in a fun way. In India specifically, over 18,000 people played the game, 11,000 of whom were under the age of 19.



Across its two versions, the game is now available in **12 languages**: English, French, Portuguese, Arabic, Tetum, Creole, French, and seven Indian languages (Hindi, Bangla, Tamil, Gujarati, Telugu, Marathi, and Malayalam).

♦ **Read more**

Highlight: Climate resilience

Engaging the eco-system to deepen knowledge [SDG 14]

Blue Economy for Green Islands

In 2020, the UNDP Accelerator Lab for Barbados and the Eastern Caribbean renewed its focus on the Blue Economy in the 'new normal.' With the pandemic severely disrupting tourism, **Small Island Developing States (SIDS) in the Eastern Caribbean region** such as Barbados, the British Virgin Islands, and Dominica had to adapt to a new reality.

How could the Accelerator Lab strengthen ocean-based economic sectors in a way that promotes the sustainable use of ocean resources? Throughout the year, the Lab focused on boosting a more **sustainable form of tourism** and supporting fisheries to generate income, **reduce waste**, and increase **renewable energy use**.

Image of a semi-autonomous underwater drone used to monitor and protect coral reefs in the Caribbean.

In search of sustainable solutions to build climate resilience

First, the team experimented with blockchain technology to improve the traceability of high quality and locally fished tuna throughout the supply chain. The Lab also trained fisherfolk on handling the practice.

To support fisheries, the Lab is experimenting with using **semi-autonomous underwater drones** combined with deep machine learning and modern artificial intelligence capabilities for monitoring and conservation of marine life such as coral reefs and associated species.

In renewables, UNDP Barbados and Eastern Caribbean experimented with the potential of **sargassum seaweed** and other organic waste to create **biofuel** for energy and heating generation. The team is exploring the potential to develop a commercial model based on the **conversion of local fish waste into energy**, which could reduce carbon emissions and increase access to clean power while lowering costs for producers and vendors.

In terms of waste management, the Lab is experimenting with sargassum seaweed and local starch food waste to create non-food bioplastic packaging. The Accelerator Lab tests various crop sources for **bioplastics** that could reduce the negative impacts of sargassum on the tourism and fishery industries and minimize marine pollution from plastic packaging.

♦ **Read more**

Highlight: Zero-waste future and Collective Intelligence

Disseminating a new approach [SDG 12]

Waste management is a far-reaching problem embedded in, and constituting, a complex system. It is influenced by a web of interactions between citizens, informal waste collectors, municipal disposal services, and private companies and is affected by various environmental, social, and economic factors.

In 2020, **13 Accelerator Labs identified a zero-waste future as a key priority and used Collective Intelligence** to help solve it. Collective Intelligence design is a suite of methods that aims to mobilize both human and machine intelligence more effectively. As a practice, it brings together citizen participation, big data, and digital technologies like AI to solve complex problems.

The UNDP Viet Nam Accelerator Lab's blog following a day in the life of a local waste picker was selected as the Network's top story and 'working out loud' blog in 2020.

Engaging with waste workers in Viet Nam

The UNDP Accelerator Lab in Viet Nam recruited nine waste workers and attached **GPS trackers to their bicycles** to map their routes in two districts in Da Nang City. The tracker's data created 39 maps that helped build the most comprehensive and up-to-date overview of waste management infrastructure in the surveyed areas. The team also conducted interviews with the informal workers to capture their concerns and potential vulnerabilities in the waste management system. Insights from these interviews helped them to interpret the patterns in the data. The data revealed that waste workers covered official dumpsites, as well as smaller alleyways and streets along roadsides that are not served by municipal collection services.

♦ **Read more (link to the Accelerator Labs' top blog of the year!)**

Tackling air pollution in Ukraine

In Ukraine, **open burning of waste** is a widespread practice with deep roots in the country's culture and agricultural economy. To understand the scale and locations of open burning across the country, UNDP Ukraine's Accelerator Lab created a near real-time map of open burning countrywide. The team used untraditional data sources like **satellite images, GIS, and citizen-generated reports** of fires to produce an interactive dashboard. They worked together with community groups from across the country and local policymakers to interpret and discuss the data over a series of ten online meetings. The Lab also mapped over 367 individuals and organizations already composting waste as an alternative to open burning – demonstrating that **local solutions already exist.**

♦ **Read more**

Citizen-generated data make the invisible visible in Lao PDR

The UNDP Accelerator Lab in Lao PDR used a combination of methods, including GIS mapping with satellite data, deliberation, co-creation, and participatory mapping in communities to **create detailed maps of open burning in three villages near the capital of Vientiane.** In these locations, open burning was taking place despite the municipality's provision of waste management services.

Chapter 2
Partnerships: the core of our network

Building and strengthening alliances is the core of UNDP and the Accelerator Labs' model. As the Network operated in full swing by early 2020, we focused on exploring and nurturing a growing range of partnerships at the global, national, and local levels.

This chapter presents an overview of the strategic partners we engaged with in 2020 and showcases how these relationships help the Accelerator Labs Network expand its reach and potential. We will zoom in on key partnerships at a global level, with the private sector, within the UN family, and those led by UNDP Country Offices and their Accelerator Lab teams.

Highlight: Working across the UN

In 2020, the UNDP Accelerator Labs initiated a range of partnerships within the UN family. UNDP Country Offices via their Accelerator Labs have reported partnerships with UNICEF, FAO, UNFPA, WFP, UNEP, World Bank, IFAD, UNESCO, UNRCO, UNIDO, UN-Habitat, UNSSC, UNFCCC, UNHCR, IOM, UN Pulse Lab, WHO, UNV, ITU, UNDESA, and UN Global Pulse. Highlights include:

UNICEF-UNDP Big Think Challenge in South Africa

UNICEF and UNDP teamed up to find innovative solutions to create greater impact with the "Big Think Challenge." Selected from nearly 200 entries by a panel of leaders from the UN and civil society, five winners received a financial reward of **US$200,000** to progress their projects. One of the awardees was UNDP **South Africa**, powered by its Accelerator Lab, in partnership with Zlto, a platform that uses **blockchain technology to increase engagement amongst youth**, track positive behavior via live dashboards, and encourage positive behavior through innovative rewards systems.

Zlto workshop with Cape Town based app developers in March 2020. ©DJReadyD

As COVID-19 hit, Zlto and the Accelerator Lab quickly adapted this innovation towards stopping the virus' spread with the "Stay Home, Keep Safe" program. This initiative rewarded positive behavior (e.g., handwashing, care for family) with retail store credits and provided free courses on health, hygiene, life-skills, and money management. This **award-winning app reached over 2 million young South Africans** and aims to reach another 100,000 young people.

♦ Read more [SDG 3]

Working across the UN

Female-led solutions to COVID-19 in India

As part of UNDP India's engagement with the SDG Finance team, the Accelerator Lab tapped into the existing partnership with UN-NITI Aayog Investor Consortium for Women Entrepreneurs to help women and their solutions access impact by connecting them with investors, venture capitalists, and mentors.

The Lab extended its focus on female-led solutions by partnering with UNDP Innovative Finance Team and UN Women to convene a "COVID-19 Business Response Webinar Series for Women Entrepreneurs." The solutions developed by the entrepreneurs ranged from solar-powered biomedical waste incinerators to the mapping of the supply chain of essential medical supplies via Artificial Intelligence.

♦ **Read more [SDG 5, 8, 10, 11]**

Empowering gender-based violence response in Mexico

As quarantine began in Mexico, "Línea Mujeres," an emergency line for **female domestic violence victims**, received 1,900 calls in March 2020 alone, the highest rate since 2016. This fact triggered UNDP Mexico to take action.

Entrance of one of the LUNA centers in Mexico that welcomes and supports female victims of domestic violence.

The UNDP Mexico Accelerator Lab and gender unit teams partnered with Mexico City's Ministry of Women, UN Women, and Mexico's National University (UNAM) Civic Innovation Lab, including Dr. Saiph Savage, one of MIT Technology Review's 35 Innovators under 35, to develop a **faster and more data-driven response for women seeking refuge** from domestic violence.

They pooled their skills and resources to build real-time data and dashboards into Mexico's 27 LUNA centers, one-stop-shops for women victims of violence, which help the Centers and the Ministry of Women make more informed decisions.

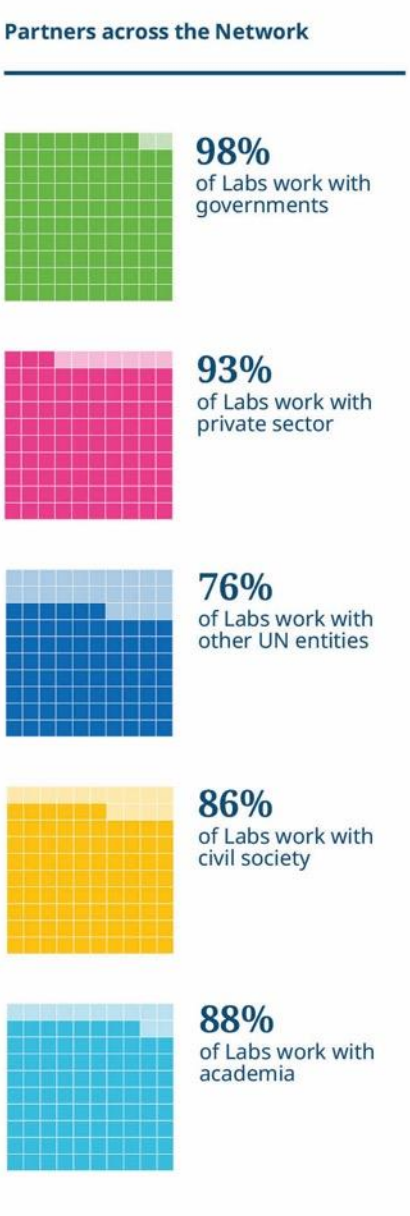
♦**Read more about UNAM's Civic Innovation Lab, watch Dr. Saiph Savage, and read about this initiative [SDG 5]**

Highlight: Local partnerships

Turning to the country level, the UNDP Accelerator Labs established **520 partnerships in 2020** with 5 main categories of organizations.

- 98% of the Labs partnered with governments;
- 93% with private sector actors;
- 86% with civil society organizations;
- 88% with academia; and
- 76% Labs partnered with other United Nations entities

Here we present a selection of highlights from these local partnerships.



Nature-inspired innovation in Ukraine

UNDP **Ukraine**, powered by its Accelerator Lab, together with the US-based Biomimicry Institute and four Ukrainian NGOs, organized a national selection round for the **Global Biomimicry Challenge**. A competition for students and professionals to address global issues with nature-inspired solutions.

The three finalists from Ukraine, ecoPod, DevoHome, and Natural Surfaces, received support from mentors to further develop their proposals. As a result, DevoHome was able to successfully prototype hemp fur, a plant-based fabric that could become an alternative to animal and synthetic furs, a sector gaining traction in Ukraine. Demonstrating the "network effect" of UNDP Accelerator Labs, this inspired the UNDP **Tunisia** Accelerator Lab to use biomimicry to boost citizen participation.

♦ **Read more on UNDP Ukraine, and UNDP Tunisia [SDG 9, 12, 13]**

Business continuity via e-commerce in Uganda

In Uganda, 80% of the labor force works in the informal sector, in which women and youth are over-represented. Many of these farmers and sellers were heavily impacted by the pandemic, unable to earn an income due to confinement. Through its Accelerator Lab, UNDP **Uganda** partnered with leading **online shopping platform Jumia Food Uganda** to enable 2,000 vendors to sell their produce online.

This partnership rallied actors from the government, such as the Ministry of Trade, Industry, and Cooperatives, to build a regulatory framework and policy for e-commerce to facilitate a conducive working environment, facilitating scale-up of e-commerce platforms and adoption by small and large businesses. This partnership has also led to other private sector partners, such as ABSA Bank, broadening digital payment channels and supporting MSMEs with business development services and nano and micro-financing.

♦ **Read more [SDG 1, 2, 8]**

Highlight: Knowledge partners

The Accelerator Lab Network works through knowledge partners that contribute technical expertise, access to data and research, and support to the ongoing iteration and improvement of our model.

Knowledge is power

We deepened our partnership with **Nesta's Center for Collective Intelligence Design** in 2020 to respond to a growing number of UNDP Accelerator Labs working in the area of waste management. Nesta delivered a global learning track for 13 Accelerator Labs to understand and apply collective intelligence to mapping waste systems, including informal parts of the system, and move towards collective action (see Chapter 1, output 3).

We also advanced the partnership with the **Grassroots Innovation Augmentation Network**, known as the **Honeybee Network**, in India. Core activities include delivering a Massive Open Online Course ("MOOC") on grassroots innovations, designed to build skills among Heads of Solutions Mapping, increased network learning, and beginning of codification of Solutions Mapping as a programmatic practice.

Furthermore, UNDP Accelerator Labs strengthened the partnership with the **MIT Lab** convened by Professor Eric von Hippel. This knowledge partnership contributes rich thinking on bottom-up innovation to UNDP Accelerator Labs and has opened doors to numerous other exchanges.

Other partnerships with academic partners continue to advance. These include:

- **Qatar Computing Research Institute (QCRI)** (digital data innovation, analysis and skills building): UNDP and QCRI have scoped out curricula for tapping into new data sources using computational social science techniques. The planned set of courses include what can be done with social media data, satelitte imagery, mobile phone data and other sources. It also covers ethics and data bias in modelling algorithms and is planned for delivery in the second half of 2021.
- **London School of Economics** (capstone consultancy focusing on innovation policy)
- **Harvard Business School** (potential case study on the UNDP Accelerator Lab Network)
- **Columbia University School of International and Public Affairs** (design of a baseline survey for government innovation, following the scaling strategy delivered in 2020)
- **UK Research and Innovation** (filling knowledge and data gaps from the Labs with available experts in academia).

Launching the Japan Innovation Challenge

One of the winning projects is led by the UNDP Accelerator Lab team in India and focuses on blockchain for spices.

In 2020, the Accelerator Labs global team, together with the Japan Unit of UNDP, designed and launched the "Japan SDGs Innovation Challenge." Selected Labs were **matched with Japanese partners** on areas around **resilience**, generating scalable solutions for **waste management**, **transformation of public spaces**, and growth and productivity in the **agricultural sector**. Through the SDG Holistic Innovation Platform (SHIP), an open innovation platform run by UNDP in collaboration with the Japan Innovation Network (JIN), Japanese partners were identified, helping eliminate barriers to entry for companies that would typically not work with UNDP.

The winners, **NEC Corporation India, Japan Manned Space Systems Corporation,** and **Sotonoba** were selected through a competitive process, for a prize of US$ 40,000 and will work with the selected Accelerator Labs through Spring 2021.

Highlight: Private sector partnerships

Building dynamism through private sector partnerships

UNDP Accelerator Labs proactively sought to expand its network of private sector partners in 2020 to bring in cutting-edge insights from innovation communities and entrepreneurs, the energy and dynamism of new ways of working, and expanded resources.

Combatting misinformation with TED

UNDP has an active interest in combatting misinformation, a need that has become more pressing with citizens' growing mistrust of governments and mainstream media. To support this work, UNDP Accelerator Labs forged a new partnership with TED, the non-profit organization known for curating global thought-leadership events. The partnership enables the **TED Healthy Internet Project** to accelerate testing and generate actionable data around a prototype tool to detect online misinformation. The UNDP Accelerator Labs in **Iraq, Lebanon, Morocco, Sudan, Namibia, Kenya, Togo,** and **Argentina** will facilitate testing of the tool through their network of partners.

Reimagining the Blue Economy with ACTAI

UNDP Accelerator Labs joined forces with the ACTAI Global community of entrepreneurs by co-hosting the Blue Economy Roundtable, focused on entrepreneurial opportunities for tomorrow's blue economy. The roundtable dove into work on plastic waste management by the UNDP **Pakistan** Accelerator Lab and innovative solutions for conservation mapped by the UNDP **Barbados and Eastern Caribbean** Accelerator Lab. The roundtable

generated substantial interest in the UNDP Accelerator Labs from the 100+ guests, most of whom represented entrepreneurship and venture capital communities. Participants have since signed up as mentors for the Labs, while ACTAI and UNDP Accelerator Labs plan to run future events in this format. The event also led to several private sector fundraising leads, helping to build out the Accelerator Labs pipeline for early 2021.

"for Tomorrow" with Hyundai

The Accelerator Labs global team was approached by **Hyundai Motor Company** in late 2019 to partner on the company's efforts to help achieve the Global Goals, especially around SDG 11 on Sustainable Cities and Communities. In September 2020, we signed an in-kind pro-bono agreement with an **estimated value of US$ 4 million**. It started with a multi-year commitment to build, promote, and maintain "for Tomorrow," a breakthrough open innovation platform to build a global community of grassroots innovators and advance their sustainable solutions.

♦ **Explore the solutions and discover innovators like Bonita.**

In a virtual ceremony, Hyundai Motor Company Chief Executive Officer Euisun Chung and UNDP Administrator Achim Steiner announced this global partnership for sustainability. They were joined by actress, activist, and social impact entrepreneur Jessica Alba and British journalist Lucy Siegle, who moderated the conversation. ♦ **Watch the signature ceremony**

Finally, "for Tomorrow" helps create awareness around grassroots innovation thanks to the reach of global media such as Fast Company or **Jessica Alba's social media reach** (18 million followers).

Innovative finance

While funded entirely by public sector donors to date, UNDP Accelerator Labs initiated a **private sector resource mobilization strategy** in 2020. Through Q2 and Q3, the global team created and refined the strategy with input from UNDP Administrator Achim Steiner, resulting in an approach that prioritizes **innovative philanthropists** who align closely with UNDP values and can make high-value contributions. Implementation began in Q4 with outreach to top donors and will continue through 2021, aiming to raise US$10-20 million. In pursuing this strategy, UNDP Accelerator Labs is helping to create new organizational processes for managing private-sector donors, both in terms of risk assessment and receipt and management of non-traditional revenue sources. These systems will allow UNDP to capitalize on trends towards **diversified funding opportunities** in development and contribute to the thematic embrace of innovation throughout the organization.

Chapter 3
Closing remarks

2020 was a year like no other. The Accelerator Lab Network, supported by its founding investors Germany and Qatar, has been a key pillar in accelerating the organization's learning on how to advance sustainable development during protracted uncertainty.

The Network adapted to an uncertain and fast changing year and delivered results towards outcomes agreed in the Project Document. In this report, we describe, through several examples, **how #NextGenUNDP's Accelerator Lab Network came to the fore in UNDP's pandemic prevention, recovery, and response**. The Network generated a range of innovative, frugal, and scalable solutions and helped change how we do development by learning fast and tapping into new data sources such as geospatial, social media, and citizen data.

Our work included a diverse range of exploratory learning activities, from helping to roll out robots in COVID-19 treatment centers in Rwanda to supporting a "3D Community" in Tanzania to design, produce and distribute personal protective equipment to health workers. By introducing innovation methods such as participatory design, futures analysis, and prototyping, the UNDP Accelerator Labs are working with partners to help create understanding of complex challenges.

” This is the time for an SDG push – for a true Decade of Action that delivers the future of development. UNDP is committed to it.”

Achim Steiner

UNDP Administrator

We also focused on diversifying our partnership portfolio. In 2021, we will work with UNDP’s Bureau for External Relations and Advocacy (BERA) to systematically organize our outreach and make it available for Country Offices to support partnerships across UNDP.

The UNDP Accelerator Labs Network continues to grow. We launched 32 Labs in the first two months of 2021. The Network now covers 116 countries, including 79% of Least Developed and Low-Income countries and 66% of Small Island Developing States.
In 2021, the UNDP Accelerator Labs will focus on:

- Maturation of the new Labs and creating models for sustainability
- Protoyping a network learning model as a contribution to innovation in knowledge management
- Deepening research and development related to informal sectors
- Exploring demand for innovation policy advisory services
- Embedding and mainstreaming new practices in UNDP programming
- Codifying the portfolio approach to move towards organizational learning and systems transformation
- Conducting a mid-term evaluation that will inform innovation in monitoring and evaluation.

This work would not be possible without the support of our founding investors and UNDP Core partners.

UNDP accelerator labs

Co-building the Accelerator Labs as a joint venture with:

german cooperation
DEUTSCHE ZUSAMMENARBEIT

QATAR FUND FOR DEVELOPMENT
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The UNDP Accelerator Labs are thankful to our founding investors: the Federal Republic of Germany and the Qatar Fund for Development. Additional support is provided by the Ministero dell'Ambiente e della Tutela del Territorio e del Mare. We are actively looking for more partners to enable the evolution of the UNDP Accelerator Lab Network.