



ERADICATE POVERTY, LEAVE NO ONE BEHIND





TEST

CHINA | How can new and emerging data be used to assess living standards and support poverty alleviation efforts?

At the Global Poverty Reduction and Development Forum in 2015, Chinese President Xi Jinping stated that China will intensify its poverty reduction efforts and lift the remaining 70 million poor out of poverty by 2020. Poverty is not simply a lack of adequate income; it is a mix of human deprivation in knowledge, health, dignity and rights, obstacles to participation and lack of voice. Poverty should be measured with this complexity in mind, so that we can identify and address its root causes, and trigger real progress in China's "targeted poverty alleviation" strategy.

UNDP China has developed a measure called the Living Standard Dimension of the Human Development Index that addresses the multifaceted and complex nature of poverty by combining eight indicators to evaluate the provision of services of the 2,284 counties across China. We developed this index in partnership with Baidu to leverage

new and emerging data sources through the Baidu Big Data Lab. The results have been presented in a published report alongside an online interactive visualization map to engage the public with the multifaceted poverty issues in China. Pilot projects based on the findings of the study will target people living in poverty. Policy recommendations based on the lessons will be provided to government departments.

Next steps include adding more dimensions or proxies, such as health, education, environment protection and energy saving, to enhance the current big data base and to make it a real-time tool to track and review SDG progress in China through 2030. We will also pursue joint research with LGOP/IPRCC on new poverty criteria and urban-rural integration, scope big data from e-commerce research with Alibaba, and scale up and expand poverty alleviation projects based on this data experiment.





TEST

EGYPT | How can we co-design livelihood solutions with members of poor communities?

Fayoum is one of Egypt's poorest governorates. The fishing community lives hand-to-mouth and below the poverty line. The lake they once relied on for sustaining their lives has become contaminated with toxins from sewage waste. Young people between the ages of 15 and 30 years make up 60 % of the Egyptian population, with 57% living in rural areas. The unemployment rate has reached 12.5% in 2016, and 84% of the unemployed are young men and women.

Entrepreneurship is one approach to this problem. In Egypt, entrepreneurship has proven effective in combatting a vast array of challenges by improving an individual's economic standing, positively impacting communities' quality of life, and ultimately improving the national economy as a whole. Therefore, UNDP supported GESR (Misr El Kheir) in organizing a social innovation camp, where youth from all over the country came together for five days to co-design their own innovative solutions to improve the livelihoods of the fishing community in Fayoum.

The top solution, now an established social enterprise, completes the value chain in shrimp production and supports local women. It includes a redesigned shrimp-peeling table, "mini-lab" for fishermen's wives, to make the shrimp peeling process more hygienic and to improve shell quality. The team also recycles and processes the shells into Chitosan, a chemical that is heavily used in the agricultural industry. Based on the success of this model, UNDP Egypt, with other partners including civil society, public sector and private companies, is exploring the potential of implementing a series of social innovation camps focusing on different thematic challenges, in one governorate. This will fall under a comprehensive development intervention.

TEST

IRAQ | How can we stimulate an innovation ecosystem to address youth unemployment and unleash young people's creative potential?

In 2016, about 18 % of the Iraqi population was unemployed, with 27% of young women and 17% of young men lacking jobs. Unemployment is higher among youth with a higher education. The Iraqi entrepreneurship ecosystem is not well established, especially regarding youth-led startups.

To stimulate an innovation ecosystem and foster entrepreneurship with cutting-edge methods, UNDP Iraq started the 'Innovation for Development' initiative in 2015. Following a promising start, the experiment continued as a component under the Local Area Development Programme in mid-2016 and 2017, funded by the European Union. The programme entails a skills-building component: Youth volunteers set up boot camps and train peers in Design Thinking and Lean Start-up methodologies. This provides an attractive learning and incubation platform, promotes volunteerism and contributes to social cohesion.

More than 600 young women and men applied lean startup and design principles to develop their ideas into projects. The initiative attracted tens of major companies and banks, and resulted in new partnerships with young entrepreneurs. The initiative is now providing tailored support to over 35 promising startups. It engages partners from academia to further advance potential partnerships with companies and banks.

In 2017, a dedicated track focuses on working with universities to bridge the skills-to-market gap by providing technical support to projects and jobs fairs, capacity-building for academics, linking graduation projects to the SDGs and supporting the development of specialized entrepreneurship courses. The initiative will continue to invest in bridging the gaps between companies, banks, government institutions/programmes, universities and young entrepreneurs.



INDONESIA | Can data from drones help small-scale farmers save money?

TEST

The people of remote Napu village in Indonesia's East Nusa Tenggara Province lack reliable access to clean water for drinking, sanitation, and cooking. Men, women, and children typically collect water from springs, and walk several kilometres carrying heavy jerry cans of water back to their village. To finance long-term solutions for the water challenges, we initiated a social finance experiment. In 2016, partnership with KOPPESTA, an NGO partner based in East Sumba, and Kitabisa.com, a crowdfunding platform based in Jakarta, UNDP Indonesia launched its first ever crowdfunding campaign: 'Bring Water for Life'. It achieved its funding target of IDR 350,000,000 from the public, and the money was used to provide clean water access to Napu village's 500 inhabitants by building a solar-powered water pump system. UNDP Indonesia is now exploring the scale-up of this successful campaign into a bigger SDG platform.

This crowdfunding experiment has been vital to understanding the challenges in developing Indonesia's social finance ecosystem. UNDP Indonesia is working

with the private sector, as well as government and traditional development partners to support the growth of the country's emergent social finance ecosystem. UNDP Indonesia has also partnered with the Financial Services Authority (OJK), The National Development Planning Agency of Indonesia (BAPPENAS), Ministry of Finance, and AlliedCrowds, an aggregator and directory of alternative finance providers in the developing world, to produce a database of investors and identify a pipeline of social enterprises for social finance ventures.

Canada has committed funds for 2017 that will focus on engaging women entrepreneurs. UNDP is exploring a partnership with the Islamic Development Bank for its urban regeneration programme. Future plans include working with partners to deliver a national workshop on social finance, expanding the crowdfunding campaign to support multiple development interventions through the SDG platform, and preparing a blended finance proposal that provides investment to a structured portfolio of social enterprises in Indonesia.



SERBIA | How can we generate employment for young people and unlock new sources of financing?

TEST

The unemployment rate among young people aged 15-24 in Serbia is very high, reaching 47.5% in 2015, significantly above the general unemployment rate (18.2% for the working-age population of 15-64). To tackle the challenges and negative impacts of long-term youth unemployment, UNDP, the Finnish Innovation Fund Sitra and the Government of Serbia are designing a Youth Employment Bond pilot, based on a Social Impact Bond (SIB) mechanism.

Social Impact Bonds are results-based financial instruments for impact investing, where private investments are intended to create a positive social or environmental impact as well as a financial return. The first SIB was launched in 2010 in the UK. By now more than 60 SIBs have been commissioned across Europe, Australia, Canada, Israel and the United States. SIBs have raised over US\$200 million and touched more than 90,000 lives in connection with issues including employment, homelessness, health,

child welfare, education and criminal justice.

SIB modality reduces the public sector's funding risk as the outcome payers agree to pay and reward investors only if outcomes are achieved. Thus taxpayers' money will be invested only in programmes that have measurable impacts, and either create savings or improve social welfare. The Serbia experiment includes young people (15-30 years) who have been unemployed for more than a year with multiple risk factors for continued unemployment.

The business rationale is that only a third of the currently unemployed youth is covered by the active labour market measures in place, and there is scope for introducing more measures, innovatively packaged, through private-public partnership, to expand and accelerate the employment of young people. As a first step, we initiated an assessment of the costs of the current unemployment rate to design an investment case based on future public cost savings.

To stimulate the social entrepreneurship ecosystem in Jamaica and to find new solutions to SDG-related challenges, UNDP Jamaica initiated a Challenge Prize. The Technology Innovation Competition invited entrepreneurs in early stages to compete for early-stage funding and incubation support. By fostering and supporting young entrepreneurs and startups, this year's competition bridged the gap between private and public, revenue and impact, technology and development. The winner, Danielle Tait, created The Interview JM, a job preparation

and recruitment application focused on addressing Goal 8: decent work and economic growth. Tait's application boasts a suite of self-help psychometric tests and training tools for job seekers and companies recruiting staff, providing a platform for continuous development and learning. She will be supported by UNDP staff over the next 12 months as she utilizes her prize money to further develop her web application into a full-scale solution. Runners-up also received funding and access to incubation opportunities.





“During the training we learnt to extract yarn from Allo to weave into cloth. Today we produce Allo cloth worth a million rupees, half of which remains as profits for the group.”

Ghammaha Garbuja
Entrepreneur, Hampal Allo Clothes Weaving Ent
Saliya, Parbat, Nepal



TEST

NEPAL | How can technology provide livelihoods for rural women entrepreneurs?

The Himalayan giant nettle, locally known as Allo, has been harvested in Nepal for generations for its fibre, which can be used to produce cloth. Allo yarn can produce a range of products, including clothes, accessories, table mats and carpets. The majority of Allo yarn producers are rural women entrepreneurs, but the manual extraction process for Allo is extremely labour-intensive and time-consuming, and can cause health problems for women. To address this challenge, UNDP looked for innovative solutions to simplify and mechanize the yarn extraction process.

UNDP in Nepal stepped away from the traditional procurement process to attract the most innovative ideas. Instead of issuing a request for proposals to choose vendors, UNDP advertised an innovation challenge prize on YouTube. Backed by the Nepalese Department of Foreign Affairs and Trade, the winners of the innovation challenge

would be given US\$20,000 to develop technologies. Contestants were asked to ensure that the technology was easy for illiterate women rural entrepreneurs to use, could run on solar power or electricity, and would reduce processing time for Allo yarn to eight hours.

Four young graduates from the Institute of Engineering in Kathmandu University won the challenge prize. Together, they developed and tested the prototypes with UNDP. The team successfully piloted the solutions in two districts: Parbat and Rolpa. The machine simplifies different stages of the fibre refining process, increasing efficiency and reducing processing time from days to hours to increase production and profits. As a result of the pilot's success, the Government of Nepal will scale up the initiative with additional funding to produce and install the machines in another 22 districts within the next year.



TEST

INDIA | Can blockchain benefit citizens with access to finance and enable the Government to deliver better services?

In November 2016, the Government of India launched a national initiative to transfer from cash to digital payments, targeting citizens, financial institutions and government agencies alike. Ensuring access and utility of digital payment options by citizens is a major challenge, particularly in marginalized communities. The Government of India and banks are committed to find solutions to address this challenge by exploring the application of blockchain technology to improve efficiency, security and transparency of transactions.

UNDP will be supporting Indian state governments in testing blockchain technology by linking citizen IDs with their bank accounts and mobiles. The government will be able to use blockchain to store citizens' identity information and records of all funds sent to their account. A copy of the records on blockchain is then distributed to

all participants in the network, removing intermediaries. The technology can also be used by state governments to cut costs, speed up transactions, reduce data duplication and increase the effectiveness of existing governmental systems in a transparent and efficient manner.

UNDP has initiated preliminary discussions with state governments on using blockchain technology and is receiving interest in piloting digital payments. Our vision is the creation of a secure database of citizen IDs, financial/ credit history, and asset records which is shareable across financial institutions and government departments, with the citizens' consent. In addition, blockchain can allow integration of key data on Aadhar ID bank accounts, mobile numbers, postal addresses and election IDs, making it simpler, easier and more efficient for the government to provide services.

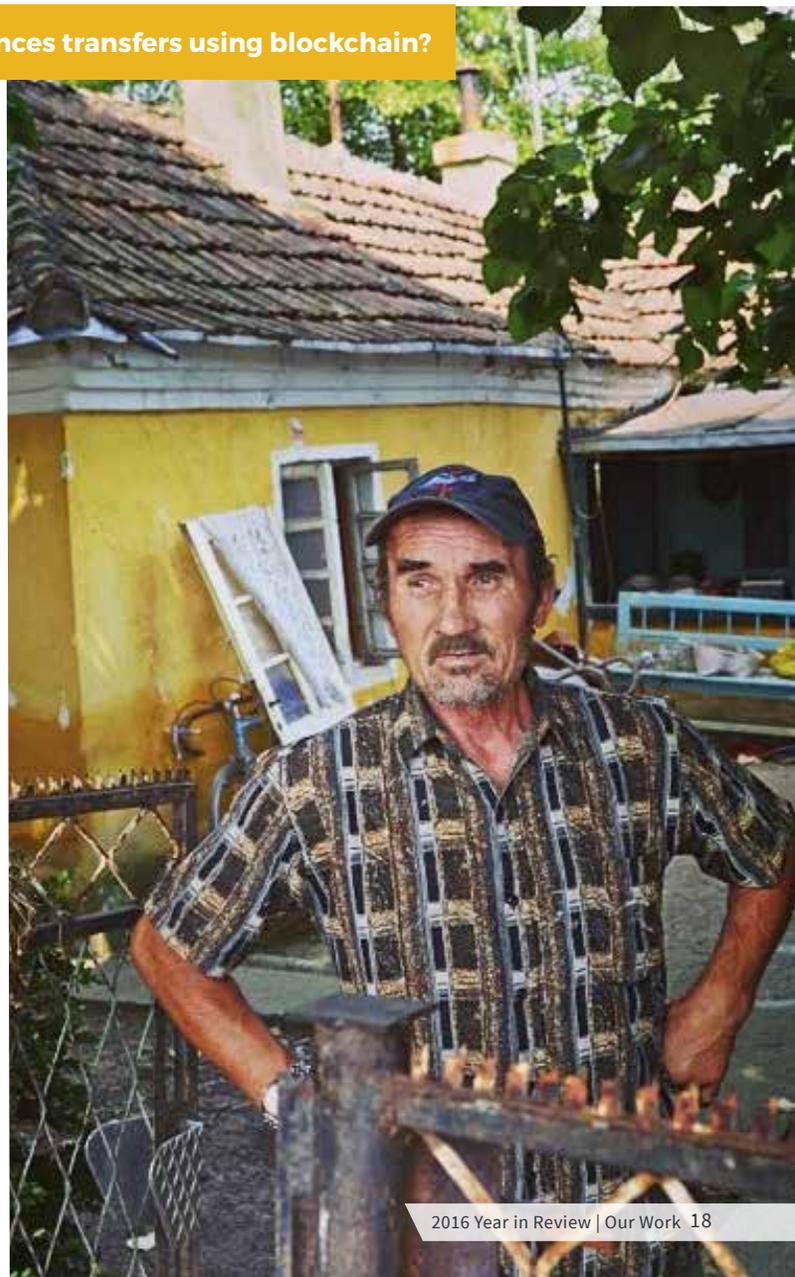


TEST

SERBIA | How can we reduce costs for remittances transfers using blockchain?

Currently the global average cost of remitting money is almost 8%. User research among Serbian diaspora communities also found that for many, there is insufficient transparency on where the money remitted is spent. Together with the FinTech NGO AID:Tech, UNDP Serbia is conducting an experiment on remittances in the city of Niš in southern Serbia. AID:Tech's Digital Identity will be issued to beneficiaries so they can receive remittances directly and cheaply. With this experiment, the diaspora will be able to send money via a UNDP portal to their families in Serbia. UNDP & AID:Tech will partner with a money transmitter to transfer the funds rather than sending just cash.

This in turn enables people in the diaspora to purchase items such as electricity, cash and supermarket vouchers. These vouchers will be sent directly to the beneficiaries' Digital Identity cards, which they can use for direct purchases on a mobile app to pay electricity and gas bills or buy groceries. Because blockchain is the underlying technology platform, permanent and real-time records of all transactions can be transparently stored. This also means that for the first time ever, it will be possible to trace where remitted funds are spent. In the future this can be extended to many other services such as social welfare, housing, health and other benefits.



15% of the world's population - a billion people - experience disability. UNDP is working together with people with disabilities, governments, human rights groups and other partners to improve legislation and service delivery, and support people with disabilities with livelihood opportunities. Innovation, especially in co-design and emerging technologies, plays an increasingly important role. For example, in Georgia we co-designed inclusive emergency services. In Egypt we co-developed social enterprises. In Armenia we collaborated to map accessible spots for the physically challenged.

In Georgia, 112, for emergency services, is one of the most dialled phone numbers. 112 was reachable only through a voice call. Those living with speech or hearing impairments simply didn't have the option to call. In 2014, UNDP Georgia, with Government of Sweden support, set up a design workshop that brought together people with disabilities, tech specialists and civil society organizations. Together, they redesigned the service. Today, sign language interpreters are on hand at the emergency hotline 112 to accept video calls and SMS messages from those who cannot hear and/or speak.

The service has helped to empower the disabled, providing them direct access to emergency services for themselves, and also to help those in need. It is noted that deaf callers were not always the ones in need of assistance. Once an elderly woman locked herself out of her house, and she went directly to her hearing-impaired neighbour who was able to call for help: "We used to be the ones who asked for help. Today we can also lend a helping hand," says Flora Bejashvili, who has also the new services.

In Armenia we have Matcheli, a map that plots accessible spots for the physically challenged. Launched in September

2016, we had a mapathon with the community to rethink the accessibility of a city. Together with the community we have been quickly able to map downtown Yerevan, thick with government buildings, banks and restaurants. With 50% of the Armenian population based in Yerevan, downtown was a good place to start. With Matcheli, we created a valuable resource for an underserved community.

We are building problem-solving skills of that community at the same time. We have seen positive spillover effects: Parents with prams, the elderly with restricted motion and tourists with luggage have also become active users of the app.

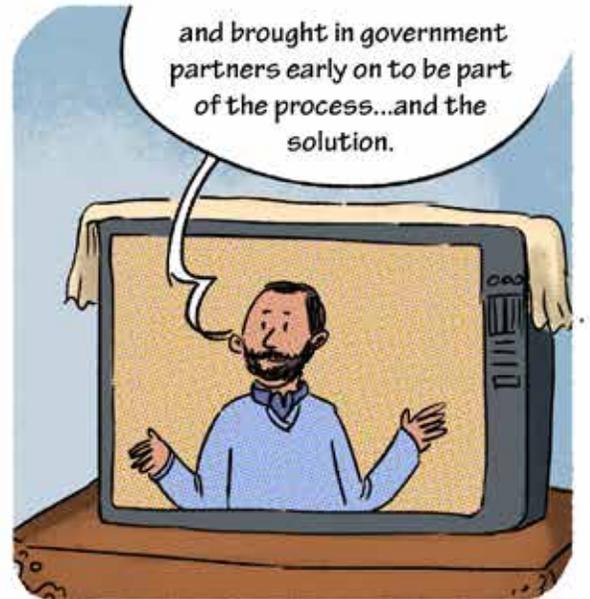
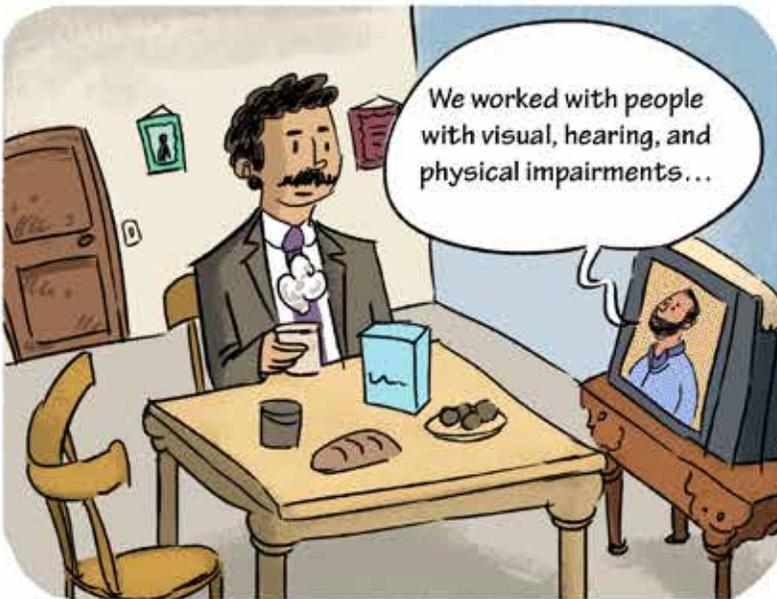
In Egypt, persons with disabilities encounter tremendous challenges in transportation, jobs, education and other integral aspects of life. To co-design solutions with people with disabilities, UNDP held a three-day workshop in Cairo titled 'Design for integrated living' in partnership with Fab Lab Egypt and Misr El Kheir Foundation. The participants, persons with disabilities, family members of persons with disabilities, student engineers, techies and designers, showed the utmost passion and commitment to co-design solutions with persons with disabilities that would support them in leading easier and more integrated lives. Prototypes included a well-structured media campaign on how to promote and mainstream sign language, and a mobile app that maps where ramps are available and where they are needed.

The Mobile Ramp app has been developed and, with the support of the local governor and private sector, 50 ramps have been built. Sign Heroes developed a prototype for a board game that teaches sign language in a fun and interactive way, which is ready to be published.

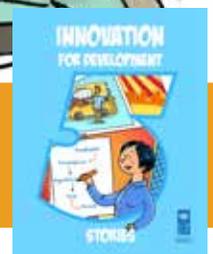




I'm Sherif! In Egypt, people with disabilities play a huge role in society... when they're given the opportunity. At UNDP Egypt we work with them to co-create solutions for their everyday problems.



Read the full story in our graphic novel - www.undp.org/innovation





TEST

SOUTH AFRICA, KENYA, NIGERIA, MOROCCO, EGYPT | Can cognitive computing be used to help young people develop the skills required to advance Africa's budding digital economy?

Finding solutions to Africa's challenges requires a workforce with a high level of digital literacy, that can leverage cybersecurity, data science, artificial intelligence, cloud computing, and other next generation skills. The proliferation of digital skills is critical for the youth of Africa to participate in the continent's growing digital economy.

UNDP and IBM are working together to deliver effective, high quality IT education to Africa's youth to foster the creation of a tech-savvy workforce. The US\$70 million IBM Academic Initiative will provide free digital skills training to prepare the next generation of tech workers. Educational services will be delivered through ready-to-use mobile apps and guides that teach new skills, online assessments to guide users through their educational journey, volunteer programmes to support and promote digital literacy at the community level, and an app marketplace where users can freely share or sell the applications they create.

IBM's platform will provide access to open standards, IBM tools, and course materials. Users will have access to thousands of resources, including web guides, lectures, interactive simulations, videos, online assessments, and volunteer mentors. Watson, IBM's AI system, will curate the programme, learning and adapting students' course offerings to help direct them towards the course they require to achieve competency, and in turn, help IBM to adapt the material being presented to the needs of all users.

Aiming to impact over 25 million Africans by teaching them digital skills over a five-year period, the initiative will be launched from IBM's regional offices in South Africa, Kenya, Nigeria, Morocco, and Egypt. UNDP and IBM hope to extend access to the programme across the continent, and work together on opportunities for promoting Science, Technology, Engineering and Mathematics (STEM) skills training, certification, and accreditation.



INDONESIA | Can data from drones help small-scale farmers to save money?

Rural farmers in Indonesia rely on their crops to sustain their livelihood, but yield often depends on factors beyond their control – weather, soil fertility, and resistance to disease. To help farmers slash expenses and increase crop yields, a local team set out to test a bold assumption: Data generated by low-cost drones can provide insights on crop health so farmers can make more informed decisions. In 2014, UNDP and UN Global Pulse launched a Challenge Prize to stimulate social tech entrepreneurs to come forward with promising ideas. Fast forward a few years and one of the winners helped local farmers reduce their expenses by 60 percent through precision agriculture. It won the best drone project at the GovInsider Innovation Awards at Innovation Labs World.

The UAVs were used to assess crop health. This data helped identify where rice crops were scarce, so farmers

could target more pesticides to increase their produce. Drones were equipped with infrared cameras to analyse photosynthetic levels; the higher the photosynthetic levels, the healthier the crops. Farmers could make informed decisions on effective pesticide use.

“Several local governments were very enthusiastic about our idea”, Hermawansyah, one of the project managers said in an interview with GovInsider. They approached his team to train public officials on “how to use drones to help farmers”. The Agricultural Office of the North Kayong District, in West Kalimantan, has added drone mapping to its 2017 budget, and a local university is working on drones for agriculture and food.



MALAWI | Can governments and the private sector use alternative investment models to deliver social dividends that help achieve the Sustainable Development Goals?

How can we stimulate private companies to advance pro-poor innovations? Enter the Malawi Innovation Challenge Fund. UNDP worked with the Government of Malawi’s Private Sector Development Project (PSDP), KfW, DFID UKAid, IFAD, and private sector partners to develop the Malawi Innovation Challenge Fund to improve the competitiveness of value chains in the agricultural and manufacturing sectors. The US\$11 million fund has adopted a social impact investment model: It provides grants as prizes for projects that have great potential to accelerate the achievement of the SDGs. For example,

the Innovation Challenge Fund invited entrepreneurs to propose new products and services that increase exports of manufactured goods produced in Malawi, or integrate processes to incorporate local products and reduce reliance on imported goods. Over the last two years, the Malawi Innovation Challenge Fund’s support of agricultural business ventures has resulted in increased income for an estimated 11,800 households, and created 290 new jobs. The investments in manufacturing projects increased the income of 21,500 households and created an estimated 900 jobs.



EGYPT | How can we support young people with launching their own cutting-edge start-ups?

UNDP Egypt launched the ‘Game Changer Fellowship’ in partnership with the Engagement Lab at Emerson College in Boston, USA. The fellowship is a one-year programme that provides aspiring Egyptian game designers with incubation support. Over the past decade, games for development have emerged as a unique approach to engaging people in development challenges and stimulating behaviour change. Games represent an opportunity to reach people where they are, with something they already know. Every year, a group of five young innovators from Egypt will be accepted into the fellowship programme, where they will be supported in designing games as solutions for development challenges

in the country. UNDP, along with the Engagement Lab, will provide the fellows with the necessary tools and resources to allow them to develop their skills in game design. From 2015 to 2016, five individuals prototyped their own games focused on issues such as sign language for the hearing impaired, entrepreneurship and environmental awareness. In 2017, UNDP and the Engagement Lab aim to work with the Information Technology Institute to launch a cross-cultural exchange programme between students at ITI and Emerson College. A total of five Egyptian fellows will be selected, and every fellow will be supported by two students from each academic entity to design a social innovation project.



RWANDA | How can young men and women across a continent access networks and resources to improve their employability?

With 200 million people aged between 15 and 24, Africa has the youngest population in the world; yet according to the World Bank 60% of these young people remain unemployed. Clearly there is a substantial need for youth employment initiatives, and for young people to participate in innovation and decision-making in their own countries. To address this challenge, in 2013 UNDP co-sponsored the launch of the YouthConnekt platform, a virtual space that facilitates partnerships among young Rwandans, the private sector and government for employment and entrepreneurship opportunities. In their first three years, YouthConnekt’s Boot Camps in Rwanda drove the creation of about 1,000 permanent and 2,700 temporary jobs.

YouthConnekt has reached more than 10,000 young women and men with skills-building services; and a million youth through 46 targeted TV and radio programmes on career opportunities and entrepreneurship support. The success of YouthConnekt in Rwanda stemmed from robust collaboration among actors across several sectors, including the Ministry of Youth and ICT, National Youth Council, University of Rwanda, College of Business and Economics, several non-profit organizations (DOT Rwanda, EDUCAT, and African Innovation Prize), and the private sector.

Seeking to adapt this model in other countries, the Innovation Facility supported a regional event in 2016 expand YouthConnekt. The event convened representatives from seven governments and UNDP offices to facilitate adaptation. Three countries—Liberia, Uganda, and Zimbabwe—have been awarded funding support from UNDP for their own iterations of the YouthConnekt platform, with Liberia leading the way with its own implementation.

Based on the outcomes of the 2016 regional event, Burkina Faso, Cameroon, DRC, Equatorial Guinea, Ghana, Lesotho, Sao Tome, Sierra Leone, Swaziland, and The Republic of Congo will pursue their own adaptations of the YouthConnekt platform in 2017 and beyond. YouthConnekt is also talking with United Nations Volunteers, the African Union, and the private sector (Microsoft and Vodafone) to initiate the design of a regional youth employment programme.