The UNDP Accelerator Labs enter a year of maturity: let a thousand flowers bloom!

Annual report 2022

UNDP accelerator labs

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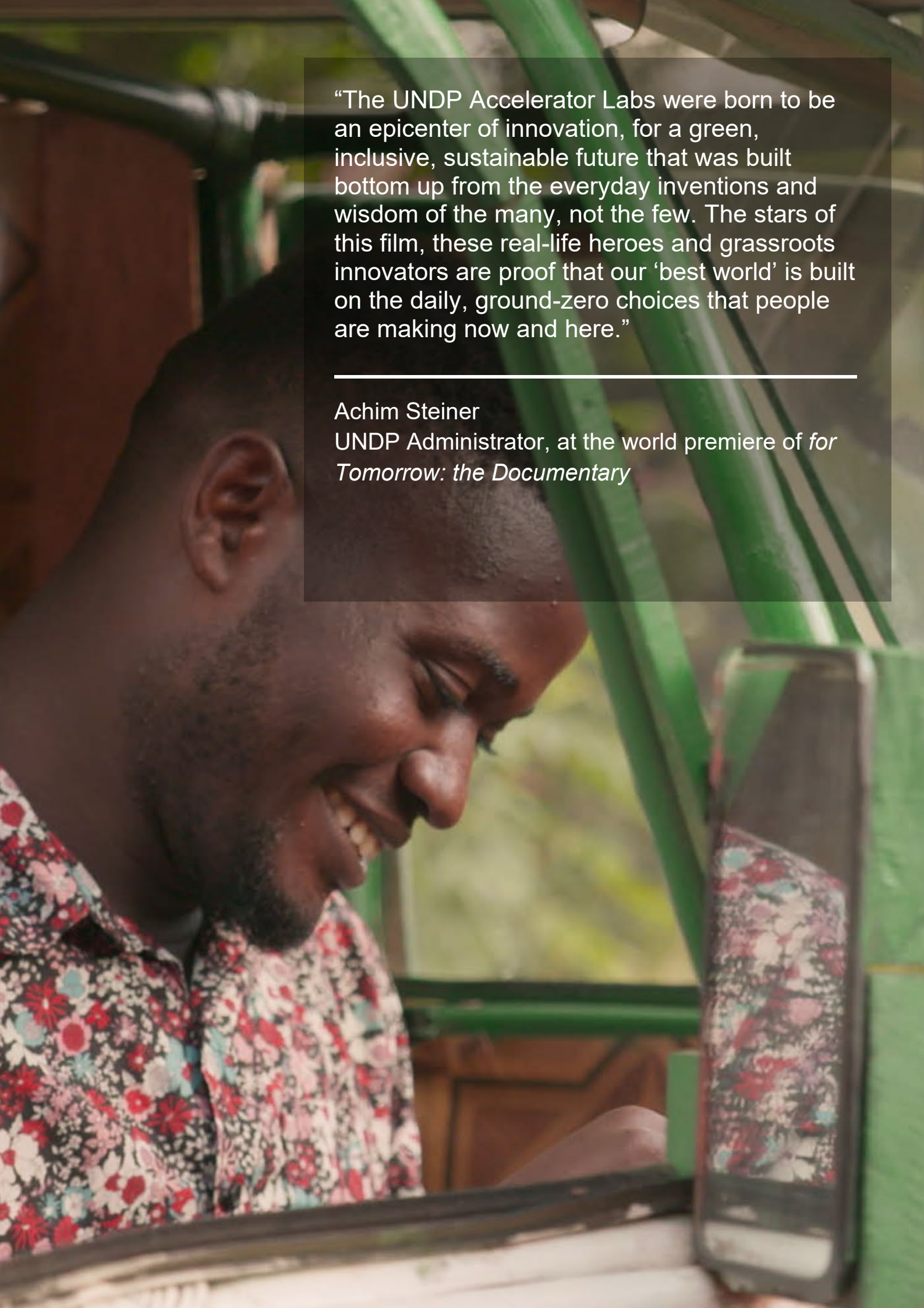

“The UNDP Accelerator Labs were born to be an epicenter of innovation, for a green, inclusive, sustainable future that was built bottom up from the everyday inventions and wisdom of the many, not the few. The stars of this film, these real-life heroes and grassroots innovators are proof that our ‘best world’ is built on the daily, ground-zero choices that people are making now and here.”

Achim Steiner
UNDP Administrator, at the world premiere of *for Tomorrow: the Documentary*

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A Network in Motion The Accelerator Lab Network at a Glance

The UNDP Accelerator Labs were designed as an agile and dynamic Network to allow communication and information transfer between 91 Accelerator Labs in 115 countries, and with the global innovation ecosystem, UNDP as a whole, and thousands of partners including grassroots innovators and their communities. The accumulated knowledge of this Network creates new pathways to the solutions that hold the key to sustainable development problems.

What it looked like and how it unfolded last year will be illuminated in this annual report: **The UNDP Accelerator Labs enter a year of maturity: let a thousand flowers bloom!**

With thanks to our founding investors, the **Federal Ministry for Economic Cooperation and Development of Germany (BMZ)**, and the **Qatar Fund for Development (QFFD)**, and the support of partners at core for UNDP, including the Italian Ministry of Ecological Transition as action partner and the Japan Cabinet, the Accelerator Labs are now a mature Network with visible, tangible results.

The Accelerator Labs were built in 2019 with the launch of 60 Labs, followed by an additional 31 -- an incredibly fast construction -- resulting in an agile and ready-to-work force of **273 social innovation experts**, bringing unique skillsets to bear in 115 countries.

From **mapping local solutions,** to **exploring** diverse sources of data and signals of change to **experimenting** to find out what works and what doesn't in sustainable development, the Accelerator Labs are **constantly in motion**. The Labs are always learning new ways to meet the most challenging sustainable development problems and helping to plot a course through them. They inform government policy makers, development practitioners and community leaders to make better decisions that can benefit all, leaving no one behind.

To date, UNDP Accelerator Labs have surfaced over **3,200 grassroots-led solutions worldwide covering all 17 SDGs**, addressing issues such as food security, circular economies, energy poverty and the impact of climate change on agriculture.

2022 saw progress in evolving the Labs as a core part of the front-line renewal function of UNDP. The independent Midterm Evaluation validated the success of the Accelerator Labs in their efforts to model how UNDP can "reimagine development." The Evaluation also explored how continuous exploration and experimentation would lead to a greater capacity for organizational learning and renewal, responsiveness and stakeholder engagement.

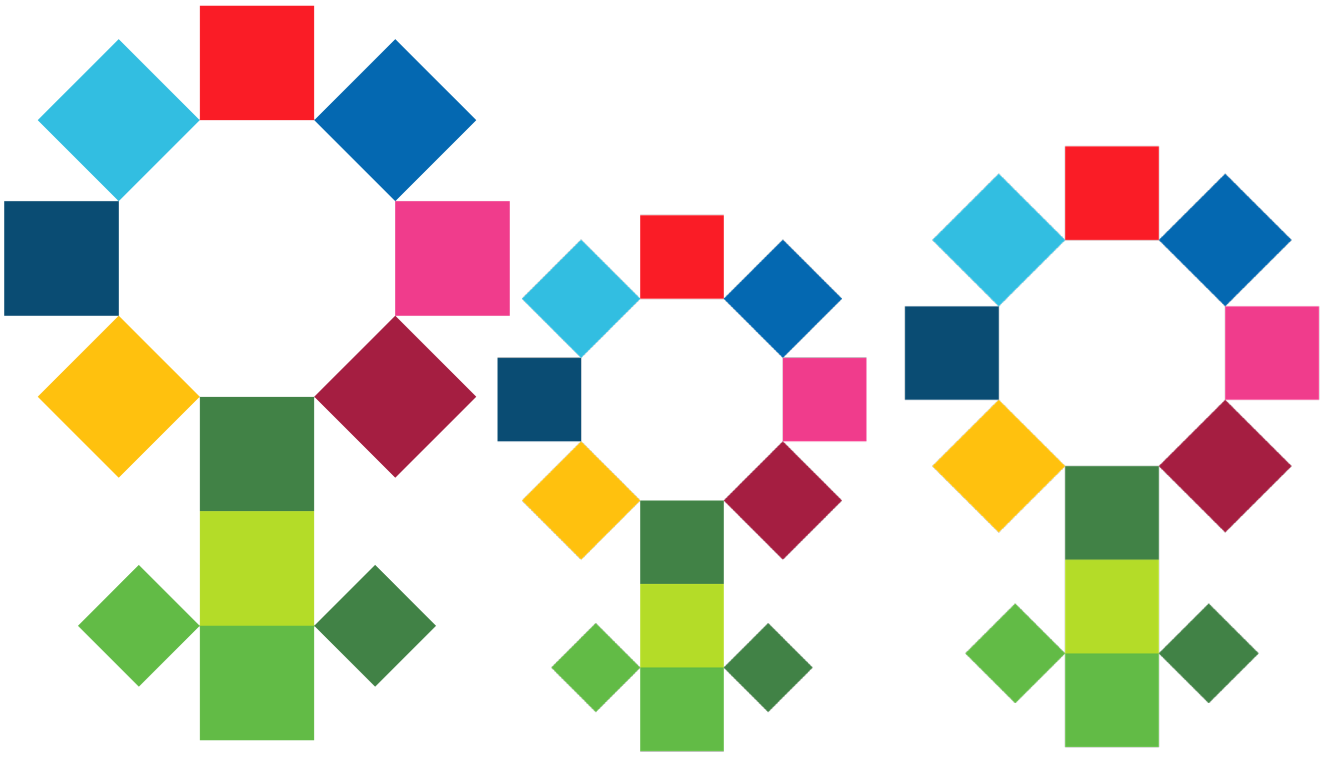
A year later, the Labs have now triggered a **UNDP-wide demand for continuous Research and Development (R&D)** to respond to ever-evolving demands of global uncertainty, and this is the direction of future iterations of the Lab Network. A pattern of integration is emerging: **the Accelerator Labs design proof-of-concept experiments**, and work as a core part of UNDP to progress, expand and leverage resources, building out new niches, responding to emerging issues and informing government strategies in the Global South.

The report follows the structure of the results framework established at the design phase.
In **Chapter 1**, the Report covers Output 1: *increasing capability for scanning, sensemaking, and experimentation*, with strong examples of this work, case studies and profiles. **Chapter 2** presents Output 2 on *scaling new sustainable development solutions,* with digital solutions and public sector innovation. In **Chapter 3**, you will read about Output 3, *the establishment of a global learning and scaling network,* discussing learning in the ecosystem the Labs have built, and how they share out that learning, with a deep dive on informality. **Chapter 4** is a place for *partnerships* to shine. The Accelerator Labs develop strong on-the-ground partnerships and continue to ally with new partners and to bring on board unusual actors. In **Chapter 5,** advocacy and communications achievements over the past year are presented, featuring the global events surrounding the launch of *for Tomorrow: the Documentary*. The Report concludes in **Chapter 6** with a look ahead towards building a global, public R&D ecosystem to rapidly accelerate traction towards the 2030 agenda. Our **financials** are attached at the end of the report.

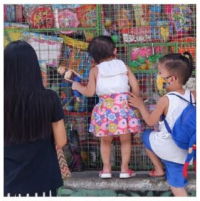
A race against time: how are the Accelerator Labs contributing to the Global Goals?

With less than seven years to the deadline for the Global Goals achievement, there is a clear need for drastic systemic changes. This is the time to unleash learning through continuous exploration and experimentation so we can close the knowledge gap on what it will take to achieve the Sustainable Development Goals.

The Accelerator Labs are working to accelerate learning across all SDGs. Over the past three years, experiments undertaken by the Labs which address Affordable and Clean Energy (SDG7), Industry, Innovation and Infrastructure (SDG9) and Peace, Justice and Strong Institutions (SDG16) have significantly increased. There is also an increase in the diversity of SDGs addressed by each Lab.



How the UNDP Accelerator Labs are advancing learning on what works to achieve the Sustainable Development Goals



20
Labs worked toward this SDG
(28% of the Network)

The **UNDP Philippines Accelerator Lab** worked with the Zero Extreme Poverty Coalition to devise new approaches to poverty reduction that involve local communities and take their needs and desires into account. This collaboration aims to make national efforts more effective in reducing poverty at the local level.

8
Labs worked toward this SDG
(11% of the Network)

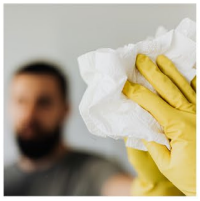
The **UNDP Ukraine Accelerator Lab** explored, experimented and took to scale five different initiatives in Ukrainian cities that enhance food security and generate co-benefits, such as maintaining social cohesion and supporting mental health during the war.

11
Labs worked toward this SDG
(15% of the Network)

The UNDP Malaysia Accelerator Lab supported the government in designing its health reform process using the methodology of foresight to future-proof healthcare in the country.

13
Labs worked toward this SDG
(18% of the Network)

The **UNDP Mongolia Accelerator Lab** tested and validated the best ways to improve digital access and skills in vulnerable populations with a focus on persons with a disability and the elderly. In 2022, online and in-person campaigns reached 200,000 people.



23
Labs worked toward this SDG
(32% of the Network)

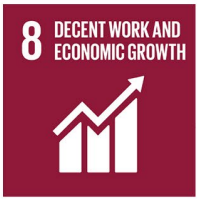
The **UNDP Lebanon Accelerator Lab** worked on increasing women's access to power in both public and private spheres with initiatives such as a campaign to influence men's behavior to take part in household labor.

7
Labs worked toward this SDG
(10% of the Network)

The **UNDP North Macedonia Lab** helped strengthen rural water management by tapping into the potential of collective infrastructure that is built, financed and managed by local villages, leading to a more sustainable way of getting access to potable water in remote areas.

20
Labs worked toward this SDG
(22% of the Network)

UNDP, powered by its Accelerator Labs and the Sustainable Energy Hub, uncovered the ability of grassroots innovation to address energy poverty. Over four months, the Network discovered 359 energy solutions from across different demographics and energy sources, with potential to be shared and deployed across regions.



41
Labs worked toward this SDG
(58% of the Network)

The **UNDP Iraq Accelerator Lab** is helping to re-imagine citizen relationships with government by analyzing data from almost 80,000 tweets to glean insights into political instability.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

41
Labs worked toward this SDG
(58% of the Network)

With the assistance of the **UNDP Uganda Accelerator Lab**, the Ministry of Information Communications and Technology is implementing a "Digital Transformation Roadmap" to promote digitalization, innovation and smart cities to transform public infrastructure.

10 REDUCED INEQUALITIES

29
Labs worked toward this SDG
(41% of the Network)

The **UNDP Eswatini Accelerator Lab** is working with partners to develop an affordable and accessible certification scheme for local agro-processed products. This will help small businesses grow and access export markets by overcoming the high cost of existing certifications.

11 SUSTAINABLE CITIES AND COMMUNITIES

40
Labs worked toward this SDG
(56% of the Network)

The **UNDP Turkey Accelerator Lab** is helping to change the top-down approach to designing urban space through their "tactical urbanism initiative" which increases participatory planning, brings down costs and encourages sustainable green spaces.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

21
Labs worked toward this SDG
(30% of the Network)

The **UNDP Fiji Accelerator Lab** team is testing a combination of solutions, including using TikTok influencers, to raise awareness and shift behaviors toward creating the conditions for a circular economy of plastics in the island.

13 CLIMATE ACTION

21
Labs worked toward this SDG
(30% of the Network)

To ignite climate action in **Bosnia and Herzegovina**, the **UNDP Accelerator Lab** designed a carbon footprint calculator and digital marketplace that enables public companies and individuals to offset emissions.

14 LIFE BELOW WATER

5
Labs worked toward this SDG
(7% of the Network)

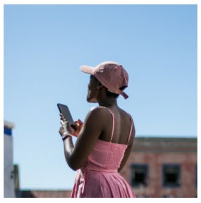
The **UNDP South Africa Accelerator Lab** is working with the Japanese Seaweed Resource Institute to transform polluting seaweed into alternative livelihood options.

15 LIFE ON LAND

6
Labs worked toward this SDG
(8% of the Network)

Along with FAO and the Ministry of Agriculture, the **UNDP Zimbabwe Accelerator Lab** is helping to secure the nation's food security by exploring means to control Quelea birds, which cause an estimated 95 percent of wheat damage in Zimbabwe.

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



23
Labs worked toward this SDG
(32% of the Network)

The **UNDP Democratic Republic of Congo Accelerator Lab** is contributing to justice reform by testing digital tools and including regular users like judges and clerks in the pilot process. Digitalization can make the justice system more efficient and transparent.

17 PARTNERSHIPS FOR THE GOALS

91
Labs worked toward this SDG
(100% of the Network)

From the Japan's NEC Corporation, to the herbalist vendors of *Primero de Mayo* in Ecuador, to UNICEF in Tanzania, all **91 Accelerator Labs** are bringing along a broad coalition of partners to contribute to the achievement of the SDGs.

"...significant data gaps still exist in terms of geographic coverage, timeliness and level of disaggregation, making it difficult to fully comprehend the pace of progress towards the realization of the 2030 Agenda, differences across regions and who is being left behind." The Sustainable Development Goals Report, 2022, United Nations

A niche for innovation within the SDGs

How do the UNDP Accelerator Labs add value in the quest to achieve the Sustainable Development Goals? They fill data gaps by exploring new sources of data. They shed light on emerging bottlenecks and source innovations that create triple wins.

1. The Labs help fill data gaps in SDG monitoring

For eight of the 17 SDGs, internationally comparable data from 2015 or later is dramatically missing[1]. Tapping into new and unusual data sources is part and parcel of how the UNDP Accelerator Lab Network operates. Present in 115 developing countries, the Labs are using **45 new kinds of data sources** such as satellite or citizen data, and are in turn producing new, timely and inclusive data that help monitor progress on the SDGs. This helps fill data gaps in the Global South to inform where to best invest to support the 2030 Agenda.

→ Read "Data that tells stories"

Take the recycling rates (SDG Indicator 12.5.1), where currently available data for recycling rates globally is limited. **UNDP Tanzania, powered by its Accelerator Lab**, is producing new data through mobile surveys to measure where recycling is happening and where it is missing in Mwanza, Tanzania's second largest city and one of the fastest developing urban centers in sub-Saharan Africa.

On SDG 16, often recognized as one of the most difficult goals to monitor, the Labs are experimenting with ways to define and measure what a good public service looks like for its citizens. In 2022, 17 UNDP Accelerator Labs explored how public service innovation can help increase efficiency of public services. For example, the **UNDP Paraguay Accelerator Lab**, in partnership with the Ministry of Health released a study to identify high-performing health centers in the country and understand what constitutes a good public health service for its citizens.

The Labs see an opportunity in using these new data sources for the real-time monitoring of the environment which would help close a gap where 68 percent of environmental SDG Indicators lack data[2]. Imagine bike sensors that can detect the quality of the air as one cycles in a city, or small devices that can be used by children to monitor rainfall and predict floods in remote areas. The Labs are experimenting with these new participatory ways to generate real-time data which are being taken to scale and are feeding evidence-based public policies.

→ Read the deep dive on citizen science in Argentina

[1] United Nations, 2022

[2] UNEP

As the process of data collection was dramatically slowed during the pandemic, with 57 percent of countries having disrupted their face-to-face data collection as of May[3] 2021, the need to leverage digital tools for timely and accurate data collection has never been more acute. The Accelerator Labs are uniquely positioned to power the transition towards digital data collection, and make it stick!

For example, the Lab team of **UNDP Uruguay** tapped into Twitter data to analyze the acceptance of COVID-19 vaccinations among the Uruguayan population, providing the Ministry of Health with actionable data to measure the I mpact of vaccination campaigns in real time.

2. The Labs pinpoint emerging bottlenecks that are in the way of achieving the SDGs

Some of the roadblocks on the path to the 2030 Agenda are known. The COVID-19 pandemic, the rise of intersecting crises and the full-fledged climate emergency have a destructive impact on the achievement of the Sustainable Development Goals. Equally important are emerging trends that are complex in nature, hard to grasp on a global scale and off the radar of most international institutions.

The UNDP Accelerator Labs are "**a network of ecosystems** that are individually effective yet collectively even more powerful to address large-scale challenges using insights gained from localized innovation and expertise," according to Elizabeth J. Altman and Frank Nagle in the MIT Sloane Management Review 2020.

Every day, the 91 Accelerator Labs, covering 115 countries including 77 percent of Least Developed Countries and 66 percent of Small Island Developing States, scan for signals of change and collect insights that are context specific. They share intelligence across all continents in a matter of hours to confirm emerging signals and they advance knowledge by analyzing how these signals are woven in a complex web of interconnected development challenges.

Informality and misinformation are two patterns that emerged from the Lab's work in 2022. They merit a much closer look from the international development community as they undermine the assumption behind the elimination of extreme poverty, a key pillar of the SDGs.

With more than two billion informal workers worldwide and about 85 percent of the economy in Africa considered **informal**[4], a vast part of the economy in the Global South remains under the radar of most international cooperation initiatives. This calls for a rethink of the traditional approach to tackling poverty. What if this popular economy could be seen as an asset rather than a problem? By flipping this issue on its head, could we make strides on Global Goal #1 (No poverty)?

Through ethnographic knowledge and partnerships with the informal sector itself, the Accelerator Labs are helping UNDP open new conversations within the UN system – notably with ILO – to imagine new pathways to formality. The Labs are exploring hybrid models where formalization is not the only way forward and supporting policy makers to realize the potential of the innovation and entrepreneurship ecosystem in developing countries.

→ Read the deep dive on informality

Another major obstacle on the roadmap to 2030 is the quick rise of **misinformation, disinformation** and hate speech online. With the intent to tap into the collective intelligence of online users the UNDP Accelerator Labs partnered with the Healthy Internet Project (HIP), incubated by TED, and launched a browser extension that allows any Google Chrome user to flag abusive content online. UNDP Accelerator Lab teams in Argentina, Kenya, Lebanon, Namibia and Sudan helped test this tool and the concept of crowdsourcing online moderation through a series of experiments and pilot programs. The UNDP Accelerator Labs will continue to explore the topic of increasing polarization in 2023 together with UNDP's Human Development Report Office.

→ Read how new and unusual partners help us learn from the edge

[4] ILO, 2018

3. The Labs source innovations that create wins across economic, environmental and social aspects of the SDGs

After nearly three years in activity and running 400+ fast and agile learning challenges, the UNDP Accelerator Labs are reaching a state of maturity. Building on all the intelligence garnered along the way, the Network is now starting to zoom out to observe which **innovation method among the top 31 used by the Labs and their partners is best suited to tackle which specific SDGs**. Generated from action, these methodological insights are shared publicly to inspire other actors in development and innovation ecosystems.

→ Read how the Labs are matching the SDGs with new ways of working

In addition to using innovation methods, the Labs surface solutions that are innovative in nature, very often off the radar of most international top-down organizations and have the potential to address multiple SDGs at once. By virtue of looking for existing solutions that are bottom-up, scanning for early signals of change and partnering with unusual partners that are driven by action and anchored in specific contexts in the Global South, the Labs are pointing towards cutting-edge sustainable development solutions as part of a Research and Development pipeline.

Take **seaweed**. It is invading coastlines around the world and tends to be overlooked. Yet it can offer alternative livelihood options, increase health and food security (brown seaweeds are showing promise for the prevention and treatment of Alzheimer's disease and other neurodegenerative diseases), support adaptation strategies to the changing climate (from sequestering methane to becoming a source for renewable biofuels) and can even be used to build affordable houses. **UNDP South Africa, powered by its Accelerator Lab**, is partnering with the Japanese Seaweed Resource Institute to investigate this huge potential.

→ Read: Japan Innovation Challenge snapshot: Seaweed in South Africa

Biowaste is another solution hiding in plain sight. Largely considered useless, biowaste could be turned into an asset to fuel the circular economy. The **UNDP North Macedonia Accelerator Lab** is looking at this solution which could create new businesses, employment opportunities, and green economic development as part of the City Experiment Fund (CEF) – an initiative of UNDP and the Slovak Ministry of Finance, to support cities in the application of innovative approaches.

Chapter 1: Using new forms of data to catch up with the speed of change

Addressing output 1: UNDP and partners will have increased capability for scanning, sensemaking, and experimentation for sustainable development solutions in 91 developing countries.

Over the course of three years, Accelerator Labs in more than 100 developing countries, including most Least Developed Countries and Small Island Developing States have introduced 45 new kinds of data sources and used 55 innovation methods, some of which are now mainstreamed inside UNDP.

It is time to look beyond the numbers. The Labs' maturity and ability to tap into granular, real-time and novel data sources in ways most other development practitioners have not done before, enable the Accelerator Labs to make sense of complex problems and catch up with the pace of change.

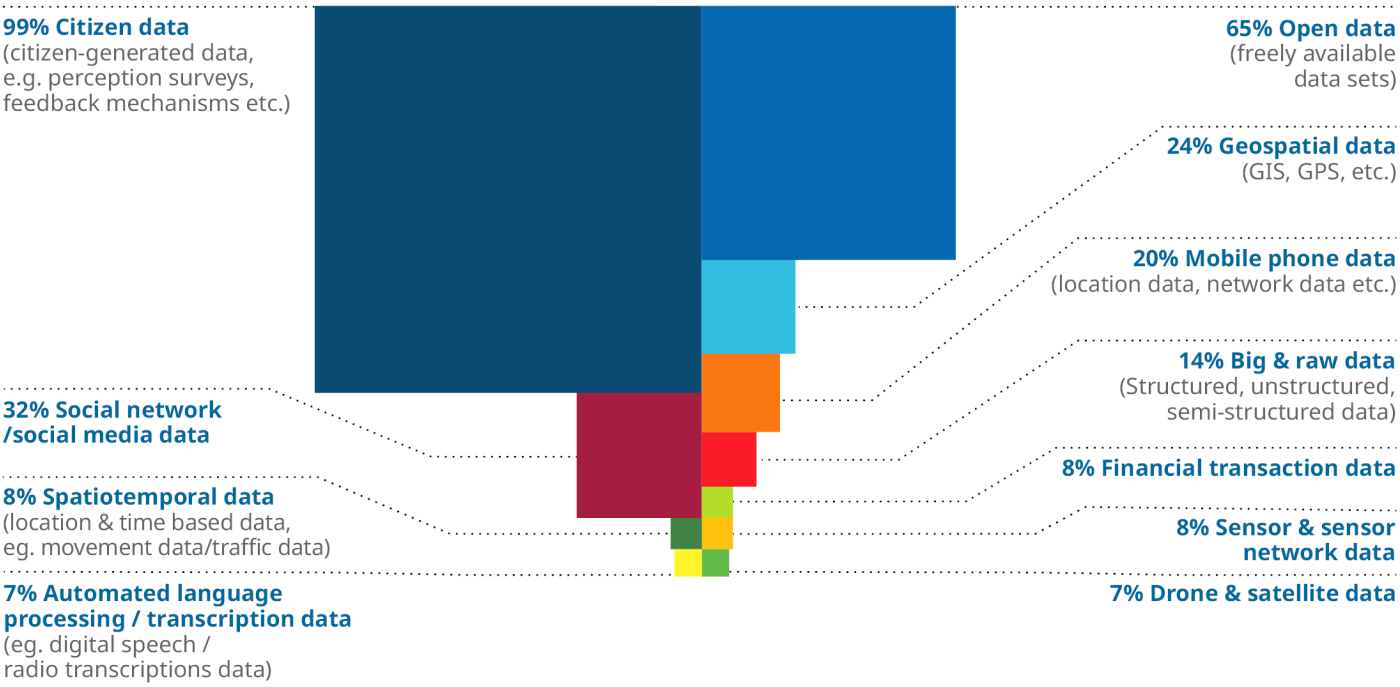
The Network is learning *how* to use innovation for development issues spanning all 17 SDGs, at national, sub-regional and local levels, offering a groundbreaking overview of the **best suited innovation methods to accelerate progress toward the 2030 Agenda**. An additional benefit of this experience on the ground, is the power of data to **amplify the voices of people** most affected by the problems, **include them in the decision making** and help elevate their stories instead of just numbers.

1.1. Data that tells stories

Diversifying data sources to make sense of complex problems has been a key pillar of the Accelerator Labs model. Since 2020, the Lab Network has introduced **45 new kinds of data sources** which allow us to catch up with the pace of change, collect different points of view and find cost-effective ways to understand the problems we are facing in development.

Almost all Labs have used new forms of citizen generated data in 2022*

* Percentage of UNDP Accelerator Labs using these data sources



On average, each Lab tackles a learning challenge by using **between four and five different data sources**. Around 90 percent of the data sources used in the Accelerator Lab Network are new; they **are collected for the first time.** This helps diversify information sources and, most importantly, to generate data to understand development challenges where, in many cases, there was no existing data. The Accelerator Labs play a crucial role in bridging data gaps, advancing evidence-based policymaking and strengthening the knowledge base for future research.

Throughout the network, the most widely used data sources in 2022 were **community-based focus groups**, **direct interviews** and **surveys**. These new sources are not only about collecting and collating quantitative information. The Accelerator Labs are also using qualitative techniques which create a connection with communities in meaningful and deeper ways. Some examples include data generated by **ethnography**, **cultural probes**, **social cartography** or **sensemaking**, which amplify the voices of those closest to the problem.

Somalia snapshot: Using data to see “positively deviant” communities who fare better in times of climate crisis

Finding “positively deviant” groups, communities or spaces can be like finding a needle in a haystack. Yet, as part of the Data Powered Positive Deviance approach which uses satellite imagery and social media data, the Accelerator Labs and its partners are able to learn from the edges and spot positive deviants.

In the past decade Somalia experienced a series of cyclic droughts, and pastoral communities were the worst hit. In 2022, the **UNDP Somalia Accelerator Lab** went into the field to continue to learn directly from communities that have successfully preserved their rangelands and pastoral livelihoods. The Lab visited multiple villages, validated information and collected additional material from communities. The aim is to find and understand the factors which helped women and men withstand the droughts and reverse rangeland degradation, so in future these practices and strategies can be shared and scaled across communities.

Surviving droughts in Somalia: which communities fare better?
Photo: UNDP Somalia Accelerator Lab.

Ecuador snapshot: Behind the numbers on gender violence

Flowers in the Air (Flores en el Aire) is a social cartography tool that allows for the collective mourning of victims of feminicide in Ecuador. The UNDP Ecuador Accelerator Lab designed Other Maps (Otros Mapas) together with various strategic partners to surface community responses, initiatives and solutions to gender-based violence and the failures of the justice system. Through the website you can digitally travel the memory routes of victims of femicide.

From the video, Flores en el Aire - Memoria.

“AI will revolutionize the travel experience for visitors in Zanzibar. AI-powered solutions can create personalized experiences, increasing visitor satisfaction and loyalty to the destination.”
Ms. Hafsa Mbamba, Executive Secretary of Zanzibar Commission for Tourism, Zanzibar

Tanzania deep dive: From a small AI experiment to revolutionizing the travel experience for visitors in Zanzibar

Zanzibar. The name itself evokes images of sun-drenched beaches, clear turquoise waters and palm trees waving in a light breeze. Zanzibar has the potential to be transformed into an upmarket and competitive tourist destination in the Indian Ocean archipelagoes. One-time tourists however, do not provide a sustainable economic model, so the question that must be asked is: why do tourists love Zanzibar, but most do not return after first visit?

In Zanzibar, only 18-20 percent of tourists return to the islands after their first visit. If you compare that with Thailand’s return rate of 60 percent, it’s clear that there is room for improvement. Zanzibar cannot only rely on its first-time visitors to build a sustainable tourism economy. Tourism is the main industry that connects all other economic sectors in Zanzibar. Travel and tourism created over 1.3 million jobs and accounts for 28 percent of the GDP.

The available data, however, is outdated; for example, the International Visitor Exit Study is only done periodically (last in 2017), and the National Census is conducted only every 10 years. **UNDP Tanzania, powered by its Accelerator Lab, designed experiments to imagine** how decision makers in the tourism industry can see, in a structured way and near real-time, what works and what doesn’t for visitors on the Zanzibar islands.

Analyzing compliments and complaints online

The Tanzania Accelerator Lab partnered with XSenseAI, a Tanzanian AI company and the Zanzibar Commission for tourism (ZCT) to build an AI algorithm which uses data scraping, analysis, interpretation and visualization of the compliments and complaints left by tourists on websites such as Trip Advisor and Booking.com.

University student Zam Zam participated in the collection of GIS data for unfrequented tourist attractions with 50 other data collectors, to better visualize the cumulative data used to analyze tourism in Zanzibar. Photo: UNDP Tanzania.

After the Tanzania Lab team networked with experts at the Artificial Intelligence for Collective Intelligence workshop in Doha in June (see call out box below), the Lab and the machine learning engineers of XSenseAI teamed up with the Two Sigma Data Clinic, Accern and the Qatar Computing Research Institute's Social Computing Department (QCRI) of the Hamad Bin Khalifa University (HBKU).

Powering the government to design 21st century tourism

Tapping into this new form of data revealed that 75 percent of complaints were about food in the hotels. It was a problem no one knew existed! And, for the first time, this data has been shared back to help hotels, restaurants, tour operators and tourist governing boards make more informed decisions to improve the tourists' experiences.

This new AI-powered model has many advantages: speed, accuracy, automation, scalability, adaptability and improved insights. The model is capable of analyzing data and even uncovering hidden patterns and relationships that might not be immediately obvious, leading to new insights and opportunities. It gives feedback **in real-time** (up to five minutes) while conventional research can take up to three months. Currently, the experimental model is being finalized for handover to the government in Zanzibar to inform tourism investments.

Advancing artificial intelligence to get smarter together for people and the planet

Development organizations and leading minds in data science from around the world gathered together for the Artificial Intelligence for Collective Intelligence (AI4CI) workshop in Doha, in June 2022. AI4CI was jointly organized with the Social Computing Group at Qatar Computing Research Institute (QCRI), UNDP Innovation in the Arab States, and 15 UNDP Accelerator Labs from Colombia, India, Kazakhstan, Lebanon, Mexico, Morocco, Nepal, Nigeria, Somalia, Sudan, Syria, Tanzania, Tunisia, Uganda and Uruguay.

The aim was to advance UNDP's efforts to leverage collective intelligence for sustainable development, under the theme "Getting Smarter Together for People and Planet." By diversifying the ways in which development problems are understood, we can unearth new insights, even potentially marking a move towards real-time intelligence for better, faster, more accurate problem solving.

The AI4CI workshop in Doha featured the work of 15 Accelerator Labs. Photo: UNDP Accelerator Labs.

500Rpm, a non-profit organization in Argentina adapts the Piggott wind turbine design to make low-cost renewable energy accessible in rural areas in Latin America. Photo: 500Rpm.

Energy deep dive: Learning from #PeoplePowered sustainable energy solutions

UNDP's Strategic Plan has set a target to mobilize partnerships for sustainable, reliable and affordable energy to 500 million people. For 20 weeks in 2022, the Accelerator Labs launched **#PeoplePowered**, a campaign aimed at surfacing grassroots solutions for energy conservation, augmentation, generation, storage and distribution to learn about the solutions of people to combat energy poverty.

Together with the **Honey Bee Network,** the Accelerator Labs engaged their innovation ecosystems to source over **200 grassroots energy solutions mapped** during the 20-week and to identify weak signals of change in sustainable energy access.

The Labs surfaced:

- **239 grassroots energy solutions** mapped during the 20-week campaign, for a total of 350 energy solutions from more than 48 countries.
- **95 solar-powered** solutions, predominantly in Latin America and Fiji
- **76 thermal-powered** solutions from across Africa and in Panama;
- **and 82 clean cooking solutions** mostly from Asia and Africa, opening opportunities for cross-country learning and adoption.

The Accelerator Labs worked closely with **UNDP's Sustainable Energy Hub** as well as with the **Columbia University School of International and Public Affairs (SIPA)** on the report, "Understanding the transformative potential of grassroots energy solutions."

Data visualization by Satoshi Ganeko

As part of the #PeoplePowered campaign, the **Accelerator Labs partnered with** Viz for Social Good and their network of data volunteers to visualize the wider insights, patterns and learnings accessible to an external audience. Check out the most compelling visualizations chosen to represent the variety of data and showcase **the power of "seeing" data**.

Discover two inspiring solutions among the hundreds the Labs sourced:

Mapped by the UNDP Argentina Accelerator Lab: 500Rpm empowers remote communities to build low-cost open patent wind turbines.

When Argentinians Esteban Van Dam, an industrial engineer and Luciana Proietti, an anthropologist, encountered Scotsman Hugh Piggott's open-patent design for a wind turbine, the flames of inspiration were fanned. The duo created 500Rpm, a non-profit organization in Argentina which adapts the Piggott wind turbine design to make low-cost renewable energy accessible in rural areas in Latin America.
→ **Read more here**.

Mapped by the UNDP Egypt Accelerator Lab: sister duo creates sustainable solar water heaters for energy poor Egyptians

Meet the two sisters behind Shamsina, Sarah and Deena Mousa. They created a solar-powered water heater that is clean and affordable, with the potential to provide low-income households in Egypt with healthier alternatives to heat water. Shamsina is currently finishing a pilot phase of 25 heaters installed around the country. Shamsina will start manufacturing them for energy poor communities and people who want to switch to cleaner energy.
→ **Read more here**.

1.2. Innovation to make decision making more inclusive

In 2022, the **Accelerator Lab Network** continued to integrate innovation methods into UNDP programming as part of the call to reimagine development for the 21st century.

Notably, including and increasing peoples' voices in decision making is a key approach embraced by the 91 Accelerator Labs on the ground. In fact, it is central to how the Network operates. By using **collective intelligence** methods such as citizen science or micro surveys, the Labs are helping build more **participatory development strategies** and this is being mainstreamed inside UNDP. As of the end of 2022, **90 percent of the UNDP Country Offices** with the presence of an Accelerator Lab use collective intelligence in their programmatic work.

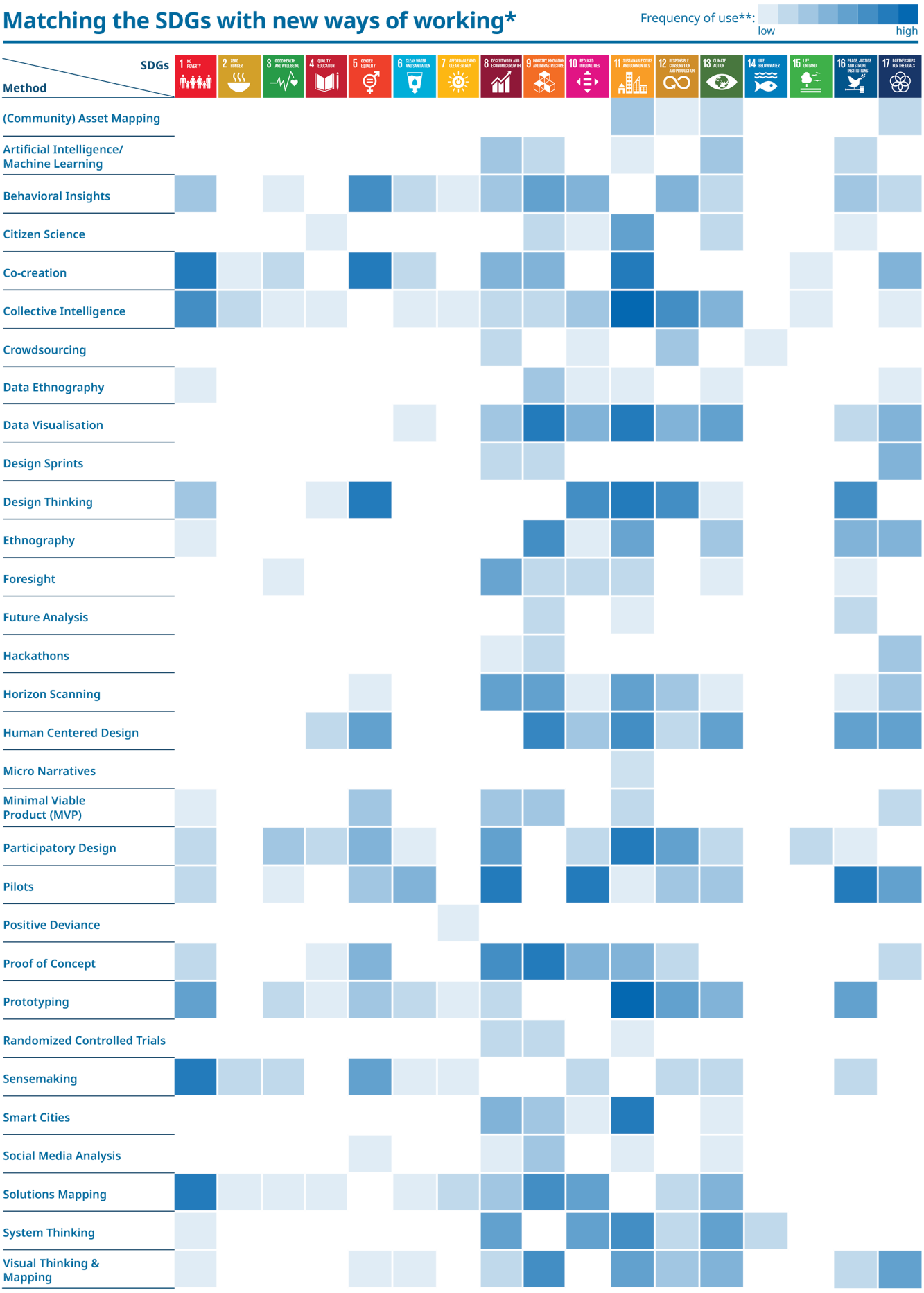
New innovation methods also emerged in 2022. They help make inroads towards systems transformation. For instance, by using **micro narratives** the Labs are able to surface the experience of individuals through storytelling, and they tap into the power of **social network analysis** to observe patterns and connections by mapping complex interactions and relationships to understand system dynamics.

Based on three years of experience: matching the SDGs with new ways of working

Over the course of three years**, the Accelerator Labs have used 55 innovation methods 1,600 times** in **400 learning challenges** — think "units of work." This has enabled the Network to learn how to use innovation for the SDGs on the ground at an exceptional scale and speed. These learning challenges are broad (spanning all 17 SDGs) and deep (specific to each national, sub-regional or even local context), and provide a robust data set to learn which innovation method has been more used for each SDG.

The next page showcases a heat map highlighting the connection between the 31 innovation methods most used by the Accelerator Labs and the 17 SDGs. This groundbreaking overview could become a proxy to identify the **best suited innovation methods to accelerate progress toward the 2030 Agenda**.

Matching the SDGs with new ways of working*



* Frequency of use of top 31 innovation methods per SDG.
** Max frequency count = 14.

Collective intelligence is now a way of working mainstreamed within UNDP. For example, it is often used to capture opportunities related to decent work and economic growth (**SDG 8**). **UNDP Colombia, powered by its Accelerator Lab** worked on an open challenge to identify, recognize and reward innovative and transformative initiatives that contribute to the increase in formalization of businesses in the country.

Community asset mapping has proven useful for policymakers to introduce new ways of understanding multidimensional poverty (**SDG1**) and to identify resources and strengths of local communities when needing to build more sustainable and resilient cities (**SDG 11**). For example, the **UNDP Thailand Accelerator Lab** undertook the use of asset mapping in two pilot communities and was able to co-create a tourism management model that puts local communities at the center. Their experiment improved the environmental conservation awareness of the community and had positive ripple effects on the management of waste.

UNDP Guinea Bissau, powered by its Accelerator Lab, rolled out mobile justice minibuses to bring basic justice and registration services to remote populations. Photo: UNDP Guinea Bissau

Guinea Bissau Snapshot: Helping institutions reach people where they are

Using behavioral science and ethnography, the **UNDP Guinea Bissau Accelerator Lab** and partners tested out mobile justice units to reach people in remote areas with legal aid as well as civil registration, a core right that opens the door to education and other opportunities. The experiment provided legal aid to 1,315 people and registered 1,656 people across seven regions. The prototype will be scaled through UNICEF investments in increasing birth registration rates in Guinea Bissau.

Marcelo García Rodríguez, professor and local citizen science activist, is empowering students of all ages in Argentina's remote places to collect hydrometeorological information, such as rain data, to optimize water resources management.
Photo: MATTEO.

"This democratic and participatory way of doing science will surely result in more varied and effective solutions to people's real problems and will help promote federal public policies that improve the quality of life of society as a whole."
Daniel Filmus, Argentina Minister of Science, Technology, and Innovation

Argentina deep dive: bringing citizen science to the national stage

"Pinch me, I cannot believe it is happening," said Marcelo García Rodríguez, Professor at the National University of Córdoba in Argentina to Maria Verónica Moreno, UNDP Argentina Head of Solutions Mapping, as they both shared the stage at the Argentina Ministry of Science, Technology, and Innovation to launch the National Citizen Science Program.

Citizen data complements official governmental data

A few years ago, Marcelo finished his PhD in the United States and came back to his own country, Argentina, to dedicate his time and passion to science. Aside from his job as a professor, Marcelo is a fierce believer in promoting the participation of youth and citizens in large in scientific work.

He founded MATTEO, a local initiative that empowers students of all ages to collect hydrometeorological information, such as rain data, to optimize water resources management. These eager volunteers, located in remote villages near Córdoba, collect environmental data that would otherwise not exist and fill the gaps of official public measurements. To date, MATTEO has helped collect data in five provinces of Argentina as well as in Perú, the United States and Colombia, involving more than 1,000 scientists and citizens without formal training.

This citizen generated data can help anticipate floods and more broadly equip policy makers with more accurate information to mitigate the effects of other environmental risks such as droughts, fires, or pollution.

Flash floods in particular affect Argentina's central and northern regions every year. In the province of Córdoba, nearly 400 water monitoring stations are in place, but technical estimations indicate that there should be five times more state-of-the-art automatic weather stations to monitor accurately the vast region during a rain event. Data recorded by the communities with simpler instruments help fill this gap in a much more affordable way.

From a small-scale experiment to a National Citizen Science Program

Marcelo's grassroots initiative is part of 55 citizen science solutions mapped jointly by the **UNDP Argentina Accelerator Lab** and the Ministry of Science Technology, and Innovation. What started in 2020 as a small-scale experiment to use citizen sensing to measure changes in air quality in Buenos Aires has since scaled to reach more than 15,000 citizens involved in collective intelligence projects related to 11 Global Goals. In fact, any citizen science hero, like Marcelo, can now submit their initiative directly on the Ministry's website.

In October 2022, the Ministry announced the creation of a National Citizen Science Program, in the presence of Marcelo, UNDP Argentina and government representatives, including Daniel Filmus, Argentina's Minister of Science, Technology, and Innovation who shared that "research is not only done in laboratories, but we can all be part of it. This democratic and participatory way of doing science will surely result in more varied and effective solutions to people's real problems and will help promote federal public policies that improve the quality of life of society as a whole."

Scaling citizen science across the country

As part of this National Program, an open call for funding citizen science projects was announced – opening, for the first time, public resources to these types of collective intelligence initiatives. UNDP Argentina, powered by its Labs, developed two experiments to test environmental citizen science solutions with four local governments, and the city of Buenos Aires is currently developing citizen science pilot projects for 60 public schools.

→ Read a publication on the role of citizen science in sustainable development.

UNDP Argentina Head of Solutions Mapping, Maria Verónica Moreno, appeared on an award-winning TV show called "La Liga de la Ciencia, (The Science League)," on *TV Pública* to present how citizen science and solutions mapping can help address development challenges from the bottom-up. This conversation has sparked so much interest, that *TV Pública* is now looking into creating a segment on solutions mapping and citizen science projects. Stay tuned!

Chapter 2: Embedding innovation for more inclusive programming and policy making

Addressing output 2: New sustainable development solutions are embeded at country level as part of UNDP's country programme and operations, national policy and/or local markets.

The Accelerator Labs continue to be prolific and contribute to publicly available knowledge on sustainable development. In 2022, they published 238 blogs in six languages, and more than 50 knowledge products on topics such as citizen science, futures thinking, digitalization, informality and solutions mapping.

By being on-the-ground and agile experts on a wide range of innovation methods, the Labs are best positioned to advise and support government partners to address a vast range of development issues from the bottom up.

The Labs are testing and scaling new solutions and are embedding new ways of working inside governmental bodies with the support of academia, private sector actors, civil society organizations and grassroots communities.

In 2022, **two out of three Accelerator Labs have worked with governments to improve innovation** policy or capability. By doing so, the Network is supporting the inclusion and participation of citizens in decision-making processes.

Gemma Harris, a small business owner in fish processing for over 30 years will soon have digital access to markets. This includes restaurants who want to buy locally and sustainably and will ultimately be certified with the Blue Standard. Photo: Nikola Simpson, UNDP Barbados and the Eastern Caribbean.

2.1. Scaling innovative digital solutions to leave no one behind

By design, the UNDP Accelerator Labs are committed to leveraging digital technology to better grasp social, economic and environmental phenomena. Integrating new technology and moving towards real-time data collection also helps senior decision makers to keep up with an accelerated pace of change. As COVID-19 exacerbated the need for digitalization, the UNDP Accelerator Labs have been experimenting with innovative and inclusive ways of bringing governments, informal businesses and the most vulnerable population into the digital spotlight.

Barbados and the Eastern Caribbean snapshot: Connecting market stakeholders together

The **UNDP Accelerator Lab in Barbados and the Eastern Caribbean** is working with Oceanic Global to verify sustainability efforts in the tourism sector through its BlueDIGITAL initiative. The Blue Standard verification program focuses on evaluating hotels and restaurants in Barbados and Dominica on criteria such as waste, food sourcing and responsible seafood. In 2022, ten more partners were certified. This helps small scale fisherfolks like Gemma Harris (pictured above) grow their business while supporting responsible use of the ocean's resources.

Namibia snapshot: Digitizing public services

The **UNDP Namibia Accelerator Lab** responded to demand from the Office of the Prime Minister to digitize the manual paper-based process of collecting data on declaration of interests in the public service. The team collaborated with 350 public servants to co-design this new digital process and understand the main issues such as poor response rates and duplicate submissions. The collaboration demonstrated how digital tools support increased transparency and accountability. The new, simplified forms are being rolled out to three additional ministries: the Ministry of Home Affairs, Immigration and Security, and the Ministry of Health and Social Services, with plans to implement across the entire public service in 2023.

The UNDP Morocco Accelerator Lab is experimenting with digital inclusion initiatives targeted toward low-income women entrepreneurs. Photo: UNDP Morocco.

Morocco snapshot: testing digital banking for low-income women entrepreneurs

The **UNDP Morocco Accelerator Lab** collaborated with the Moroccan Central Bank to encourage women entrepreneurs to make use of digital financial services and mobile money transactions. With the Behavioral Insights Team, a UK-based company, and UNDP's Regional Innovation Hub, they explored ways to design inclusive digital finance 'nudges'. As a result, UNDP Morocco has expanded its portfolio of solutions to include a digital literacy WhatsApp chatbot, micro savings schemes and low-cost digital remittance targeting low-income women.

2.2. Embedding innovation into the public sector

Public sector innovation leads to developing creative solutions to address problems in government. It's important for achieving the SDGs as it prioritizes local needs and improves citizens' lives through effective and efficient public services.

In 2022, **UNDP Accelerator Labs** in **51 countries** worked with governments to improve innovation policy or capability. In a non-exhaustive count, the Labs worked with over **4,300 civil servants** in the Global South to elevate innovation skills. Through this work, UNDP is either directly supporting national innovation policy like in the Dominican Republic and Viet Nam or helping with the establishment of an innovation lab inside the public sector, such as in Ecuador and Burkina Faso.

The number of Labs involved in embedding innovation into the public sector doubled since 2021, signaling a growth in government demand. In the past two years, **22 new public sector labs have been incubated** with the help of the Accelerator Labs. Decision makers are increasingly keen on exploring areas in which the Labs excel: network learning, collective intelligence, foresight, frugal innovation and positive deviance to name a few, to tackle societal challenges.

"Be In" volunteers in the field collecting data from female beneficiaries of the Rapid Finance Facility Project. Photo: UNDP Guinea Accelerator Lab.

Guinea snapshot: A "mini–Accelerator Lab" with young people

The Guinean government launched the "BE IN" National Network of Innovation Volunteers initiative with the support of the **UNDP Guinea Accelerator Lab**. This volunteer program of 300 young people operates as a "mini lab" to identify local problems and innovative solutions. The program also boosts young people's employability by providing them with a range of skills and experience through their involvement in ongoing innovation projects such as creating a mobile app for tracking epidemics, recycling plastic waste into building materials and providing solar-powered lighting to rural communities.

Dominican Republic snapshot: developing a Digital Innovation Laboratory

The **UNDP Dominican Republic Accelerator Lab** supported the formation of the Digital Innovation Laboratory with the Government Office of Information and Communication Technologies. The purpose of the Digital Innovation Laboratory is to support e-government institutions, and design technical solutions for obtaining citizen services. The Accelerator Lab shared methodologies and concepts on innovation, supported field work and provided a blueprint for how digital tools can be leveraged to make solutions more citizen centric and inclusive.

Presidential support for the Kenyan innovation ecosystem. Photo: UNDP Kenya

Kenya snapshot: Presidential support for the Kenyan innovation ecosystem

UNDP Kenya, powered by its Accelerator Lab, in partnership with Konza Technopolis Development Authority (KoTDA), the African Center for Technology Studies (ACTS) and the Association of Countrywide Innovation Hubs mapped the country's innovation landscape in groundbreaking research, which was launched in December 2022 by His Excellency, Dr. William Ruto, President of the Republic of Kenya (pictured above right). The report called Mapping the Innovation Ecosystem in Kenya features a foreword from Kenya's President.

This research highlights urgent steps required to unlock the potential of the ecosystem of young Kenyan innovators and makes the case for an Innovation Fund and a National Innovation Strategy, policy guidance and investments on Intellectual Property Management and more coordination among Government Ministries. Among the findings:

- 46 percent of more than 200 innovation centers mapped are in Nairobi,
- almost 63 percent of startups are less than three years old,
- while 80 percent of new companies fold before three years of operation, signaling areas for government strategy in order to grow the innovation ecosystem in Kenya.

Ecuador snapshot: activating the social innovation ecosystem

The **UNDP Ecuador Accelerator Lab** helped incubate Thinkia, the first citizen innovation lab in the country, with the objective of improving public sector service quality and delivery and strengthening the participation of citizen in public decision making. It is led by a consortium of actors from the academic world, government, civil society and UNDP. In less than two years of activity, Thinkia has supported the Ministry of Agriculture and Livestock to prototype an instrument to improve hemp production and public regulation processes, developed an online course on open, public and social innovation and supported the city of Quito to set up its own Social Laboratory.

Chapter 3: We have let 1,000 flowers bloom, it's time for harvesting!

Addressing output 3: Establishment of a global learning and scaling network.

As the UNDP Accelerator Lab Network matures, so does its ability to connect the dots globally, strengthen its influence in the development ecosystem and make strides in finding new solutions to thorny, complex problems in an uncertain world.

From using drones to recover faster from a natural disaster (read the "Drone for Development" snapshot) to joining regional forces to push forward a gender equality agenda or leveraging groundbreaking AI capabilities to beat air pollution (see India's deep dive), the Labs are firing on all cylinders and are a testament that well executed, agile and out-of-the-box experiments can lead to large scale regulatory action.

The knowledge they create is receiving an increased amount of attention from development and innovation actors, among which are the Harvard University Business School and the European Commission's Joint Research Center. People, professionals and institutions are looking to the Labs.

Yet the Network's collective intelligence is more than the sum of its parts. When the Labs start to make sense of patterns and turn them into insights, they are giving life to a global learning and scaling network capable of developing groundbreaking value propositions that are so desperately needed to rescue the Global Goals.

3.1. The Network Effect: sharing what we've learned

The continuous use of WhatsApp messages, intra-network exchanges and social media facilitate the rapid and transparent exchanges of ideas inside the Network, with their partners and with the people they work with on the ground. One spark can start a fire, and these sparks occur across the global network. Thanks to the Network's sharing culture and decentralized means of communications, a learning from one Lab can be shared with and used by other Labs in a matter of minutes. This helps fast track action so Labs build on existing knowledge rather than creating it from scratch, and more importantly it helps connect the dots globally and formalizes actionable insights that address development challenges beyond country-specific contexts.

Latin America and the Caribbean snapshot: Learning regionally about misinformation and citizen engagement and informality

In the Latin America region, UNDP powered by its Accelerator Labs in eight countries (Argentina, Bolivia, Colombia, Dominican Republic, Guatemala, Panama, Peru, and Uruguay) reflected on innovative ways to turn off the taps of false information flows in the region and to reduce the reach and impact of these flows.

Thirteen Labs in the region introduced a new way to engage citizens and collect their perspectives for policy dialogue and solving development challenges. Collective intelligence methods such as citizen-generated data and crowdsourcing are shown to be powerful tools for turbo-charging more traditional citizen engagement mechanisms. And Labs in UNDP Argentina, Colombia, Ecuador, Guatemala and Paraguay reflected on how to tackle the issues surrounding widespread informality (in some countries in the region, 70 or 80 percent of workers are informal).

Moroccan tech-entrepreneur Aida Kandil pitching at 4YFN. Photo: 4YFN.

Arab States snapshot: Learning about how to advance women in STEM

With the support of several Accelerator Labs in the region, the Regional Innovation Team in the Arab States is implementing the Four Years From Now (4YFN) initiative. 4YFN is a start-up platform for female tech-entrepreneurs working on the SDGs. **Accelerator Labs in Algeria, Iraq, Lebanon, Libya, Morocco, Palestine, Somalia, Sudan, and Saudi Arabia** came together to work with the Regional Innovation Team in the Arab States on implementing the program. In its first two rounds, the program delivered over 500 hours of one-to-one mentorship to women-led, digital start-ups in 16 countries in the region.

Small Island Developing States snapshot: Joining forces to combat shared concerns

The 14 UNDP Accelerator Labs in Small Islands Developing States (SIDS), with support from the SIDS team at UNDP, regularly meet as part of their own "**mini-network**" to exchange knowledge, build collaboration and inspire each other, as many SIDS face similar challenges. One example of this cross-country collaboration which happened in 2022 is the **UNDP Haiti Accelerator Lab** working together with the **Lab in the Dominican Republic** to explore ways to improve waste management at a binational market located at the border of both countries. Plastic waste is a main challenge, and the Labs are working together on recycling mechanisms and partnering with companies to replace single-use plastic.

Colombia snapshot: Drones for Development

When Hurricane IOTA hit Providence Island in November 2021 almost 800km north-west of mainland Colombia, nearly all homes and commercial buildings were devasted. With the support of the Accelerator Lab team, UNDP Colombia flew to the archipelago equipped with drones and 360 cameras to accelerate the mapping of the affected areas and support the government to build an accurate early recovery strategy.

Using augmented reality to show before and after infrastructure on Providence Island, Colombia.
Photo Credit: UNDP Colombia

In taking and analyzing aerial photographs of 1,241 infrastructure units, **UNDP Colombia, powered by its Lab**, was able to get a faster and more accurate diagnosis of the hurricane's impact, cutting the need for time-consuming on-site visits. It also helped guide recovery efforts by enhancing the traditional House and Building Damage Assessment delivered by the UNDP Crisis Bureau. Since this diagnostic tool is publicly available, the population can see with great accuracy and transparency how resources are invested to rebuild.

In addition, the Lab team mainstreamed these skills by training 20 UNDP colleagues to become drone pilots and learn photogrammetry, the art and science of extracting 3D information from photographs. This forms the basis of a new "Drones for Development" programme which will be used for recovery efforts, land tenure, cadaster and area mapping. They also extended their support to UNDP Dominican Republic after hurricane Fiona hit the island in September 2022 by bringing 360-degree cameras and drones, sharing their learning and supporting the recovery response on the ground.

→ Go 360 degrees around the archipelago by drone or read more about their efforts

3.2. Engaging with & influencing the broader development ecosystem

Three years after its initial launch, the influence of the Labs continues to grow and to be recognized by the development ecosystem, which publicly acknowledges the work of the Labs globally, regionally and nationally. Recognition by government partners, development and innovation actors means the Labs' experiments and expertise are valuable to the wider ecosystem and are supporting the goal of becoming the world's fastest and largest learning network on sustainable development challenges.

From policy makers to UN organizations, private sector, NGOs, academia and beyond, **the Accelerator Labs' knowledge is becoming a resource for prestigious actors** such as Harvard University Business School (see below's snapshot for details) or the European Commission's Joint Research Center who picked up on the UNDP Serbia Accelerator Lab's work on mapping diasporas using Google Trends.

UNDP Accelerator Lab team members at Harvard University. Photo: UNDP Accelerator Labs.

Harvard University Business School Snapshot: the Labs as an inspiration for corporate innovation models

The Harvard University Business School now teaches the case study **"Strategic Innovation at the United Nations: A Network of Ecosystems,"** which focuses on the Accelerator Labs and their impact at UNDP. The case study is currently being taught to second-year Harvard MBA students in the Innovations, Strategy and Technology class, most of which have careers in the private sector. The case study focuses on how UNDP succeeded in building a network of ecosystems of innovation, which is presented as a valuable inspiration for corporate innovation models.

Lilian Abou Zeki joins the panel at the "Women in Conflict Zones initiative" launch. Photo: UNDP/Fouad Juez.

Changing gender norms snapshot: the Lebanese team shares its expertise on global and national stages

The Qatar Fund for Development (QFFD) invited Lilian Abou Zeki, Head of Solutions Mapping from the **UNDP Lebanon Accelerator Lab** for the **"Women in Conflict Zones" initiative** on the margins of the 77th session of the United Nations General Assembly (UNGA) in September 2022. Lilian Abou Zeki shared how the Lab uses behavioural science to influence social norms around care duty for men in Lebanon.

The Lab also conducted a broadcast television experiment by airing an all-women TV show about politics and power to contend with generic male-only shows. It garnered **a massive TV audience and at least 160,000 people online.** The Lab demonstrated how to create a "norm" of gender inclusion that offsets media and perception bias against women in politics.

Nargiz Guliyeva, Head of Solutions Mapping, UNDP Azerbaijan and Jamila Mammadli, disability activist and grassroots innovator featured in the *for Tomorrow* documentary, speaking at an UNDP webinar, "The Future We Create."

Disability snapshot: the Labs are advancing disability-inclusive development

On December 3rd, 2022, the development community observed International Day of Persons with Disabilities. The theme this year was "Transformative solutions for inclusive development: the role of innovation in fueling an accessible and equitable world."

UNDP brought together the World Institute on Disability and The Global Alliance of Assistive Technology Organizations, the private sector, academia and government partners during a webinar called "The Future We Create," to exchange good practices, discuss challenges and identify solutions on innovation that support disability-inclusive development. In attendance were also members of other UN agencies such as the World Food Programme, UNICEF, UNFPA and UN Women.

In recognition of their contribution to this field, two Heads of Solutions Mapping of the UNDP Accelerator Lab Network were invited. Paulina Jimenez from UNDP Ecuador and Nargiz Guliyeva from UNDP Azerbaijan shared their unique ethnographic perspective of working closely with grassroots innovators with disabilities such as **Jamila Mammadli**. Jamila is a disability activist from Azerbaijan featured in the *for Tomorrow* documentary. She also took part in this event to explain how she has become a resource to advise the Metro system of Baku to adjust its services for disabled persons.

→ Read the UNDP blog featuring three solutions holders identified by the Accelerator Labs

Brick manufacturing puts workers' health at risk. Photo: Let me Breathe, with support from UNDP Business and Human Rights Asia Program and the European Union.

India deep dive: Scaling an AI-model to combat air pollution

India's booming construction industry relies heavily on brick kilns, which provide the majority of the country's building materials, but the industry's practices have devastating effects on both people and the environment. India is the second largest producer of bricks in the world, and the sector consumes 40 million tons of coal per year. In the Indian State of Bihar, brick kilns are responsible for 14 percent of air pollution. Although in 2017 the Central Pollution Control Board of India mandated brick kilns to switch to a less-polluting design, only about 70 percent of brick kilns in Bihar have made the switch, and many of them are in remote areas that are hard to monitor.

It doesn't stop with air pollution. Brick manufacturing puts very vulnerable workers' health at risk, causes soil degradation, groundwater depletion and the kilns are hotspots for child and bonded labor.

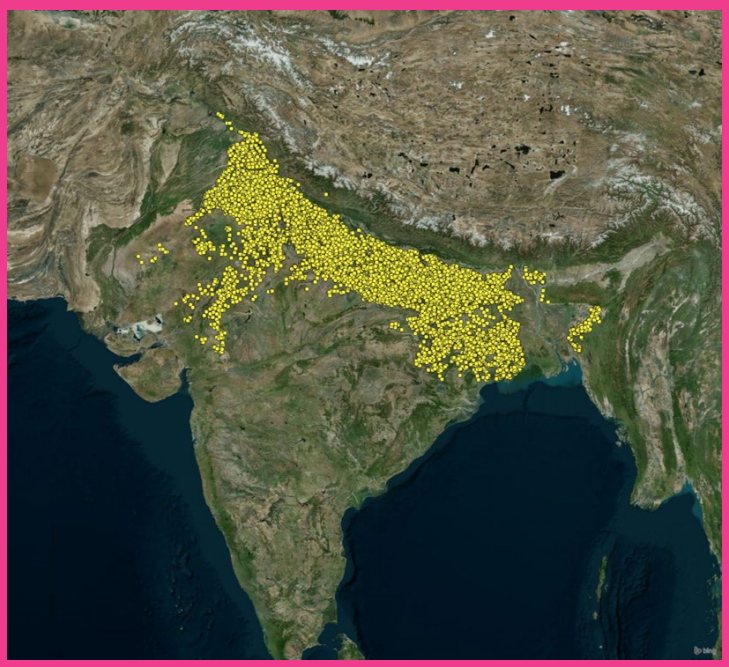
In fact, the **UNDP India Accelerator Lab** first learned of the University of Nottingham's research on tackling hotspots of modern-day slavery in the brick manufacturing sector. They were proposing a new methodology using artificial intelligence -- machine learning algorithms and geospatial analytics -- to map the entire brick kiln belt in India, which could then be used by the Bihar State Pollution Control Board to better target monitoring efforts.

GeoAI has increased the efficiency of government efforts to monitor and enforce pollution regulations by over 40 percent.

When a small experiment leads to regulatory action

The India Accelerator Lab and the University of Nottingham's Rights Lab put their heads together to see how the brick kilns could be mapped. The Board expressed concern about the large number of brick kilns and limited staff to conduct field verifications on compliance. To address this, AI and data layers were added to the model, and citizen science volunteers were brought in to produce training datasets for AI algorithms. The result was the GeoAI technology platform that is the first AI-driven effort to monitor air pollution in India.

GeoAI is a novel approach combining geospatial technologies and artificial intelligence to detect exact locations of brick kilns and classify them on degree of environmental compliance. It brings together coordinated action from diverse stakeholders – regulators, government agencies, civil society, and volunteer groups to tackle the complexity around brick kilns. Using GeoAI in the State of Bihar, the total number of brick kilns was brought down to a manageable number for staff to inspect. Around 7,500 brick kilns were first analyzed by GeoAI, and it was determined that 1,655 kilns were high risk. Environmental regulators were then able to complete an inspection of 1,013 of those which led to the **green transition of 1,000 brick kilns and the reduction of 500,000 tons of CO2 per annum** (equivalent of 100,000 gasoline vehicles).



View from space: there are over 47,000 brick kilns in North and East India. 9,000 of them will be monitored by the Bihar Pollution Control Board thanks to the GeoAI platform. Image: University of Nottingham.

Going forward, with the GeoAI platform, the Bihar Pollution Control Board will be able to monitor almost **9,000 brick kilns** across the state. The platform helps regulators report violations of relevant laws and regulations, including human rights and access to social security. It brings together regulators, government agencies, civil society and volunteer groups to take coordinated action and address the complexity around brick kilns.

Scaling impact beyond India

Building on this successful experiment, UNDP India is now scaling out this platform to two additional Indian states and Nepal has already voiced interest in using the platform to beat air pollution.

The India Lab continues to work on the development of a cutting-edge digital stack to scale this experiment up by providing open data and digital infrastructure around air pollution, which will include vehicular pollution and crop burning. The Lab's initiative is also scaling deep as it is becoming a case study for educating Indian policymakers on the application of AI for development challenges of large scale.

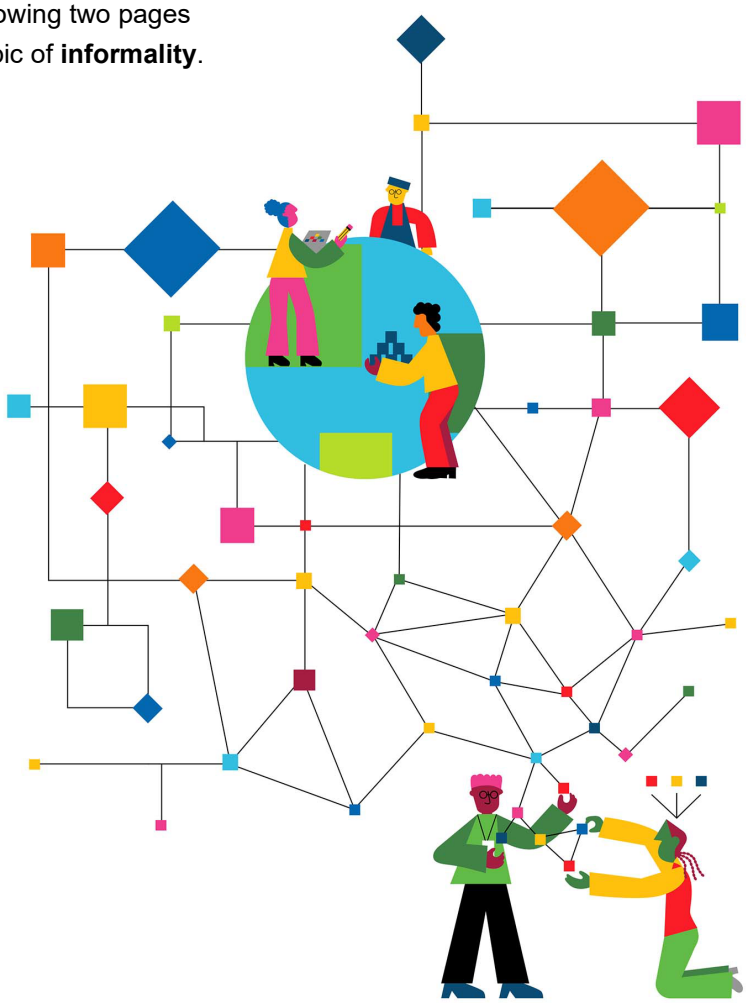
→ Watch a segment on UNDP Business and Human Rights' channel about the brick kiln problem and GeoAI's contribution to solving it.

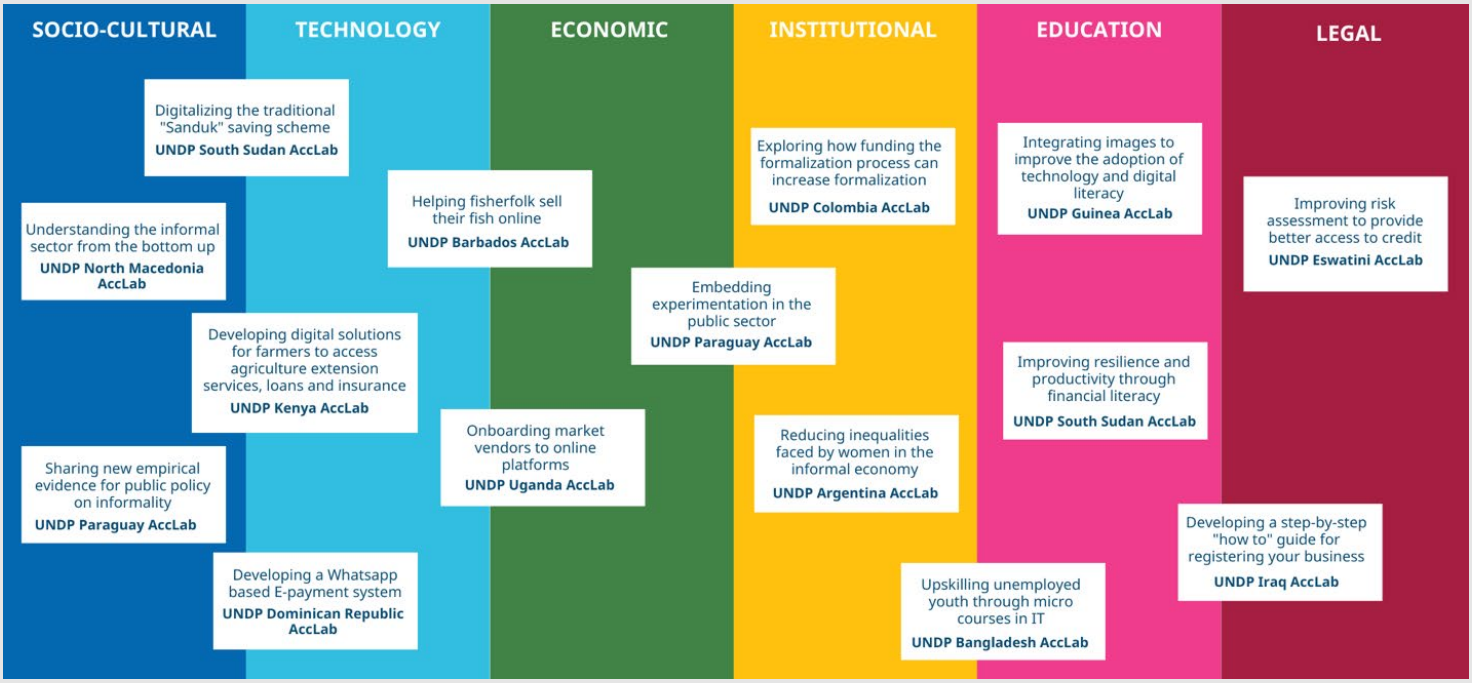
3.3 Learning through a network of ecosystems

The ability of the Network to accelerate progress toward the Global Goals hinges on its capability to learn what works, in what contexts, for whom, and how – within each Lab, between the Labs and with the wider development ecosystem.

There is no simple way to do this. The aim is to measure and incentivize networked learning on four levels:

- **National:** Within each Accelerator Lab, they test hypotheses, map solutions and validate new ideas.
- **Horizontal:** Each Lab is an ecosystem and shares knowledge with other actors in their local environment, setting up **learning partnerships nationally**, spreading social innovation and looking into local challenges.
- **Vertical:** The Accelerator Labs feed the knowledge gained in their country work by sharing it with UNDP and the wider UN system in country as well as with other government institutions. In 2022, virtual and in person exchanges have been very vibrant, with **49 weekly global calls** and **four in person regional retreats** held in Istanbul, Addis Ababa, Panama City, and Aman.
- **Networked learning**: Given the range of development problems and solutions explored by the Network of Labs, they contribute to seeing new patterns or programming ideas, new insights and value propositions, as highlighted in the following two pages on the topic of **informality**.





A snapshot of Labs' initiatives in informality. This work transcends technological, economic, institutional and other systems.

Informality deep dive: from mapping patterns to surfacing unique insights

In 2022, with Network learning in motion, the UNDP Accelerator Lab Network continued its learning focus on **the informal economy**, a phenomenon at global scale – two billion workers world-wide, yet lacking policy options that recognize the innovation and entrepreneurship that occurs in the informal sector.

A growing number of Labs are working on digitalization initiatives for the informal sector. For example, the **UNDP South Sudan Accelerator Lab** is working on digitalizing the traditional solidarity-based saving scheme called 'Sanduk-Sanduk' which is helping Sudanese women plan savings and raise start-up capital. **Labs in Uganda** and **Barbados** are working on e-commerce platforms, increasing the productivity of informal vendors and enabling them to access online markets.

In Guinea, the Accelerator Lab has tested the use of images in banking apps to improve financial literacy among women, bringing the unbanked population closer to the benefits of digital payments. And on the educational front, the **UNDP Bangladesh Accelerator Lab,** along with leading universities in the country, are measuring the impact of online micro-credentials skills training and the feasibility of incentivizing such programs as part of formal education in the country.

These patterns led the Network to redefine its R&D topic to focus more on **the intersection between digitalization and informality.**

Expanding the edge of knowledge on the intersection of digitalization and informality

As a contribution to the knowledge available on this global phenomena, the Network is creating new knowledge on what it means to go digital within the sector and the opportunities and risks digitalization brings to the informal economy.

Using a systems mapping approach, the Network is exploring the drivers and effects of digitalization in informal businesses and the role that the private sector, governments, cooperatives and small and medium enterprise (SME) associations play in jumpstarting digitalization. In addition, the Network is looking into the relationship between digitalization and formalization and how digitalization is shifting the formalization process for businesses.

These insights are enabling the Network to develop new value propositions to better support the informal sector—from using digital data, tools and platforms to connect farmers, informal traders and business owners to better credit and (group) savings schemes, to working with the International Labour Organization (ILO) via a global UNDP-ILO partnership to develop alternative pathways to formalization.

Three main insights on the intersection of digitalization and informality

1. Digitalization may be shifting how **formalization of business** occurs. Governments can create enabling policy environments for digitalization. But the **private sector**, by developing digital products, may help informal businesses organically opt into elements of formalization, such as tracking expenses, paying invoices and securing loans.
2. Achieving formality is more of a "**messy continuum**" than an "on/off" switch. Traditionally, a business registration indicates whether a business is or isn't formal. In the digital world, however, an informal business can transact on WhatsApp, secure loans on another app and find customers on Facebook, without seeking formal registration.
3. Becoming formal may be **non-linear** and composed of "**micro pathways**." Again, the typical path to formalization is familiar— you start a business, register it, secure licenses, make money and then pay taxes. But with digital tools like WhatsApp, an informal business can advertise its products and services, generating enough demand for customers to start requesting formal receipts or quality assurance guarantees — familiar signs of formality.

Chapter 4: Partnerships to change the narrative of sustainable development action

Thanks to the diversity of knowledge and array of experimentations it creates, the UNDP Accelerator Lab Network continues to catch the interest of a wide range of partners. To date, the Network has created **1,502 partnerships** from academia, private sector, governmental partners, United Nations entities and civil society. Among the partnerships that the Network creates are “unusual suspects,” such as innovation hubs, mobile phone operators, start-ups offering data, tech or digital products and services (e.g., drone or satellite imaging companies), informal sector groups (e.g., vendor associations, women’s market collectives, waste pickers) and social enterprises.

As reported in the independent Midterm Evaluation (2021), the UNDP Accelerator Labs “*convene unusual suspects to gain a full system view on development problems*.” Unusual partners bring in new insights and help to broaden the conversation. New partners also play into the forms of data and innovation methods the Labs are using to boost knowledge of ecosystems and stakeholders. Through engaging with these actors, the Labs are bringing disruption and learning into UNDP Country Offices.

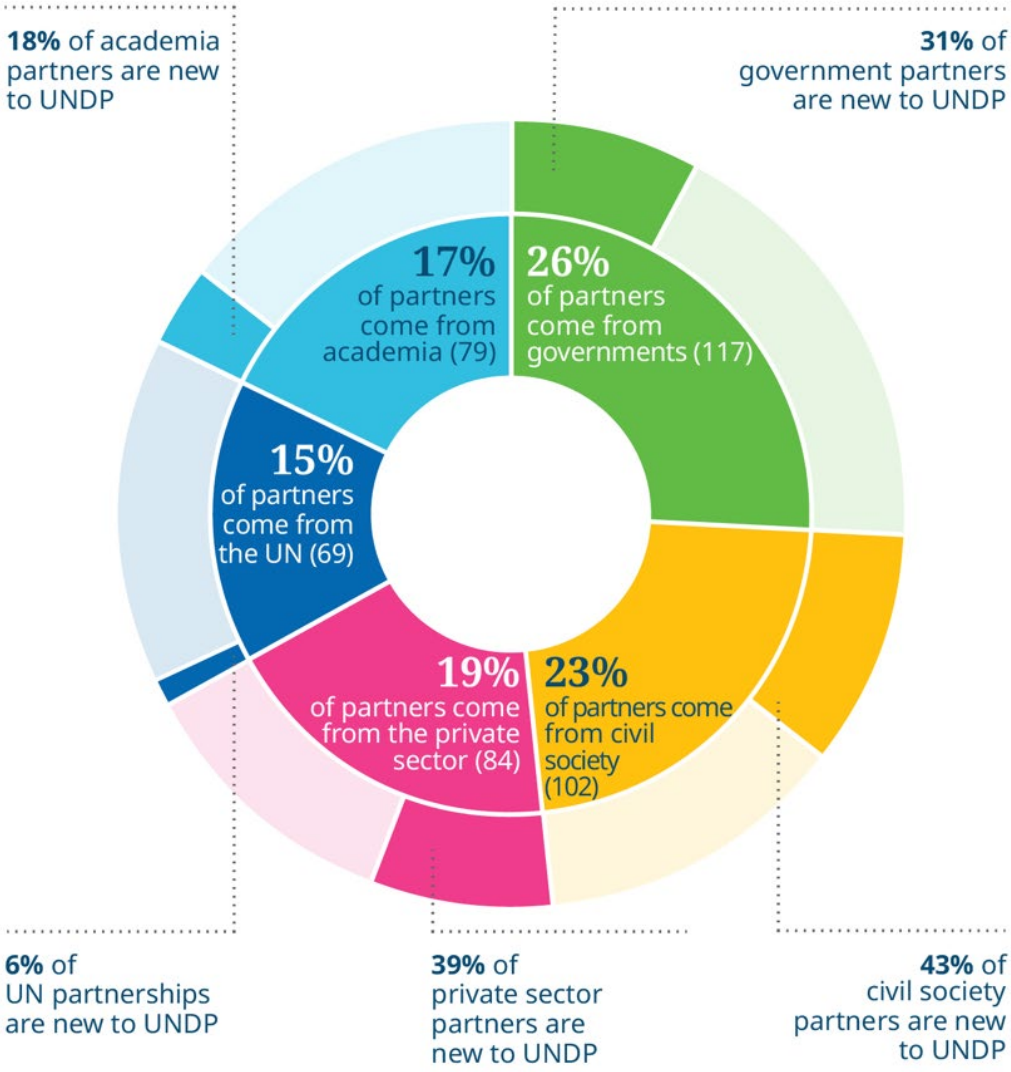
The Accelerator Labs' partners help the teams spearhead new experiments, tap into **novel data sources** and **experiential knowledge**, enabling UNDP to translate these learnings into cutting-edge new value propositions for UNDP and beyond. Partners help the Network in facilitating the scaling of innovation by embedding new ways to work inside governmental bodies and through influencing policy makers and partners in the innovation landscape.

Over time, the Labs have started to bring in **new funding and in-kind resources** through partners in each country.

According to a survey with UNDP Country Offices, the type of partnerships that the Accelerator Labs bring to UNDP are their **biggest value. UNDP partnerships with the private sector** have emerged at the core of the Accelerator Labs model. In fact, **more than a third of all private sector partnerships are with new partners and nearly one out of two partners from civil society are new to UNDP.**

Beyond the added value each Lab brings to its UNDP Country Office and national partners, the global Network itself creates and curates a wide range of practical knowledge and globally actionable insights, increasing value both *with* and *for* partners.

Partners across the Network in 2022



4.1. Partnering across the UN Development System

In 2022, the Accelerator Labs established 69 partnerships with UN sister agencies, more than 1 out of 10 partnerships reported during the year. This reflects the demand for the capability of the UNDP Accelerator Labs across the UN system including with UNICEF, UN Women, UNFPA, IOM, ILO, UNCDF, ITU, FAO, UN UNIVERSITY and UNHCR.

According to a study led by UN Women in Bolivia (2021), only 20 percent of women access finance and only 30 percent of saving accounts are held by women. In this context, the **UNDP Bolivia Accelerator Lab** partnered with **UN Women** and two Bolivian fintech start-ups to test out new financial inclusion solutions for women entrepreneurs and vulnerable groups.

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UNDP Somalia, powered by its Accelerator Lab, is partnering with **UNFPA** (United Nations Population Fund) to improve and redesign several youth centers across the country to better equip youth for the jobs of tomorrow, in areas like the digital economy, innovation and research.

The Dajabón River, also called Massacre River, at the border between the Dominican Republic and Haiti is a significant water source for the northwestern part of the island. A binational produce market operates at the cross point, increasing the negative environmental footprint on the river and triggering possible conflicts between communities living at this border. The **UNDP Dominican Republic Accelerator Lab** and **IOM** (International Organization for Migration) are collaborating on testing new ways to collect data, such as community asset mapping, which can help identify potential emerging opportunities in the binational market area.

4.2. Private sector partners

Nana Yaa-Menu Adjei packaging her soap products. She is one of the entrepreneurs who benefited from the mentorship and business growth programme co-led by the UNDP Accelerator Lab. Photo: UNDP Ghana.

The **UNDP Ghana Accelerator Lab** and the bank Societe Generale Ghana PLC (SG Ghana) encourage and support innovators, especially small businesses led by youth, women and persons with disabilities.
The partnership created a tailored program, including mentorship, business-to-business matching and pitching masterclasses to connect innovators with investors and markets.
Meet one of these women entrepreneurs, Nana Yaa Manu Adjei, who produces eco-friendly cosmetics and detergents and has grown her business by 50 percent just under a year after being enrolled in the program.

The **UNDP Panama Accelerator Lab** partnered with Coca-Cola FEMSA, a bottling distributor, to improve waste management through recycling in Tonosí. Coca-Cola FEMSA invited the Accelerator Lab to analyze the logistics involved in the delivery of Coca-Cola products and to help develop a new strategy to collect and compact recyclable material at the source and to build a network of recovery facilities nationwide.

The UNDP Accelerator Labs continued its partnership with Hyundai Motor Company to release **for Tomorrow: the Documentary**. The film was a successful materialization of the partnership with Hyundai established in 2020, dedicated to celebrating bottom-up innovation to reach the SDGs. It won a range of awards and continues to gain new audiences worldwide.
→ Read about *for Tomorrow: the Documentary* in the Communications section

“In close collaboration with the UNDP South Africa Accelerator Lab, we developed an implementation plan for aquaculture using Japanese technology by utilizing South Africa's abundant seaweed resources. By conducting a trial in the coming phase, we hope to demonstrate this solution will lead to improving the livelihood of local communities.”
Seaweed Resources Institute

Representatives from the Seaweed Resource Institute on a seaweed expedition in the Western Cape coastline. Photo: UNDP South Africa.

South Africa snapshot: Unlocking seaweed solutions, a multiplier effect across the Goals

The seaweed sector is highly underdeveloped in South Africa, despite its potential to create wins across the Goals: seaweed farming can contribute to economic growth and job creation, bring health benefits, strengthen food security, and introduce adaptation strategies to the devasting impact of climate change on life below water. The government says the ocean’s resources have the potential to contribute to up to $10 billion dollars to the country’s GDP by 2033. With the length of coastline and number of endemic species, seaweed could play a pivotal role in this burgeoning blue economy while accelerating SDG progress in South Africa.

Through the Japan SDG Innovation Challenge, the UNDP South Africa Accelerator Lab and the Japan Seaweed Research Institute designed a pilot to test low-tech, low-cost seaweed cultivation techniques that can provide alternative livelihood options to coastal communities. This partnership created actionable intelligence on the most suitable species for cultivation based on market opportunities in Japan, grow rates and ease of cultivation. It also opened the door to developing relationships with Japanese firms to create a local market for seaweed products and to support local entrepreneurs.

About the Japan SDGs Innovation Challenge

Since 2020, the Japan SDGs Innovation Challenge has convened the UNDP Accelerator Labs, the **UNDP Japan Unit** and the advisory of the **Japan Innovation Network (JIN),** funded by the **Japanese Cabinet Office** to generate learning exchanges between seven Labs, the Japanese private sector, and business federations like Keidanren, one of the largest in Japan. Successful experiments range from a seaweed cultivation project in South Africa (above) to a spice blockchain solution developed in India. A new cohort of Labs was selected in 2022: **Samoa** and Start Up Sea Corp. (Tototo Leather) will focus on creating high quality leather products out of fish waste, and **Zimbabwe** and Pegara, a company specializing in AI technologies, will zoom in on food security.

4.3. Knowledge partners

Knowledge partners may take many forms, be they universities, groups of local activists or informal workers, or think tanks. They all join the Labs at a local, regional and global level to advance knowledge on sustainable development.

In 2022, the Accelerator Lab Network positioned its global research agenda on **informality**. By working with leading universities and research centers, the Network combines the Labs' experiential knowledge with the rigor of academic research to feed UNDP and the broader development ecosystem with actionable insights.

The Network has been exploring the intersection between informality and digitalization, identifying what drives digitalization in informal businesses and what effect it has on the formalization process. As part of this stream of work, a new research partnership was signed in 2022 with **Utrecht University, the University of Johannesburg,** and the **MIT Sloan School of Management** to start understanding the relationship between informal businesses, digitalization and innovation in Africa. In addition, the Network continued its partnership with **New Cities' Global Network for Popular Transportation** to dig deeper into the informal urban transportation systems of the Global South and learn about a new facet of the informal economy.
→ Read the Informality deep dive

In 2022, the Network extended its partnership with the **Honey Bee Network** and **Columbia University's School of International and Public Affairs (SIPA)** to keep exploring bottom-up, lead user, frugal and grassroots innovations specifically in sustainable energy.
→ Read the Energy deep dive

At a country level, the **UNDP Kenya Accelerator Lab** partnered with the African Centre for Technology Studies (ACTS), a pioneering development research think tank on harnessing applications of science, technology and innovation policies for sustainable development in Africa to map out innovation ecosystems in Kenya.
→ Read the Kenya snapshot

The UNDP Mauritius and Seychelles Accelerator Lab is learning from and partnering with farming associations (here, on Rodrigues Island). Photo: UNDP Mauritius and Seychelles.

4.4. New and unusual partners help us learn from the edge

As reflected in the independent Midterm Evaluation, "*the Labs' ability to prioritize local relationships with unusual subjects over the usual big players in the development sector is positively shifting practice towards grassroots local solutions and ownership*." For instance, the Accelerator Labs partnered in 2022 with a range of new private organizations, groups of informal actors and cutting-edge academic centers to make strides on the following sustainable development challenges:

- **Working towards increasing food resilience in Mauritius and Seychelles with three different farming associations**, Val D'En Dor, Seychelles Farming Association and FALCON Association. As both islands rely heavily on imported processed foods and are struggling to build local capacity to produce and consume locally, the Lab decided to partner with these farms to get a better understanding of the real issues being felt and dealt with on the ground by these communities.
- **Devising new ways to reach gender equity with Quilt AI in India,** a firm that converts millions of data signals into human understanding. The **UNDP India Accelerator Lab** partnered with Quilt AI to study the gendered nature of unpaid care work and identify how to best change behaviors among men and boys to increase their acceptance of and responsibility towards unpaid care work.

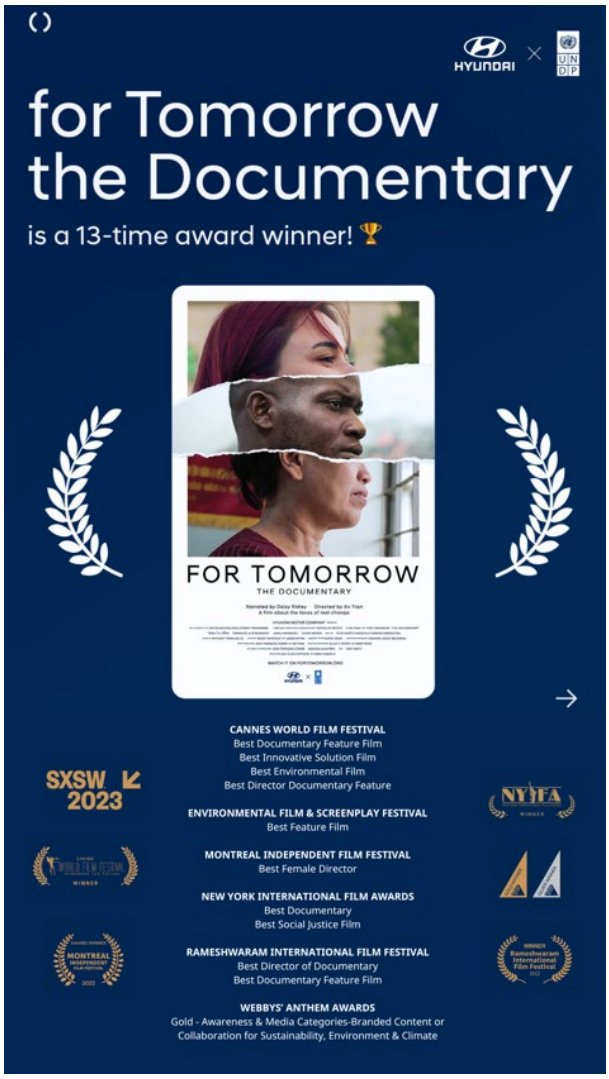
The UNDP Philippines Accelerator Lab and behavioral design agency KindMind developed a campaign to shift attitudes and encourage climate action.

- **Understanding the consumers' sentiments towards reducing single-use plastics and marine pollution with KindMind in the Philippines**. The **UNDP Philippines Accelerator Lab** partnered with KindMind, a behavioral design agency, to analyze a large amount of social media conversations on the topic of plastic waste. The wealth of insights uncovered enabled the team to develop behavioral communications (see visuals) to shift attitudes and encourage action towards more sustainable consumption patterns and a zero-waste life. The study reached over 434,000 Facebook users across the Philippines.

- **Understanding what drives people to consume or combat misinformation online:**
    - **The Busara Center for Behavioral Economics,** a research and advisory firm based in Kenya, led a live experimental demonstration of the Healthy Internet Project web browser plug in, in collaboration with the **UNDP Kenya Accelerator Lab**, and the Healthy Internet Project incubated at TED. Their joint research allowed for a better understanding of a user's motivations to voluntarily flag misinformation online.
    - **The Bunge & Born Foundation** is an Argentinian nonprofit organization focused on developing innovative, scalable and evidence-based solutions in education, science, culture and public health. **UNDP Argentina, powered by its Accelerator Lab**, partnered with the Bunge & Born Foundation to research the sources of misinformation related to COVID-19 and the demographic factors leading to vaccine mistrust and avoidance.

Chapter 5: Reaching New Audiences & Winning Awards

In 2022 the UNDP Accelerator Labs reached new levels of media traction, branching out to new audiences beyond the core target group of sustainable development practitioners.



5.1 *for Tomorrow*: the award-winning documentary

The UNDP Accelerator Labs together with Hyundai Motor Company released ***"for Tomorrow: the Documentary"*** (available on Amazon Prime and YouTube) in September 2022. As the culmination of a two-year partnership, this feature-length film argues for the transformative power of bottom-up innovation for sustainable development. Narrated by Daisy Ridley (Star Wars), the film follows five innovators from around the world.

The film and its promotional videos by the K-Pop group **BTS** have been viewed millions of times. It was screened at a wide range of festivals including Fixing the Future in Barcelona, Cannes World Film Festival, New York International Film Awards, Montreal Independent Film Festival, Rameshwaram International Film Festival, Switzerland International Film Festival, Bridge Of Peace International Film Festival, and Common Good International Film Festival.

To date, the partnership and film received twenty awards from prestigious festivals such as South by Southwest, the Cannes World Film Festival and the Webby's Anthem Awards.

"The bold investment of UNDP has paid off. The Accelerator Labs are unique drivers of social and grassroots innovations. The documentary will encourage more people to be bold and Germany is proud to be a partner in crime." Ambassador Antje Leendertse, Permanent Representative of Germany to the United Nations.

Going global with *"for Tomorrow"*

The world premiere of **"*for Tomorrow: The Documentary*"** was held on September 15th, 2022 at the Lincoln Center for the Performing Arts in New York in proximity to the 77th session of the United Nations General Assembly.

The event featured opening remarks by Achim Steiner, UNDP Administrator, Ambassador Antje Leendertse, Permanent Representative of Germany to the United Nations, and Vice President of Brand Experience at the Hyundai Motor Company, Sungwon Jee.

From left to right, H.E Hyunjoo Oh, Deputy Permanent Representative of the Republic of Korea to the United Nations, Achim Steiner, UNDP Administrator, Ambassador Antje Leendertse, Permanent Representative of Germany to the United Nations, Sungwon Jee, Vice President of Brand Experience at the Hyundai Motor Company, and Rwodah Alnaimi, Strategic Partnerships Manager of the Qatar Fund for Development.
Photo: for Tomorrow.

After the screening, the audience was able to ask questions to panel members including, from left to right: Elliot Kotek, Producer; An Tran, Director; Emmanuel Mansaray, innovator from Sierra Leone; Gina Lucarelli, UNDP Accelerator Labs Team Leader; and Professor Anil Gupta, Founder Honey Bee Network.
Photo: for Tomorrow.

for Tomorrow premiered in Germany, Peru and Guatemala

Following the official premiere, *for Tomorrow* was premiered and screened at UNDP events organized by UNDP and its partners in Berlin, Guatemala and Peru.

UNDP German representation office and the UNDP Accelerator Labs, in partnership with BMZ and with the support of the SDG Action Campaign team organized a screening event in **Berlin, Germany** in November. It was an opportunity to celebrate grassroots innovators and recognize the visionary support of Germany as the founding investor of the UNDP Accelerator Labs.

Attending the screening event in Berlin from left to right: Dr. Jürgen Zattler, Director General for International development policy, 2030 Agenda, climate at the German Federal Ministry for Economic Cooperation and Development (BMZ), Gina Lucarelli, UNDP Accelerator Labs Team Leader, and Michael Leutert, Director of UNDP Representation Office Germany.

Amadeo Gonzales, Silvio Cacallica and Nelsi Gallegos, (pictured above) are protagonists in the film and leaders of Ancocala's “10 de Agosto Farmers Association.” They attended the Peru premiere organized by the **UNDP Peru Accelerator Labs** at the Museo De Arte De Lima (MALI). However, more than just a premiere, the Accelerator Lab took the opportunity to arrange **live** solutions mapping exercises and experiences to help people understand how the Lab surfaces grassroots solutions. See how it unfolded in a musical video story. Photo: UNDP Peru.

The **UNDP Guatemala Accelerator Lab** launched the documentary at an event that included a forum and discussion where public institutions, academia, companies and innovation ecosystems could discuss the value of grassroots solutions. At an adjacent exhibit, a solution featured in the documentary, the Solar Tuk Tuk, a solar-powered three-wheeler co-created by Guatemalan innovators was on display. The team created a companion documentary on the Solar Tuk Tuk.
Photo: Paola Constantino.

5.2. Media coverage of the Accelerator Labs

The UNDP Accelerator Labs at the Climate Conference (COP27)
The Head of Solutions Mapping for the **UNDP Egypt Accelerator Lab**, Alik Mikaelian spoke on **UNDP's Broadcast Hour**, a 60-minute daily production at COP27.

Alik shared the work of the Lab on adaptive and green farming practices while advocating for the critical role of local innovations to ensure more resilient food systems in the future.
→ **Watch Alik Mikaelian speak on the broadcast (starting at 1:13:20).**

WEF: 'Open' technology can tackle the world's biggest problems - here's what's holding it back.
"UNDP's Accelerator Lab network is another initiative that works across 91 countries, including Lebanon, Togo, Kenya, Sudan, Iraq, Morocco, and Argentina, to create local innovation hubs to address critical access and online safety areas," shares WEF.
→ Read more here

WEF: Achim Steiner of UNDP on empathy, tech policy and the 'power of one'.
"The UNDP a couple of years ago set up, the UNDP Accelerator Labs, […] to study where innovations were coming from within the country, looking at the tech sector, the startup sector, but also low community-driven solutions," says the Administrator.
→ Read more here

Thomson Reuters Foundation News: Local heroes: The untold story of the COVID-19 pandemic
→ Read more here

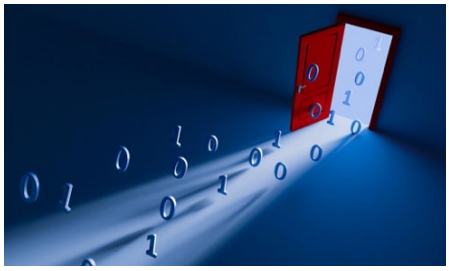
DevDiscourse: UNDP launches new Digital Strategy towards achieving SDGs.
→ Read more here

5.3. Regional awards & media coverage of the Accelerator Labs

"We Breathe It In" wins awards at the Effie Ukraine awards

Just prior to the conflict in Ukraine, the **UNDP Ukraine Accelerator Lab** and advertising partners focused on behavioral insights about open burning for the campaign, "We Breathe It In."

The anti-pollution campaign won several Effie Ukraine awards, including a Gold for Cross Media Storytelling and a Silver for Partnership with Media Channels.



Forbes India

Harvard Business School's Frank Nagle highlights the **UNDP Zimbabwe Accelerator Lab's work** on combatting food shortages and the **UNDP Vietnam Accelerator Lab's work** on plastic waste and the circular economy as examples of developing solutions that benefit communities.

→ Learn more about how our Network accelerates learning and develops solutions to benefit communities here.

Infobae

Presenting the **UNDP Ecuador Accelerator Lab's work** on eliminating femicide using a hybrid methodology that combines on-site mapping with digital tools.

→ Learn how the Lab utilizes this hybrid methodology and how their social cartography tool is used in practice here.

The Star

Presenting the **UNDP Kenya Accelerator Lab's work** on driving digital inclusion of young women through FemiDevs, a programme upskilling young women with digital skills.

→ Learn more about the FemiDevs programme and the participants here.

The Hindu

Presenting the **UNDP India Accelerator Lab's platform** that equips farmers with information on the impact of climate change using Artificial Intelligence.

→ Learn more about how their DiCRA platform works and the insights it has generated so far here.

Springwise

Presenting the **UNDP Rwanda Accelerator Lab's work** on developing a multi-sensory smart cane that helps visually impaired users navigate public spaces.

→ Learn how the multi-sensory smart cane was built and the technology behind it here.

5.5. Amplifying the Labs' voices online

In 2022, the UNDP Accelerator Lab published **over 2,000 posts on social media** (around 5-6 posts per day) sharing the explorations undertaken by the Labs and the key insights they surface on global Twitter, Instagram and LinkedIn accounts.
In 2022, the Accelerator Lab Network's global audience grew by **32 percent** on Twitter, **38 percent** on LinkedIn and by **43 percent** on Instagram. The Accelerator Labs' media channels generated **1.31M** impressions (the number of times content has been displayed on social media.)

Twitter spaces participants from left to right: Yrika Vanessa Maritz, UNDP Namibia Accelerator Lab, Darinka Vasquez, UNDP Chief Digital Office, Tayo Akinyemi, UNDP Accelerator Labs, Rodrigo Moran, UNDP El Salvador Accelerator Lab, Rachel Sibande, Senior Director, Country Outreach at DIAL.

Snapshot: Twitter spaces: How do we ensure digitalization benefits everyone?

With COVID-19, the world has been going digital at an accelerated pace. But will this rapid digitalization last? and how can it benefit even the most vulnerable populations in the Global South, such as informal workers and women?

To deep dive into this timely topic, the UNDP Accelerator Labs and the UNDP Chief Digital Office hosted a Twitter Spaces conversation in October of 2022 to bring perspectives from Namibia, El Salvador and continent wide from Africa. **Over 750 people** tuned in worldwide from various sectors to listen and comment, and the event generated **8,300 impressions**.
→ Listen to the Twitter Spaces conversation

"La Ronda," a multi-Lab podcast produced by the UNDP Paraguay Accelerator Lab.

Snapshot: showcasing the Labs' work through video, audio and augmented reality

The **Labs in Paraguay, Pakistan, the Philippines** and **Cabo Verde** created their own podcast series to experiment with audio storytelling and continue to share their learning with a wider audience. Other Labs showcased their work through video storytelling, like the Accelerator Labs in Guatemala and Cameroon who produced mini documentaries around their work in the field. The UNDP Colombia Accelerator Lab is experimenting in augmented reality (AR), using AR for storytelling by integrating the technology into their own annual report and their Lab's promotional materials. The video profile, "Sargablock: Omar's Story," from the UNDP Mexico Accelerator Lab was downloaded 46 times by broadcasters from UNifeed, a multimedia service from UN Headquarters that feeds stories to broadcasters worldwide, as well as on Reuters Connect and AP Video Hub platforms.

Chapter 6: A Look Ahead, towards a continuous

Building on a growing track record of results in changing the way UNDP delivers, invests in and thinks about development, the UNDP Accelerator Labs continue to create new forms of actionable insights to understand and solve 21st century development problems in 115 countries around the world, including most Least Developed Countries and Small Island Developing States.

As outlined in this report covering a selection of exploratory work underway, the Labs are approaching development from the bottom up by mapping thousands of solutions and empowering grassroots partners on the frontlines. They are exploring complex development issues such as informal economies and air pollution and translate this learning into cutting-edge new value propositions. They are facilitating the scaling of innovation by embedding new ways to work inside governmental bodies and by demonstrating results of experiments to policy makers.

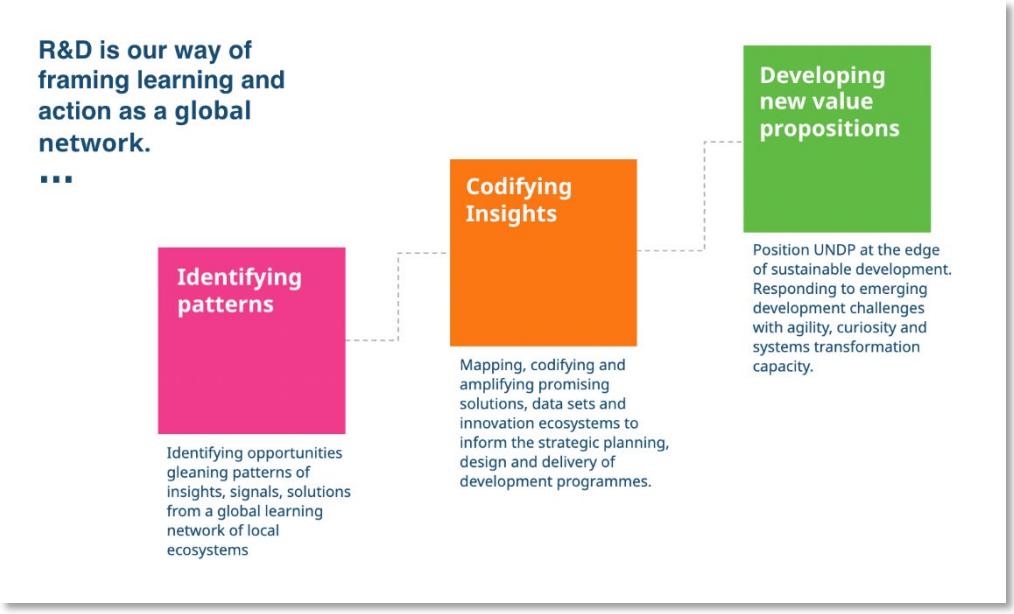
Across 115 countries, the UNDP Accelerator Labs have matured to create new value. They **build upon national capability** to advance global digital public goods and assist governments in determining digital readiness and pursuing digital transformation.

The Accelerator Labs **track signals** of change, convene stakeholders to imagine and plan for alternative futures. They also **test** out new methods of advancing UNDP's signature solutions.

Moving forward, in the next evolution, we will build on this track record to learn about countries that have **opened the door** for new partners, including the private sector, fintech and social impact entrepreneurship. We will also learn from strategic innovation investments that have facilitated and prompted portfolio sensemaking and activation, making inroads to systems transformation. The drive for scale will increase ways to work with partners to create new niches beyond UNDP's signature solutions when it comes to urban systems, as well as informal, circular, and blue economies among other emerging global development value propositions.

Scaling learning globally through the R&D cycle

In 2023, the Network will continue to learn about emerging development challenges from the edges and move these insights into action.



Our Network learning strategy in action. Here are the key steps we take in our research & development practice to move our learning into action.

The Network identifies emerging patterns of insights, signals and solutions surfaced by the Labs across the world. As a learning Network, we codify insights to distill new value propositions that can help respond to emerging challenges sustainably and with agility.

This approach has proven successful in moving from learning to action in 2022 and offers a strategic and practical frame for the programmatic work of the Labs in 2023. As seen on the topic of informality and digitalization, the Accelerator Labs' learnings are translating into alternative policy prescriptions.

Doubling down on open R&D to navigate uncharted territory

The SDGs demand structural transformation of existing systems. While UNDP and its development partners have amassed significant knowledge on transforming governance, environmental and economic systems to create a fairer world for and with people in poverty, the pressures of the current poly-crises means that what we know is not enough. How do we transform energy systems towards renewables while also ensuring an end to energy poverty? How do we ensure fair elections in an age where information integrity threatens democratic processes? What does an end to multi-dimensional poverty look like given global recessionary pressures?

The truth is, we don't fully know. Which is why we need exploration, experimentation and learning from grassroots solutions. We need new ways of working that translate into new value propositions. We need R&D for continuous renewal in the face of emerging challenges.

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In the course of 2022, the Accelerator Labs have matured and begun transitioning towards globally distributed **Research and Development (R&D) units that evolve new value in the face of uncertainty**. By learning from the edges, attracting new partners and making inroads into systems transformation, the Labs are providing a model for the development ecosystem whereby new **value propositions** respond to the demands created by continuous uncertainty

As we look toward this next phase of the Accelerator Labs Network, 2023 will focus on taking the results achieved with Germany, the State of Qatar, UNDP core donors and action partner Italy's investments to scale and make a **wider global impact in the public domain.**

The UNDP Accelerator Labs' focus in the next 12 months will be to test out ways to **build an SDG innovation commons while expanding multilateral partnerships.** The SDG Innovation Commons will drive public domain experimentation, inquiry and investment designed to unleash action for intractable issues in sustainable development. It will be backed up by the largest learning Network on sustainable development challenges, the UNDP Accelerator Labs, which now operates at scale in 115 countries, has sourced over 3,000 development solutions, wins awards and attracts a diverse range of partnerships. The SDG Innovation Commons – backed by UNDP's global learning Network capability – will create new value by connecting **insights, data, finance and grassroots solutions** to encourage action-based learning on what it takes to reach the global Sustainable Development Goals.

UNDP accelerator labs

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

german cooperation
DEUTSCHE ZUSAMMENARBEIT

QATAR FUND FOR DEVELOPMENT
صندوق قطر للتنمية

UNDP Core Partners

UNDP Core Partners

Action Partners

MINISTRY OF ECOLOGICAL TRANSITION
giz
Healthy Internet Project
AfriLabs
Center for Music Ecosystems
newcities
Honey Bee Network
nesta
Utrecht University
School of Economics
QCRI Qatar Computing Research Institute
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empowering experimentation

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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 Italy Ministry of Ecological Transition. We are actively looking for more partners to enable the evolution of the UNDP Accelerator Lab network.