

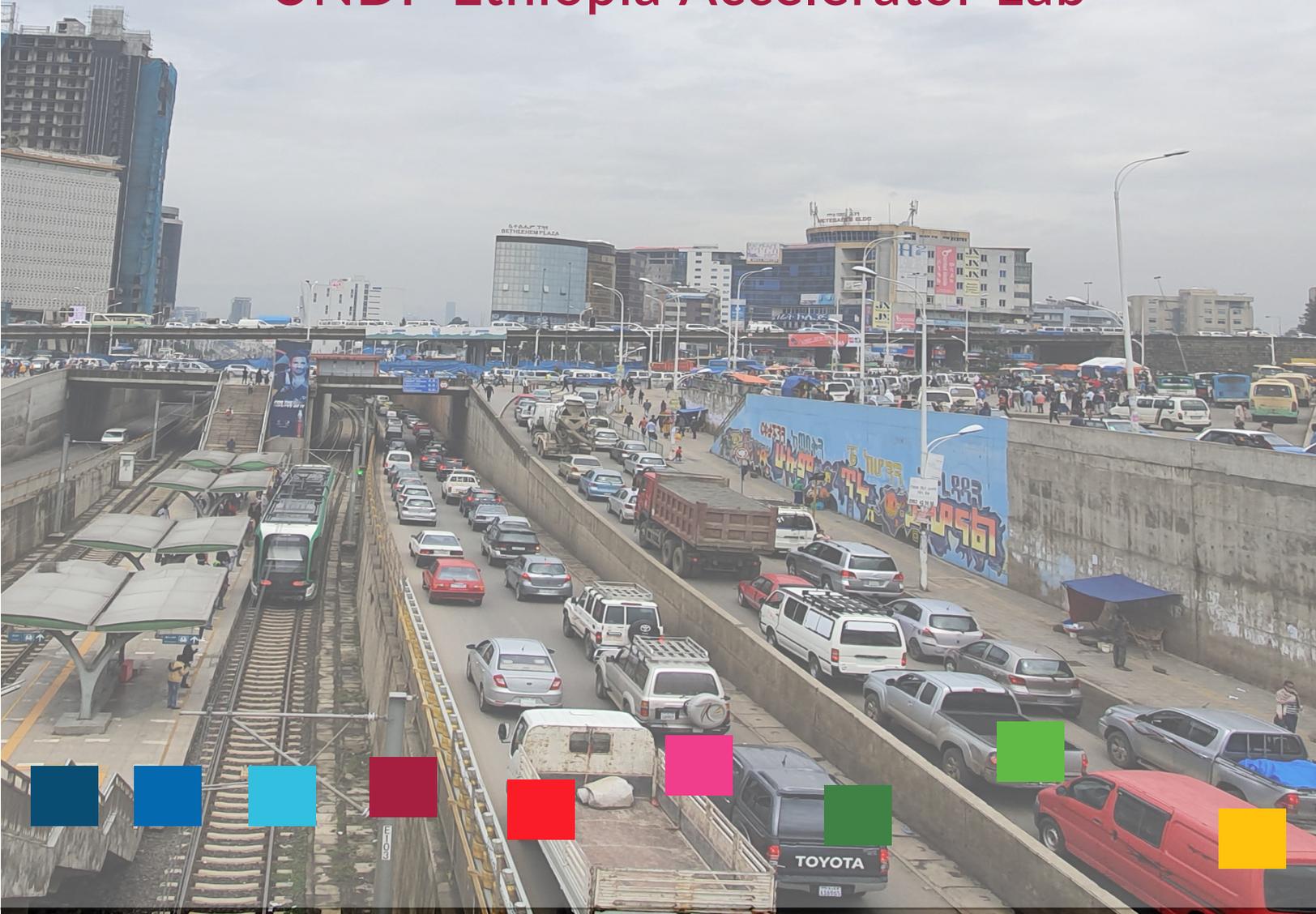


accelerator
labs



2020 IN REVIEW

UNDP Ethiopia Accelerator Lab



OVERVIEW

UNDP Ethiopia's accelerator lab was officially launched on December 10th, 2019, as part of the largest and fastest learning network of 60 accelerator labs across the world. The lab is a space for UNDP to explore, test and grow innovations for development through collaboration and partnership internally and externally with stakeholders. We are bringing a new way of working to meet the 2030 sustainable development goals by mapping, testing and growing grassroots solutions that are crafted by those close to the problem.

Over the past year, we identified frontier challenges for Ethiopia, generated insights and learnings with an active partnership of stakeholders and remained flexible in dealing with the COVID-19 pandemic. We Focused on [youth unemployment](#) for skilled urban youth, efficiency of [solid waste management](#) for job creation and socio-economic [response to COVID-19](#). Alongside these challenges we also looked at strengthening the [innovation ecosystem](#) in the country and within UNDP.

The team, made up of [Netsanet Mekuria](#) [Head of Exploration], [Amanuel Tadesse](#) [Head of solution mapping], [Okelo Fekadu](#) [Head of Experimentation] and [Wudasse Berhanu](#) [Technical expert], come from diverse backgrounds in mechanical engineering, product design, agriculture, food security and Impact measurement and management. We bring a different perspective on development challenges from expertise in innovation development, data science and human centered design that give us a unique position as an innovation partners to UNDP Ethiopia and in the ecosystem.

The lab team with Mrs. Ahunna Eziakonwa, Assistant Secretary General and RBA Director



INNOVATION IN ACTION

- 01 SYSTEM THINKING**

Development challenges are interconnected and complex so we cannot afford to look at them as functioning in silos. We use systems thinking to get a broader perspective on how the challenges we work on are related and uncover patterns that connect them. For example, we are taking a systemic view on solid waste management by looking at the efficiency of waste management as it relates to urban development, employment, and resiliency. We are creating an equitable market for waste that can generate jobs, sustainable management of waste to build climate resiliency and creating a culture of proper waste disposal in communities for urban development.
- 02 UNUSUAL DATA SOURCES**

Being agile means we need to learn things quickly and act fast .At the onset of the pandemic, we wanted to get a plus on social distancing trends. We used social media, specifically to Twitter polls and within 24 hours from 300 votes , we found that people had significantly limited their movement to work and seeing others but going to the bank was the activity they couldn't avoid. When we wanted to get a deeper understand of industrial park worker's perception on the impact of the pandemic, we partnered up with VIAMO for real-time remote data collection and communication campaign using mobile phones which was a first of its kind for UNDP Ethiopia.
- 03 FUTURE THINKING**

When the pandemic created uncertainty for the industrial park workers because of the slowed global market, the lab team used foresight to embrace the impact of long-time lock down and showed the range of future scenarios to inform decision-makers. We used a future wheel to map major and secondary consequences for a given signal change. The exploration showed the industrial park's dependency on the export market held major socioeconomic implications for the companies and workers. Since slowing down of the global market reduced productivity companies might go bankrupt and staff might get laid off but also lead to reduction in the country's foreign currency reserves due to low export rates.
- 04 SOLUTION MAPPING**

The lab supports the country office achieve SDGs by capturing and developing the untapped potentials of grassroot innovations pursued by the local community in a course of solving their own problems. We trace and exhaust available solutions through a collective approach that draws on UNDP and the community's knowledge. In partnership with the Technology and Innovation Institute, we are developing a grassroot innovation mapping platform to chart traditionally applied best practices and new or improved products/services across challenges. This database of grassroot solutions will serve as a national resource for further exploration and iterative experimentation to identify scalable and impactful solutions to development challenges.
- 05 BEHAVIORAL INSIGHT**

Using the opportunity created by COVID-19 on the access to facilities and awareness creation on hand washing practices, we were curious about how to create a lasting behavioral change beyond the pandemic. After observing the current hand washing practices at various location in Addis Ababa, we set up a washing station outside a coffee shop with varying amenities and messaging to identify the most effective one at getting customers to wash their hands. We learned that while access is important, awareness and knowledge are much more powerful drivers for people to wash their hands. Once people wanted to wash their hands, they will seek out the facilities to do so.

IN THE BEGINNING

We spend the first few months learning about the development landscape and the current and future works of UNDP Ethiopia to before setting the ground for our own work. We looked at the country office's priorities and sensed the emerging challenges and opportunities in the local context to determine where to focus. The process of defining the Country Office's(CO) areas of work for 2020-2025, gave us the chance to learn more as we engaged in:

PORTFOLIO REVIEW

An overview of all the projects showed that UNDP Ethiopia continues to be a key and trusted partner for the government and the CO is interested in moving away from traditional ways of doing business to achieve SDGs. The Lab saw an opportunity here to show its value and introduce the methodology of exploring, mapping, and experimenting with local solutions as a new way forward.

SENSE-MAKING WORKSHOP

Using tools like issue mapping, system mapping and collective intelligence to understand driving factors, the country office was able to identify three frontier challenges for the next five year; rapidly growing population marked by a youth bulge, governance shortfall and environmental degradation.

In addition, we consulted with internal and external stakeholders and brought people together to generated knowledge collectively on what we should focus on in 2020. Through this process, we got direction and outlined challenge areas to begin our as an accelerator lab.



At the boot camp, outside of what we already knew, the students highlighted the need for knowledge sharing platforms on opportunities that exist and find out stakeholders in the innovation ecosystem that support them which wasn't identified in our previous explorations. As a quick way to address this, the lab team created a database of the ecosystem builders that was shared on external youth led digital platforms, employability skill platforms and our social media for collective building. This resource serves as starting point for youth to get to know the ecosystem in Ethiopia.

Along the way, we also saw that even though 98% of the students expressed interest in skill development activity, 76% of students had no idea about the existing career development activities on their campus. The top-down approach of career development centers was able to attract only a few students compared to the number of students that showed interest. This led us to examine more closely student-led career development initiatives and also test the most effective ways to communicate with the students for greater engagement.

Our team designed a quick experiment on what impact student-led initiatives around career development have on increasing student engagement while providing incentive mechanism on digital platforms to increase awareness of such programs. To accomplish this, we partnered with Dereja Academy, a youth career empowerment platform maximizing the Ethiopian youth's potential and employability skills, Addis Ababa Science and Technology University student affairs office and Cassiopeia, a student led career development platform that was prototyped at the boot camp. Dereja developed a tailored training program with Cassiopeia and together we leveraged existing resources on campus to promote career development services. From the experiment, we learned that increasing students' ownership and placing them at the center of their learning creates autonomous critical thinkers that are equipped with skills and experiences that they have already bought into as being necessary for their success.

YOUTH CAREER DEVELOPMENT

Based on the frontier challenges identified, the lab team explored youth unemployment from the perspective of UNDP and the government through portfolio sense-making where a sample of 28 projects answering question such as what is the problem this initiative addresses? Why is this important for Ethiopia? What is the project doing? And What effect or change is the initiative producing?. From this exercise, 76 % of our active projects validated how significant it would be for UNDP projects if we accelerate youth engagement and employment. In addition, We saw youth employment being addressed in many project even thought it might not be the primary issue. For example, a project focused on waste management has creating more than 18,000 jobs, a project on bio-mass technology has also creating an opportunity for women led SMEs.

Parallel to the portfolio sense-making, the lab continued exploring open and official data sources as contextual issue focused desk review, which enabled us to understand trends in the country. Following the exploration, we narrowed our scope to look at youth unemployment for the skilled labor force, as our first challenge, because we found that despite having qualifications young people were still facing unemployment. So, we wanted to dig a little deeper and explore young people's perspective no the issue. However, we wanted to take it a step further by also design solutions with them to the problems they identified . To do this, we organized a co-creation boot camp with university students to understand why even with a university degree it was hard to secure a job and design solution prototypes that tackle this problem.



SENSE

What are the emerging issues for the youth bulge in Ethiopia?



EXPLORE

How can we look at youth unemployment from a youth-led angle?



TEST

How might we give an active role for youth in their career development?



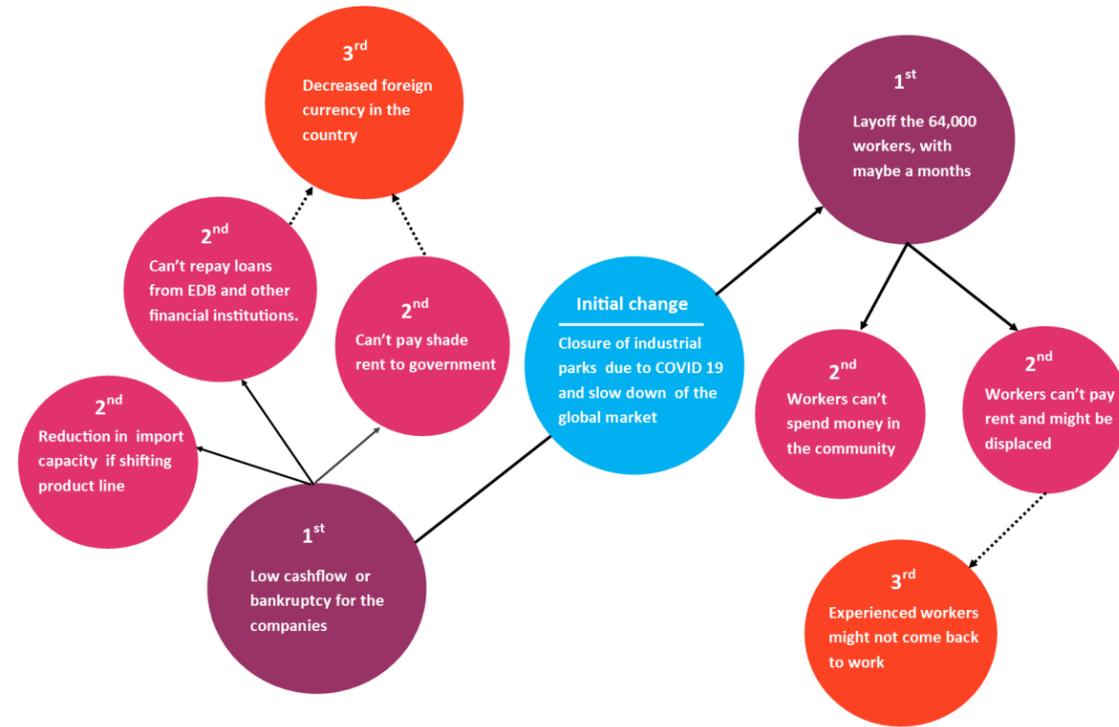
GROW

How can we create a lasting youth centered initiative for education and work?

To this end, universities need to inspire and allow students to take the lead in their growth and give as much energy and effort alongside the university. When students are at the center of their learning, they find relevance and purpose in it. Dereja's experimental training received positive feedback from students because it was based on a need's assessment. It is very important to provide an opportunity for students to have a voice in what and how learning experiences take shape and provide a space for students to express their existing talents to fit in what they are learning. We took this insight for the active participation of youth in their future for creating sustainable intervention into our work in setting up Generation Unlimited in Ethiopia alongside UNICEF and the Jobs Creation Commission. The multi sectoral partnership driven initiate, is creating a portfolio of scalable youth programs in Ethiopia and the accelerator lab is designing the youth engagement strategy and bringing new ways for active engagement.

COVID-19 RESPONSE

The first COVID-19 case was announced in Ethiopia in March 2020. The lab quickly redirected its attention to support UNDP Ethiopia to understand and address the impact of the pandemic. The lab did this through primary two ways; supporting intervention at industrial parks and setting up a challenge grant for innovations around the pandemic. Along the way, we also experimented with creating lasting social norms on hand washing.



BUSINESS CONTINUITY AT INDUSTRIAL PARKS

The lab was tasked to conduct a rapid situational assessment of the socio-economic impact on the industrial parks across the country as part of UNDP Ethiopia's COVID-19 response and recovery plan. We captured insights and designed interventions quickly using our tools for foresight to understand the relationships between the slowing global market, export focused companies at industrial parks and factory works. We spoke with industrial park managers, workers and the Industrial Park Development Corporation to understand the implication of lock down. We also investigated the gaps in preventative measure for COVID-19 that could be easy addressed and would ensure a safe work environment.

We learned that while industrial parks have taken quick measures like sanitizing works station, staff rotations to maintain a 1-meter distance between working stations and so on, there were some challenges when it comes ensuring workers practicing prevention measures outside of work and language barrier between foreign company manager and local workers limited effective crisis communication. In addition, we found that workers were under a lot of stress from the possibility of losing their jobs and contracting COVID-19 because of the large workforce present at the industrial Parks.

Based on these insights, we designed an intervention to address the short term impact in collaboration with VIAMO, a social enterprise that uses mobile phones to disseminate information and gather data. We set up a communication campaign and remote trainings through text and voice message in multiple languages about the pandemic for the IP workers and supervisors. This ongoing initiative addresses the information gap we identified in crisis communication, stress management and so on while continuously engaging the worker in active preventative measure when they are outside of work.

EMBRACING LOCAL SOLUTIONS

Crisis breeds innovation and the pandemic was no different. Seeing new and exciting ideas pop-up all across the country the lab embarked on finding scalable local solutions through a challenge grant in partnership with the Ministry of Innovation and Technology (MIiT). The grant was focused on how we can use technology and the entrepreneurial community to combating the pandemic. The goal of the innovation challenge grant was to support Ethiopian innovators and the tech sector develop home-grown solutions to address public health issues, ensure business continuity of the public sector and curb the social and economic impacts on jobs and enterprises.

The innovation challenge aimed to create an enabling environment for local innovators/researchers or businesses with a ground-breaking close-to-market solutions to help tackle the virus by availing funds and a platform for testing and scaling up their solutions. It was also the important to bringing many actors on board to contribute to the efforts at the national level so insure inclusivity.

The challenge grant was hosted online through a simple application portal and announced on local TVs, radios and different social media channels. We received 446 and 174 submissions in two rounds consecutively with applicants from across the country. Our partner MIiT set up a national task force to lead the innovation challenge and a technical evaluation team from different institutions and the private sector to select winning ideas.

We wanted to ensure the sustainability and profitability of the solutions we are investing in by implementing interventions that go beyond funding. As a first step, our accelerator lab introduced the concept of Human Centered Design to the product and service development process to ensure viability and desirability by educating the innovators and opening possibilities for collaboration. For a more concrete support, we are bringing on board an innovation hub to incubate and provide business development guidance to the winning innovators. Ten innovators were selected as winners for the first-round challenge grant to test and finish their prototypes while the final technical evaluation is underway for the second round.

EXPERIMENT ON HAND WASHING PRACTICE

Seeing people adapt new behavior like wearing masks and washing or sanitizing hands frequently to prevent COVID-19, made us curious about how we can create a lasting behavioral change on hand washing practice that can endure beyond the pandemic. We wanted to know what was the most effective way to get people to wash their hands; the design of the washing stations, the type of information available, the emotional triggers to the threats of dirty hands. To answer this question, we conducted a social experiment at a popular coffee shop where we observed customers wash their hands with various combination of the washing station design and type of information available.

The key insight was that to build on the opportunity the pandemic presents on making hand washing facilities accessible and improve hand washing practice is continuous awareness creation. Access to facilities alone is not sufficient to improve hand washing practices. People who wash their hands showed that they had the awareness and determinations to do so because they followed guidelines. It had to do more with what they wanted to do (wash their hands) rather than what was available for them. While access is important, awareness and knowledge are much more powerful drivers for people to wash their hands. Therefore, continuing the awareness creation will sustain the gained momentum and create sustainable market for the entrepreneurs manufacturing touch-less washing stations.



SOLID WASTE MANAGEMENT

Solid waste management is a serious challenge for the rapidly urbanizing Addis Ababa and other regional cities in Ethiopia. Cognizant of this problem and the potential socioeconomic and environmental impact of urban solid waste, UNDP Ethiopia has the NAMA COMPOST project that is introducing the use of organic solid waste to produce compost for agriculture and urban greenery in 5 cities. Organic waste is the largest portion of waste produced in Ethiopia, so this project contributes towards environmental protection and creating jobs along the value chain.

From our field visits to NAMA COMPOST cities Adama and Bishoftu, we learned that waste management business model is promising, it is faced by systemic challenges that emanate from weak institutional arrangements, community behavioral gaps, and logistical failures for waste segregation and market linkages. Further exploration of waste management in Addis Ababa and Bahir Dar, showed the need to view the challenges in waste management in a systemic way and that interventions should be at multiple levels. Therefore, we took a multi phased approach for the planned intervention we will undertake in 2021.

76% of waste collected comes from households and separating waste is not a common practice



Improve household waste segregation

Even when households segregate their waste it is collected together and sorted again at transfer stations



Low cost Transportation for segregated waste

Majority of waste is openly dumped, only 5% is recycled and 5% is composted in Addis Ababa



Increase waste recycling, upcycling and reuse

WASTE SEGREGATION: we are designing a behavioral insight study to understand positive deviances in household waste segregation. Households waste sorting is an important starting point for an effective and efficient waste flow and management. Based on this study, we will design grassroots community intervention for experimentation to find the best fitting household waste sorting structure for Ethiopian households.

TRANSPORTATION: we will support household segregation with a solution co-creation with experts and waste collectors to design segregated waste collecting and transporting mechanisms that could be created from locally available materials at an affordable price. This will address the current issue of segregated waste being combined for transportation due to inefficiencies in the transportation system.

WASTE PRODUCTS: In the solid waste management value chain, waste products need to be identified to create marketable commodities through reusing, upcycling and recycling. This will reduce the waste that reaches landfill and create job opportunities. Therefore, in collaboration of the Addis Ababa Solid Waste Management Agency we will be hosting a solutions fest to exhibit a range of waste products and connect stakeholders in the value chain to create market linkages.



INNOVATION ECOSYSTEM

The success of our lab is closely tied to the success of the innovation ecosystem in the country and within UNDP. If we are to source innovative grassroots solutions to scale and grow with UNDP projects or external stakeholders, we need openness to collaboration and knowledge sharing. Therefore, one of our first activities was to map stakeholders in the innovation ecosystem to identify potential partners and missing links. From this exercise, we learned that key players in the system exist but they weren't connected and lacked synergy. So, we set out to strengthen the system by creating networks and links between the different players.

Due to the limitations of COVID-19, we took advantage of the tools available to organize 5 webinars focused on entrepreneurship in different sectors, 2 of which were focused on women in entrepreneurship. Despite online meetings not being the norm in Ethiopia, we attracted over 200+ participants. The webinars, which were in connection with the challenge grant UNDP organized around facilitating innovations on COVID-19, also served as a valuable tool for connecting with entrepreneurs and stakeholders [across the country and globally](#).

In addition, we looked internally in UNDP on how to strengthen internal knowledge sharing, engage in a collaborative environment and integrate the lab's tools and methodologies within projects. We are organizing monthly learning sessions for the country office where we share the lab tools, how they can be used at different stages of project development and serve as tools for creating open spaces for collaboration and innovation with colleagues. We plan to take this on fully in 2021 with actively building on internal innovation tools.



In 2021, we will be focusing on exploring and building innovation ecosystems outside of Addis Ababa, such as in Bahir Dar where we will be holding a boot camp with the university early in the year. We will actively introduce our tools and methodologies as part of project development phases in the CO to shift to a more innovative and collaborative culture.



Mapping Stakeholders in the innovation ecosystem



Webinar series connecting 200+ entrepreneurs across the country



Monthly country office learning session on tools

CONNECTING GLOBALLY

CULTIV@TE

UNDP partnered with the Cultiv@te, an initiative of the Global innovation center to identify innovations in the agriculture sector. Among some, the toothpick project to eradicate sorghum's popular weed (Striga), solar powered mobile irrigation pumps, Real time data driven agronomic support and irrigable water desalination plant were the shortlisted ones. In collaboration with Ethiopian local partners evaluations were conducted based on the innovation's affordability, scalability, increased food security and jobs creation potentials. The toothpick has finally been selected to pilot its innovation with Ethiopian sorghum producing farmers in the coming cropping season. Throughout this process the Accelerator lab has been facilitating the connection with local partners for the selected solution and is supporting the pilot testing of the products.

MULTI CITY CHALLENGE AFRICA

A joint venture by UNDP Global Center for Technology, Innovation and Sustainable Development and NYU's Government Lab, MCC Africa brings shared challenges across cities for an open innovation challenge to identify local solution with scalable impact. Bahir Dar city administration participated in this program with the accelerator lab facilitating the problem definition process on waste management shared with Accra, Ghana and Kano, Nigeria. Through this challenge, we learned more about the problem and mapped solutions proposed by residents in these cities. Currently, ideas are being evaluated to select a winner for the city of Bahir Dar which will be experimented for scaling in the coming year.

CZECH SOLUTIONS FOR SDGs

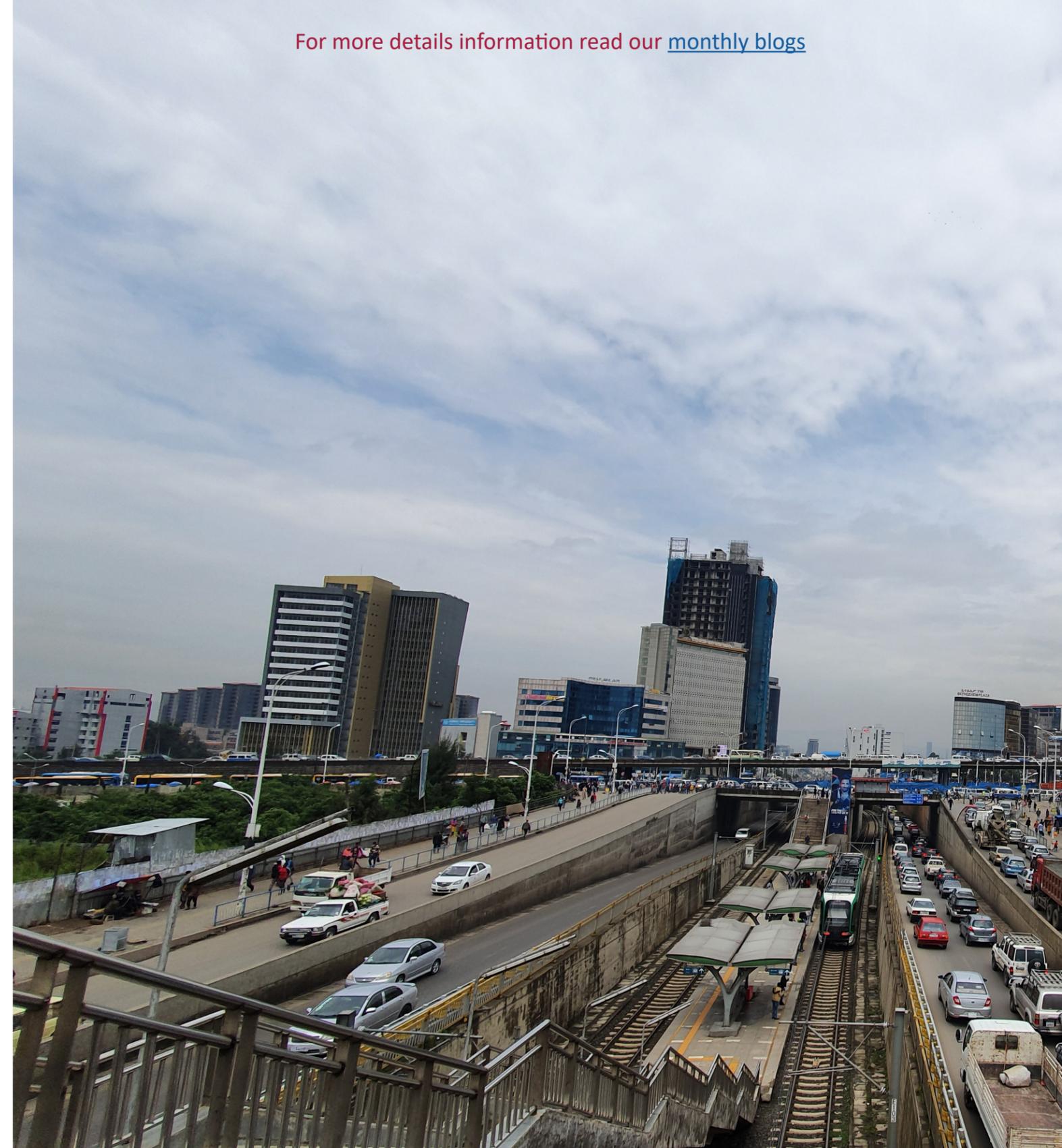
Established under the Czech-UNDP Partnership for SDGs project, this challenge grant aims to facilitate the transfer of Czech knowledge and innovative solutions that address development challenges identified by UNDP Country Offices. The accelerator lab was involved in the evaluation process for selecting the solution that would come to Ethiopia and handled connecting the solutions with the relevant stakeholders for testing and scaling in the country. This year, two Czech innovations namely DOT glasses and AQUA test benefited from the challenge fund. The projects are testing low-cost eyeglasses network and a technology monitoring of sustainability of shallow ground water resources, respectively. These projects were received very well by the local partners who are eagerly testing the solutions in the local context.

IN 2021

We have learned a lot in our first year as part of UNDP Ethiopia and a global learning network. We have established our presence in the innovation ecosystem and navigated a year full of challenges and opportunities. In the coming year, we look forward to expanding the reach of the accelerator lab within the innovation ecosystem in Ethiopia and fortify partnerships with key stakeholders in scaling our insights. The lab will continue the work on solid waste management based on the learning from last year and the activities we have set forth. We will be exploring new challenge areas of sustainable energy as a continuation of the waste management system and the digital economy. The lab will also be looking internally at growing innovation and collaboration across UNDP projects. In all our challenge areas we will be taking a portfolio approach to ensure a systemic and sustainable change.

In addition, we aim to grow the lab's tools and methodologies for fostering innovation with external stakeholders like government institutions and academia while adopting them to fit the cultural context in Ethiopia. We are looking forward to another exciting year for the accelerator lab to grow and bring innovation to development challenges.

For more details information read our [monthly blogs](#)



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



UNDP
Core
Partners