



**INNOVATION  
ACCELERATOR**

# 2020 Year in Review





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# Introduction

# Dear reader,

## **AS WE STARTED 2020, NOBODY COULD HAVE PREDICTED THE YEAR WE WOULD EXPERIENCE.**

The impacts of COVID-19 have led to lasting implications for global food security. And yet, we've seen firsthand the transformative power of innovation and technology to connect people virtually and allow for food distribution in a socially distanced world.

These [enabling opportunities](#) have helped the World Food Programme (WFP) teams to continue serving communities most in need despite the far-reaching impacts of the pandemic. What has been accomplished this year is significant, but it is even more meaningful given the unprecedented circumstances the world had to face. In recognition of this work and the critical connection between food security and peace, **WFP was humbled to be the 2020 recipient of the Nobel Peace Prize.**

WFP's commitment to innovation continues to grow, in part through the efforts of the WFP Innovation Accelerator. The Accelerator has built a strong convening role in the innovation ecosystem, bringing together stakeholders through collaborations including the **United Nations Innovation Network**, the **United Nations Digital Solutions Center**, and the **Atrium**. It is clear that investments in innovation continue to have a multiplier effect, with the Accelerator's impact **growing from 72,000 served in its inaugural year to over 3.7 million people served in 2020.**

These milestones could not have been realized without the dedicated support of **WFP's Country Offices** and key partners. In particular, I would like to extend deep thanks to the **Government of Germany** for their leadership in supporting the establishment of the WFP Innovation Accelerator in Munich, and for continually championing its cause.

I also wish to express gratitude to **the U.S. Agency for International Development (USAID), the Netherlands, and Luxembourg**, whose ongoing support enables the growth and success of the WFP Innovation Accelerator.

We are humbled to have a strong and growing community who have helped us reach this point in our journey: our **Innovation Advisory Council**, global leaders who continuously amplify our message, and the **WFP Advisory Group** whose diverse expertise helps distinguish WFP's work.

Though the impacts of the pandemic may have set back our progress towards the ambitious goal of achieving a world free of hunger by 2030, **it has not lessened our determination.** We're counting on you all — our network of supporters, champions, and advocates — to continue working with us towards this shared goal with a renewed urgency.

**Thank you for going on this journey with us.**

Sincerely,

**DOMINIK HEINRICH**

Director of Innovation and Knowledge Management  
United Nations World Food Programme



# Dear friends and supporters,

In this unprecedented year, we are humbled to share the ways in which we have continued to achieve impact in the WFP Innovation Accelerator's 2020 Annual Report. In the following pages, you will read about some of the ways we have adapted to the COVID-19 pandemic and scaled innovations around the world to disrupt hunger.

In 2020, as we celebrated our fifth anniversary and the exponential growth of our organization and impact, we were one of ten organizations recognized by *FastCompany* with dual awards: **Best Workplaces for Innovators, and Innovative Team of the Year 2020**. These are milestones we only dreamed of when we first launched the Accelerator in 2015.

## THANKS TO THE DEDICATED SUPPORT OF OUR GLOBAL COMMUNITY OF INNOVATION CHAMPIONS, LAST YEAR, WE:

- Sourced and supported **19 new cutting-edge innovations** to disrupt hunger, growing our portfolio to more than **80 projects** spanning **46 countries**, with **3.7 million people** directly impacted by our work.

- Hosted **nine Innovation Bootcamps, of which eight were fully virtual**, maximizing the value of virtual innovation programmes.
- Launched our first regional hub — **WFP Innovation Hub for Eastern Africa** — hosted in WFP Regional Bureau in Nairobi, Kenya. This new hub helps build a global innovation network within WFP, along with Innovation Hubs in Jordan, South Sudan and Tanzania that we launched in the last two years.
- Hosted a virtual visit of the **European Council Working Party on Humanitarian Aid and Food Aid (COHAFA)** under the German Presidency.
- Celebrated new and renewed partnerships, including another five years of partnership with the **Government of Germany, supporting us with a generous EUR 21 million**.

We are inspired daily by a drive to reach our shared goal of Zero Hunger, and by the dedication of our colleagues both here in Munich and globally throughout WFP.

With gratitude,

**BERNHARD KOWATSCH** and the WFP Innovation Accelerator Management Team



**BERNHARD KOWATSCH**  
Head of the WFP Innovation Accelerator



**HILA COHEN**  
Chief of Staff and Head of Business Development



**JOSE ALCOCER**  
Head of Innovation Services



**ANJA CARRETERO**  
Executive Assistant to Head of WFP Innovation Accelerator



**JORGE FERNANDES**  
Strategic Projects and Organizational Design Advisor



**KYRIACOS KOUPPARIS**  
Head of Frontier Innovations



**JOANNA PURCELL**  
Donor Relations and Partnerships Lead



**REGINA SCHMIDT**  
Head of Innovation Projects



**NINA SCHRÖDER**  
Head of Scale-up Enablement

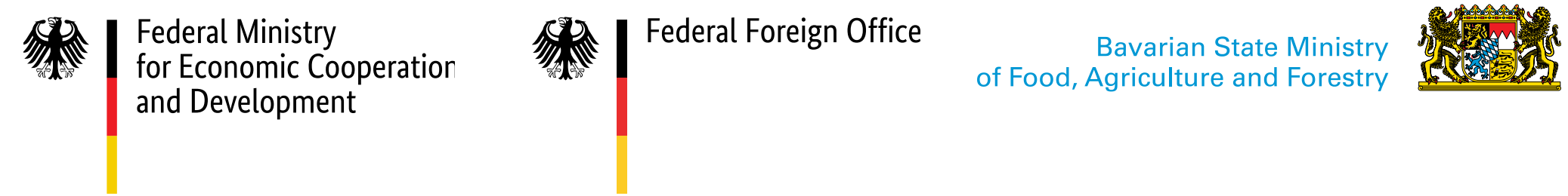


**KENNETH TONG**  
Communications and Knowledge Management Lead



**ANGELA WYAN**  
Head of Field Innovation





# Thank you

## to our key partners

**Thank you** to our core donors, the German Ministry for Economic Cooperation and Development, the German Federal Foreign Office, and the Bavarian State Ministry of Food, Agriculture and Forestry for their continued support as we enter the next five years of partnership.

Thank you to our partners from USAID's Bureau for Humanitarian Assistance — going above and beyond to enable our COVID-19 response and Knowledge Management activities. A huge thanks to the Netherlands for their commitment to enabling scaling, and to Luxembourg for their dedication to harnessing bold new ideas through our Frontier Innovations work.

In 2020, we worked closely with foundations such as BASF Stiftung, expanded our

relationship with the Bill & Melinda Gates Foundation, and worked with a number of other organizations that have helped the Innovation Accelerator grow and thrive, including Google, the German Aerospace Center (DLR), Sealed Air, and Salesforce. We were thrilled to begin collaborations with new organizations, including neighbours in our headquarters of Munich like BSH Home Appliances.

We strengthened partnerships to drive progress toward the Sustainable Development Goals (SDGs), running acceleration programmes for external partners including the United Nations Innovation Network (UNIN), United Nations Population Fund (UNFPA), and Creating Hope in Conflict: A Humanitarian Grand Challenge.



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Who we are



# About us

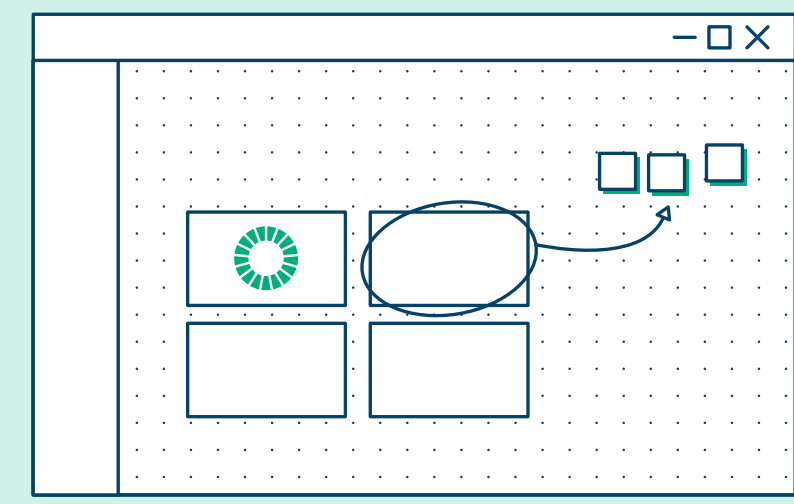
The WFP Innovation Accelerator sources, supports and scales bold new solutions to achieve Zero Hunger.

Based in Munich, Germany, the Innovation Accelerator provides WFP operations, entrepreneurs and start-ups with **funding, hands-on support and access to WFP's global operations.**

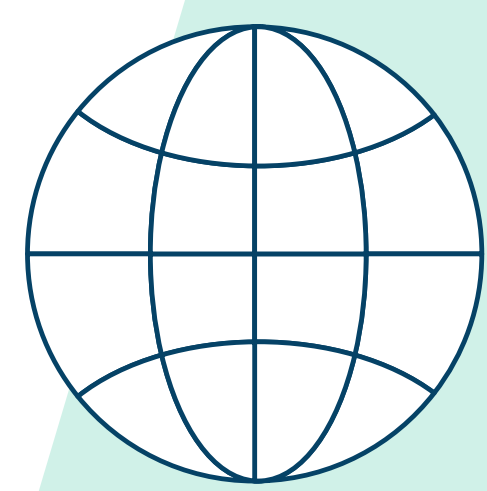
WFP is leveraging unprecedented advances in digital innovation — such as mobile technology, artificial intelligence, blockchain and new business models — to transform the way it serves vulnerable communities across the world, with the Innovation Accelerator supporting every step of the way.

**3.7M**  
People reached

**80+**  
Sprint projects

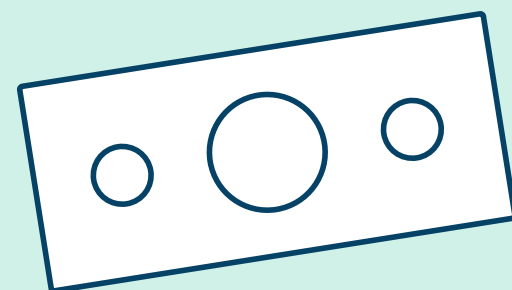


in **46**  
Countries

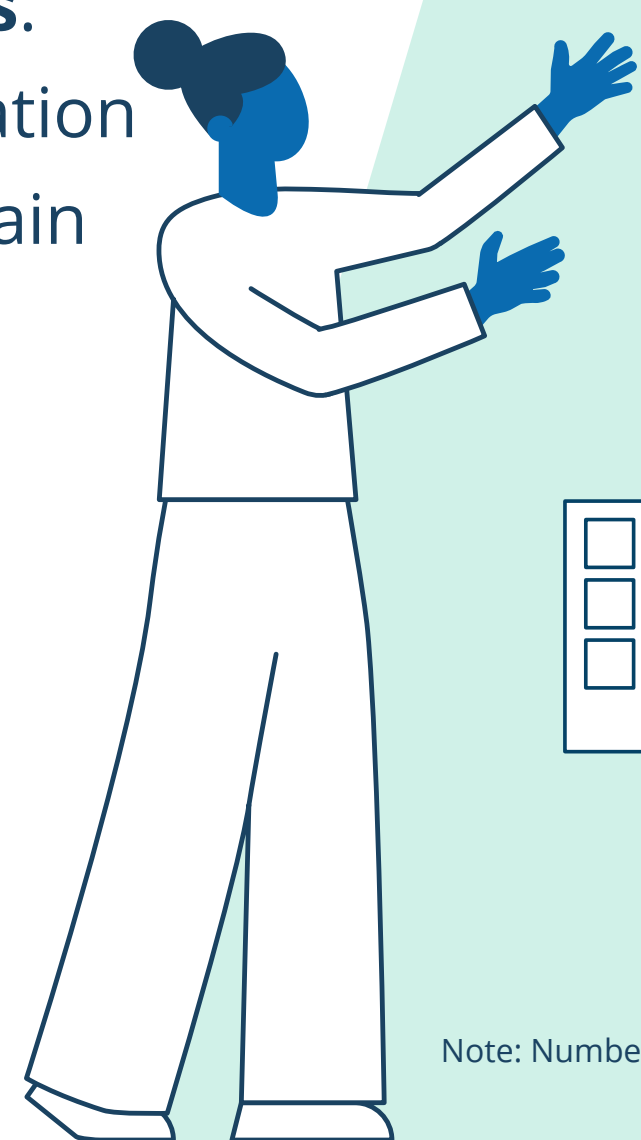


**14**  
Scale-up projects

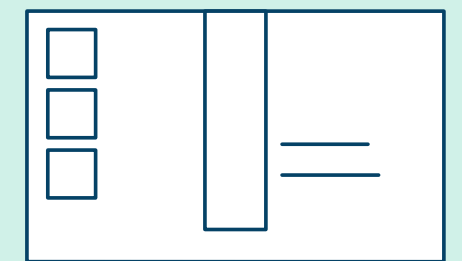
**US\$ 117.8M**  
Co-funding raised



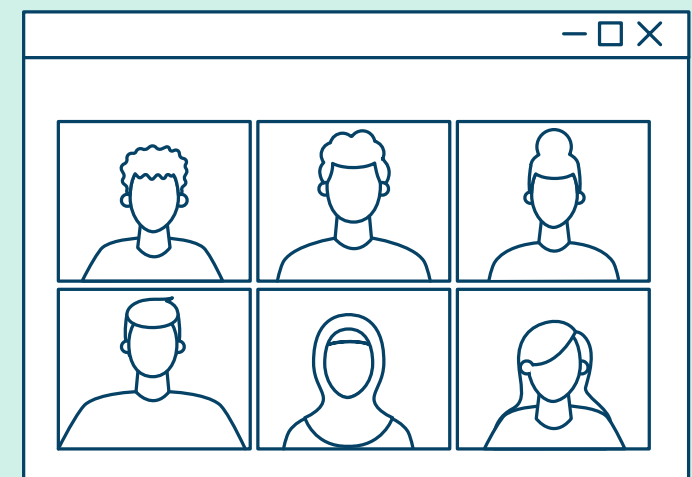
**6,358**  
Applications received



from **125**  
Countries



**32**  
Bootcamps hosted

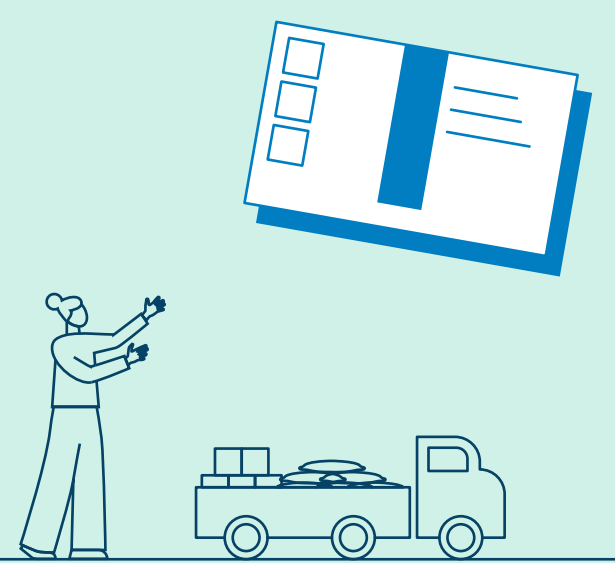


with **321**  
Teams

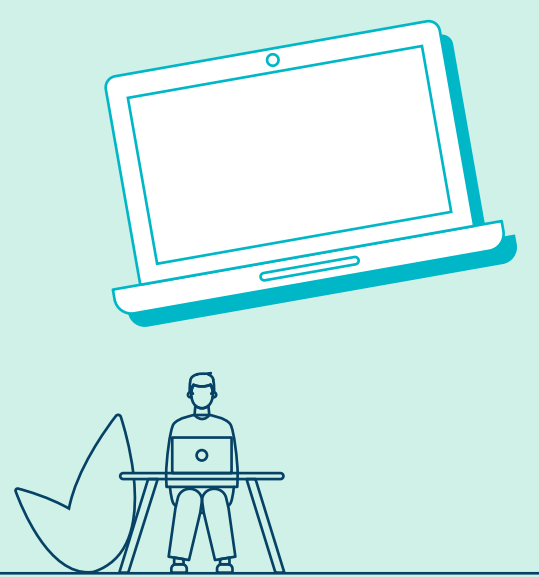
Note: Numbers shown are cumulative.

# 3.7 million people reached in 2020

**PRISM**  
**388,392** people receiving emergency aid as a result of advanced flood mapping



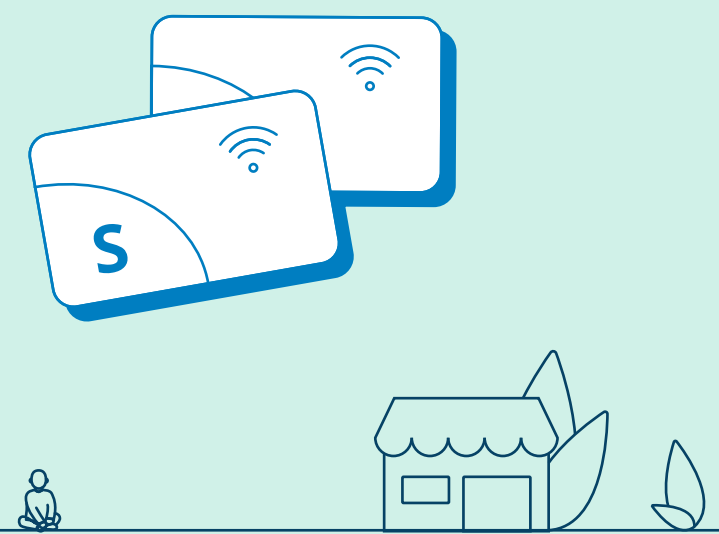
**IMPACT**  
**18,097** benefiting from digital skills training



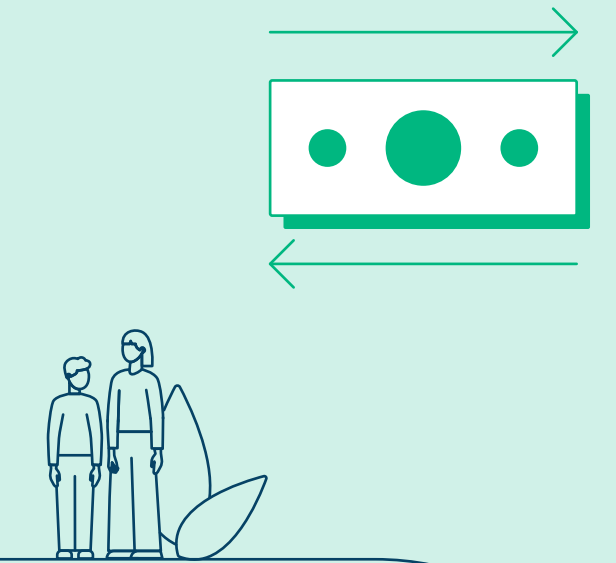
**DALILI**  
**52,700** people accessing up-to-date food prices through the Dalili mobile app



**CODA SERVICES**  
**32,118** people registered into a malnutrition programme through the CODA mobile app



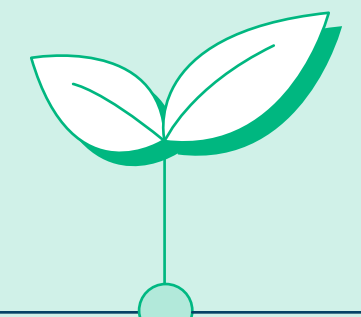
**BUILDING BLOCKS**  
**910,000** people received blockchain enabled cash-based transfers



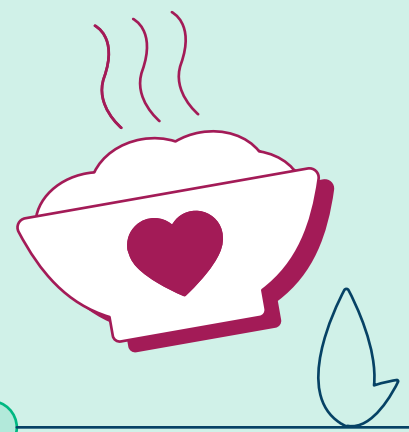
**CLOUD TO STREET**  
**16,000** people receiving cash vouchers in flood-affected areas as a result of C2S mapping



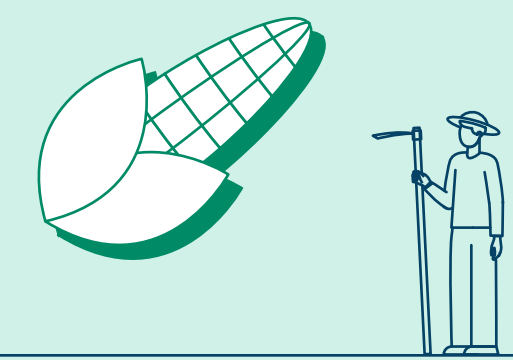
**PLUS SCHOOL MEALS**  
**705** students fed nutritious meals under the PLUS programme



**H2GROW**  
**26,500** people growing food with hydroponics through H2Grow



**SHARETHEMEAL**  
**557,096** people receiving meals through the ShareTheMeal mobile app



**POST-HARVEST LOSS REDUCTION**  
**675,000** people reached through post-harvest loss reduction training



**FARM TO MARKET ALLIANCE**  
**782,500** people reached through the public-private Farm to Market Alliance

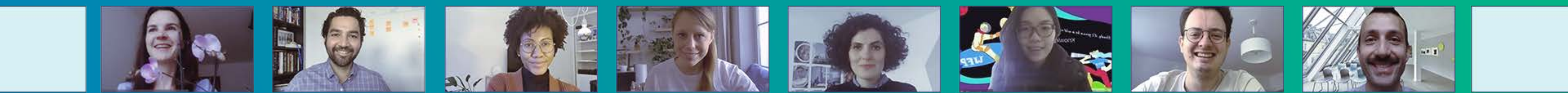


# Meet the team

We are 51 innovators



32 nationalities



67% female



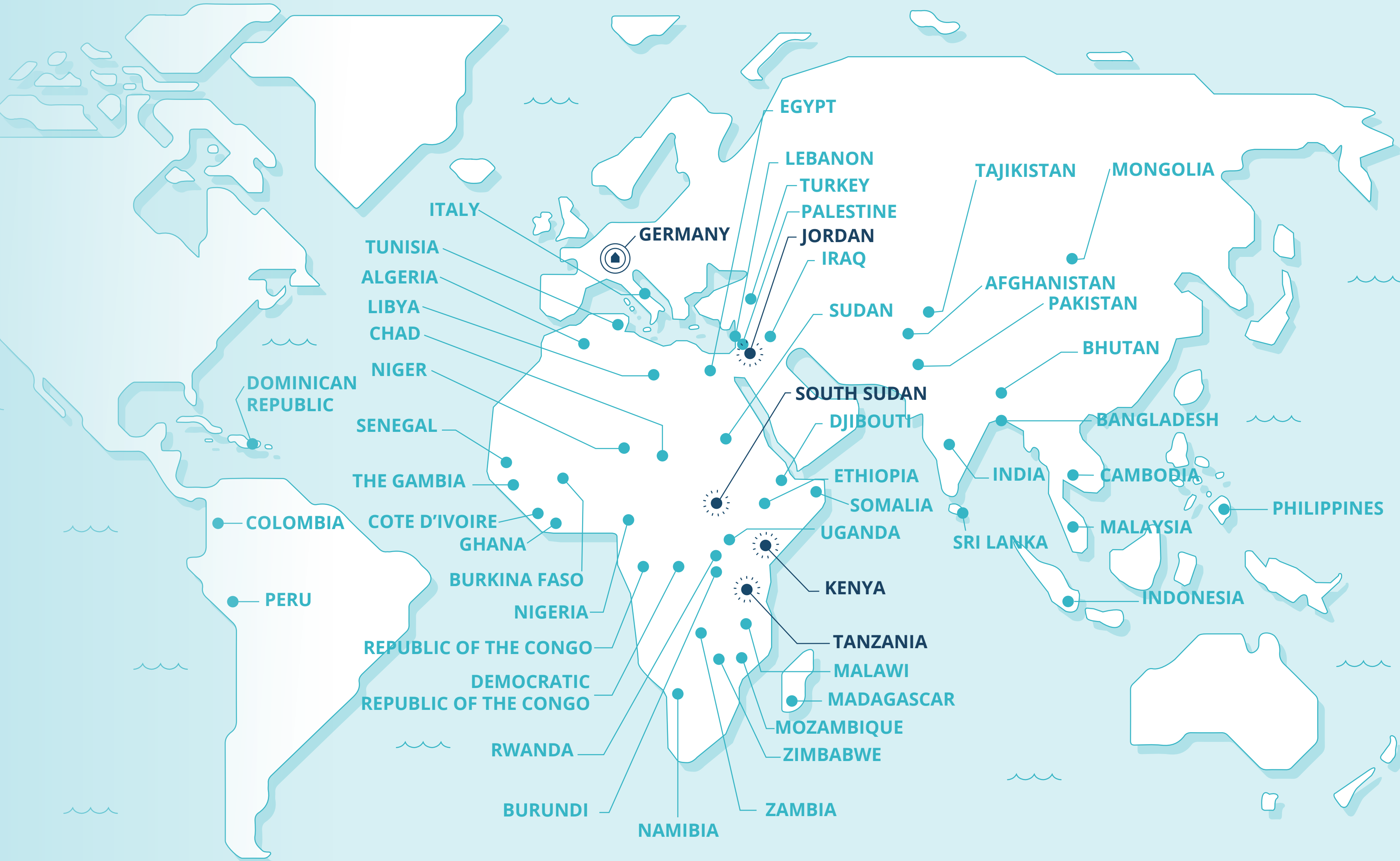
19 languages





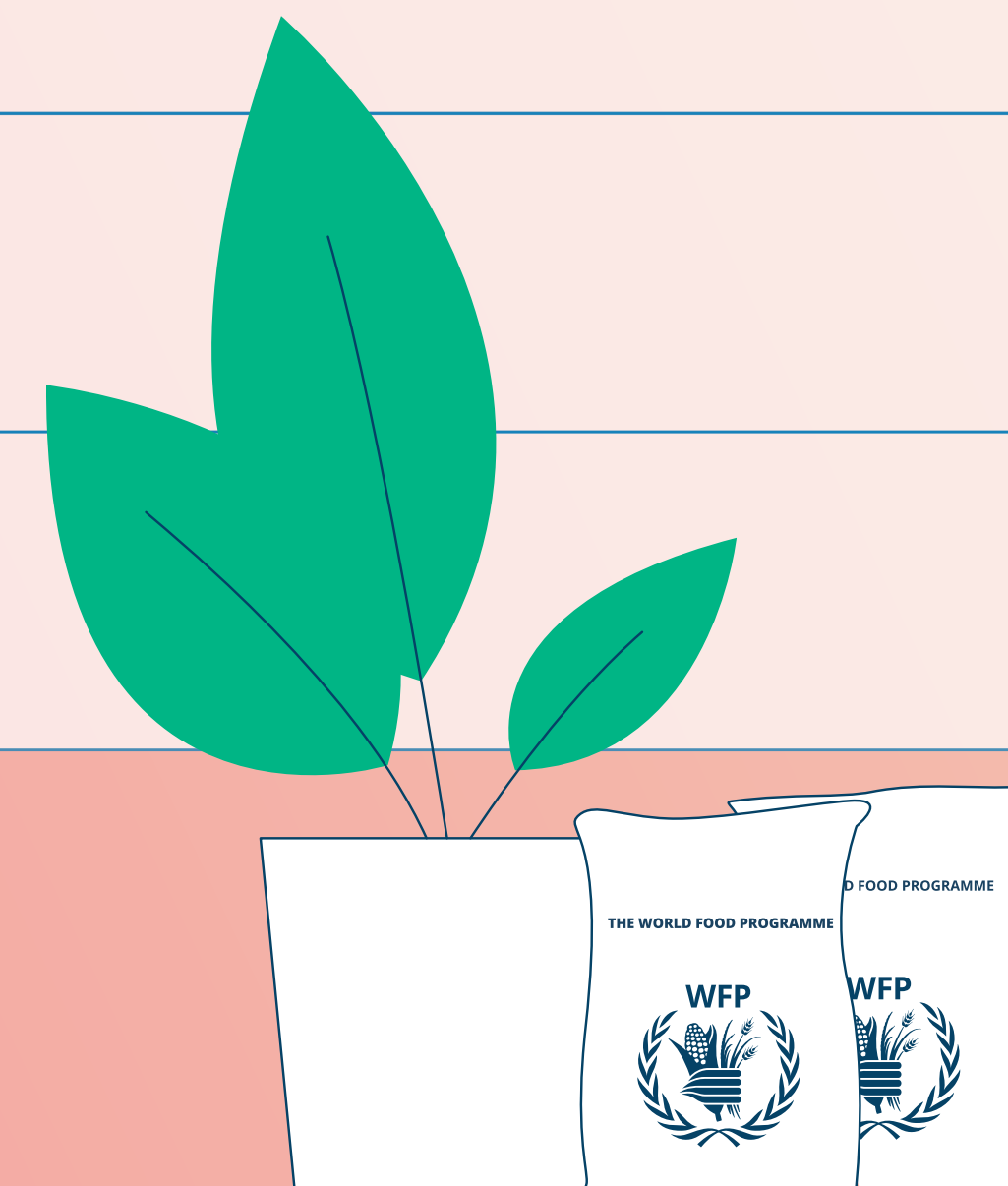
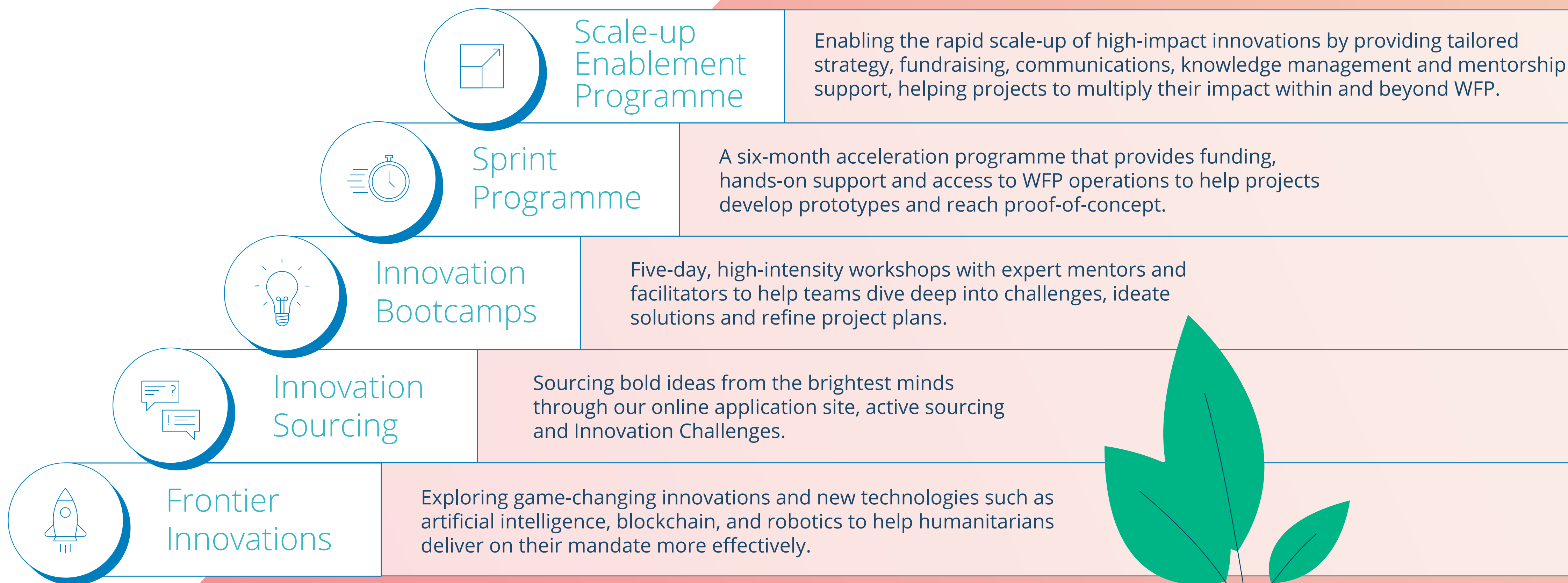
# Where we work

<b>Agri-Wallet</b>	Kenya
<b>BioAnalyt</b>	Ghana, Kenya, Nigeria and Malaysia
<b>Building Blocks</b>	Bangladesh, Jordan, Lebanon
<b>Child Growth Monitor</b>	India
<b>Circular Food Assistance</b>	Bangladesh
<b>Cloud to Street</b>	Congo, Ghana, India, Pakistan, United States of America
<b>Cockpit</b>	South Sudan
<b>CODA Services</b>	Afghanistan, Democratic Republic of the Congo, Madagascar, South Sudan, Tajikistan and Uganda
<b>Dalili</b>	Kenya, Lebanon
<b>Decapolis</b>	Jordan
<b>DEFAST</b>	Rwanda
<b>e-Shop</b>	Somalia
<b>Electro Methanogenic Reactors</b>	Kenya
<b>EMPACT</b>	Iraq, Kenya, Lebanon, Turkey
<b>Farm to Market Alliance</b>	Kenya, Rwanda
<b>Fenik</b>	Malawi
<b>Annapurti GrainATM</b>	India
<b>GrainMate</b>	Ghana
<b>Groasis</b>	Algeria, Chad, Colombia
<b>H2Grow</b>	Algeria, Chad, Jordan, Kenya, Libya, Palestine, Peru, Namibia, Zambia
<b>Hello Tractor</b>	Kenya
<b>Humanitarian Topographic Atlas</b>	Global
<b>Hunger Map<sup>LIVE</sup></b>	Global
<b>Log.ie</b>	Bangladesh, Cambodia, Ethiopia, Lebanon, Madagascar, Malawi, South Sudan
<b>MEZA</b>	Congo
<b>Ninayo</b>	Tanzania
<b>NutriIndia</b>	India
<b>Optimus</b>	WFP HQ (Italy)
<b>Pesitho ECOCA</b>	Burundi
<b>PLUS School Meals</b>	Bhutan, Dominican Republic, Mozambique, Sri Lanka
<b>Post-Harvest Loss Reduction</b>	Burundi, Cote d'Ivoire, Ghana, Malawi, Madagascar, Mozambique, Nigeria, South Sudan, Sudan
<b>PRISM</b>	Cambodia, Indonesia, Mongolia, Sri Lanka
<b>Producers Direct</b>	Peru
<b>Retail in a Box</b>	Bangladesh, Mozambique
<b>Roambee</b>	Ethiopia
<b>Sanku</b>	Tanzania
<b>Saving Grains</b>	Ethiopia
<b>SHAPES</b>	Mozambique
<b>ShareTheMeal</b>	Global
<b>SheCan</b>	WFP HQ (Italy/Germany)
<b>The Last Mile Ecosystem</b>	Tunisia
<b>Thrive Agric</b>	Nigeria





# Our path to scale





# Our path to scale

Innovation has been part of the WFP DNA since it organized the first humanitarian airlifts in 1962. These days, WFP's use of innovation to deliver its mandate ranges from the application of [artificial intelligence in satellite imagery](#) to predict emerging crises and plan humanitarian responses, to setting up [digital cash-based transfers](#) that help families buy foods and support the local economy.

When the Innovation Accelerator was established in 2015, scaling innovations was the ultimate goal: to achieve impact for the most vulnerable populations worldwide. To get there, the Accelerator also had to undertake its own path to scale. From an initial team of five people hosting a bootcamp in a single room, the Accelerator quickly grew to encompass a team of **over 50 people** hosting at least four regular bootcamps annually. Since 2018, the WFP Innovation Accelerator's portfolio has **included innovation services for other United Nations agencies and non-governmental organizations (NGOs)**, expanding our focus from the SDG 2 of Zero Hunger to tackling a multitude of interconnected SDGs.

This year, the WFP Innovation Accelerator scaled up even further with the expansion of our Innovation Community,

which launched our first [Regional Innovation Hub for East Africa](#) hosted in WFP's Regional Bureau in Nairobi, Kenya. This new hub, along with the South Sudan, Jordan, and Tanzania Innovation Hubs launched in the last two years, helps build a global innovation network within WFP.

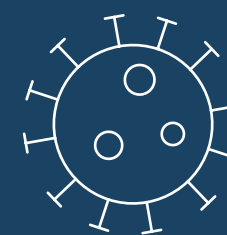
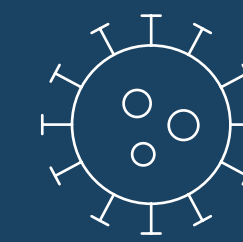
We also established the **WFP Innovation Champions Community**, where WFP staff members from around the world come together to be agents of change, driving innovation within WFP and accelerating solutions for hunger.

Finally, we established a dedicated Knowledge Management (KM) pillar to our work, ensuring that we are also sharing the hard-earned lessons along the way. In 2020, our new KM team members developed a KM Roadmap, and documented lessons, how-tos, and best practices — from [hosting virtual bootcamps](#) to [managing projects remotely](#).





# The year unlike any other



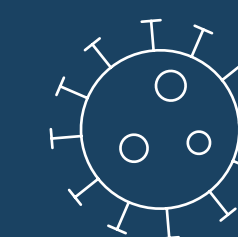
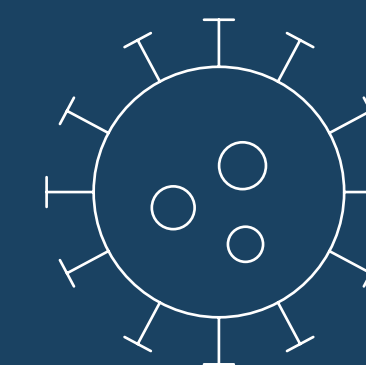
## COVID-19 has shattered lives and livelihoods

**across the planet**, making it harder to reach the Zero Hunger target by 2030. In low- and middle-income countries where WFP operates, 272 million people face acute hunger. That is a staggering 82 percent increase from the pre-COVID period. Sustained lockdowns are disrupting agricultural activities, food supply chains, jobs, and remittances. All of this is a recipe for disaster for countries whose food security is already undermined by conflict, displacement and climate change — primary drivers of hunger. The pandemic's fallout is expected to continue through 2021, aggravating vulnerabilities in food systems worldwide and pushing more people to rely on food assistance.

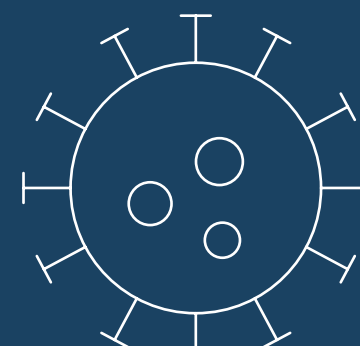
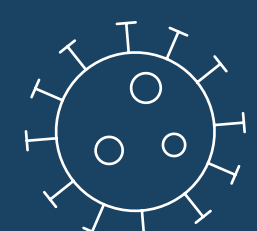
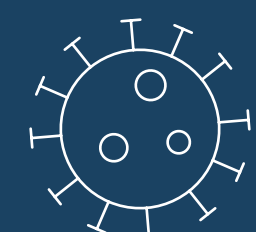
## Now, more than ever, innovation is imperative.

The new face of hunger required us to innovate at speed and scale. Early in the pandemic, the Accelerator launched the **COVID-19 Fast Track** to accelerate the sourcing and roll-out of existing solutions to serve communities affected by COVID-19.

In 2020, the programme enabled rapid adoption of two life-saving innovations in South Sudan, where COVID-19 is deepening hunger brought by years of conflict, extreme weather events and locust infestations. One of the pilots, **Retail in a Box**, provides WFP's ready-to-deploy shops to communities in need, empowering local producers and accelerating markets' ability to recover from COVID's economic shock. **Cockpit** is another pilot that trains WFP field staff in using data analytics to deliver food more efficiently to over half a million children under the School Feeding Programme in South Sudan. These projects will continue benefiting communities in South Sudan through 2021.



# Innovating in uncertainty



In response to COVID-19, we **switched our in-person innovation bootcamps into a virtual, online experience** — in less than a week. Eight innovation bootcamps out of nine hosted in 2020 were entirely virtual. Adapting a physical bootcamp curriculum to be digital was an innovation by itself, leveraging the benefits of a global virtual programme instead of just shifting it online. The digital space expanded our reach to a global ecosystem of startups, innovators and mentors while reducing logistics costs. We learned that even in-person bootcamps may benefit from virtual activities — online onboarding, remote keynote speakers, e-collaboration tools, and other components — when we arrive in the post-COVID era.

Not only did our accelerator programme pivot to the virtual format, but **many innovation projects also embraced digital transformation.** **EMPACT** adopted online learning and virtual coding bootcamps to continue connecting young people to the future of work. **Dalili**, a smartphone app that compares staple food prices at local retailers, added a new door-to-door delivery feature. Other projects, such as **Farm to Market Alliance**,

Fenik and Pesitho ECOCA, increased mobile phone usage to communicate with and collect rapid feedback from the people we serve.

**Several innovation projects tackled COVID-19 directly.** Hunger monitoring dashboards such as **HungerMap<sup>LIVE</sup>** and **SHAPES** started evaluating the pandemic's impact on food security, allowing more efficient planning of humanitarian operations. WFP's crowdfunding app, **ShareTheMeal** launched emergency campaigns to raise funds from thousands of donors for COVID-19 response. While the loss of livelihoods forced people to eat less food and less nutritious food, **H2Grow** and **Groasis** offered techniques to grow fresh vegetables closer to home, helping at-risk communities under lockdown diversify diets and generate income.





# In the spotlight 2020

In the year where COVID-19 devastated the world, internal and external partnerships and knowledge sharing have become even more vital to the Accelerator's work. In 2020, our team produced 78 knowledge products, sharing best practices and crucial learnings to help spur innovation, fill knowledge gaps and replicate impactful solutions in development contexts. We proactively contributed to global conversations through 55 speaking engagements — from food security and COVID-19 response to agri-tech solutions and frontier innovation. Our contributions to thought leadership in the domains of humanitarian innovation and the future of food systems have been featured in major publications such as [Forbes](#), [Chicago Council on Global Affairs](#), [Fast Company Magazine](#), and [World Economic Forum](#). Together, we can accelerate our efforts to reach Zero Hunger and all SDGs.



**1,468**  
Media mentions



**US\$ 55.3 million**  
Advertising value equivalency



**78**  
Knowledge Management products



**58**  
Countries

## Top 10 featured items:

**Der Spiegel**  
[Cowboys und Champions](#)



**World Economic Forum**  
[How Food Innovation Hubs will scale technology to transform our food system](#)



**Forbes** [Iris Scans, Hydroponics And Blockchain: How Innovation Is Helping Fight Global Hunger](#)



**Fast Company**  
[These 10 companies are double award winners](#)



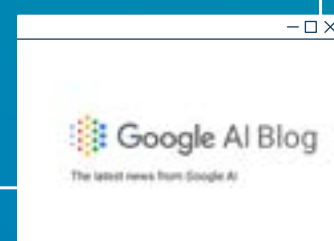
**Chicago Council on Global Affairs**  
[Innovating in a Crisis: How the World Food Programme is Adapting to COVID-19 and Why You Should Care](#)



**Süddeutsche Zeitung**  
[Hunger ist ein lösbares Problem](#)



**Google AI Blog**  
[Machine Learning-based Damage Assessment for Disaster Relief](#)



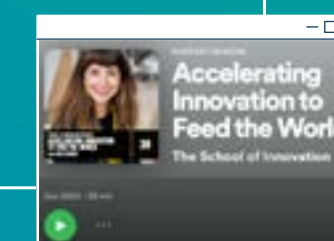
**Singularity Hub**  
[The World Food Program's Coronavirus Fight—and How You Can Help](#)



**Podcast:**  
[How Innovation Can Help Solve Hunger During a Pandemic \(Bernhard Kowatsch @HackingHunger\)](#)



**Podcast:**  
[Accelerating Innovation to Feed the World \(Hila Cohen @The School of Innovation\)](#)





# Our ambitious future



The first five years of the WFP Innovation Accelerator were focused mainly on establishing our core programmes and building solid relationships with our partners. The next five years will cast an eye towards adopting lessons learned to improve the way we work and share our knowledge so that we can further expand our reach. By the end of 2025, we aim to **positively impact the lives of 15 million people**. To do this, we intend to continue our overarching goals for the next five years, including:

- **Saving lives, changing lives** through innovative products, services and projects supported by the WFP Innovation Accelerator.
- **Increasing our geographical reach** by expanding products, services and projects supported by the Accelerator to help operations in all WFP Country Offices and Regional Bureaus.
- **Strengthening national capacities** by mainstreaming innovative products and services supported by the Accelerator into the national systems and processes of at least 50 national governments and/or institutions.
- **Broadening partnerships and cross-sectoral collaboration** by establishing at least 50 bilateral and multi-stakeholder partnership agreements with key actors in the private sector, academia and research institutions, media, WFP and the larger humanitarian and development community.
- **Achieving a Return on Investment (ROI)** by raising US\$ 200 million from direct donations, revenues from Accelerator operations, and external funds raised through supported projects.

We intend to empower local innovation systems in areas where the need is greatest and where there is emerging innovation capacity. We will continue our close collaboration with other WFP divisions and WFP Country Offices, aiming to establish three more innovation hubs on a regional level in order to sustainably foster local innovation ecosystems.

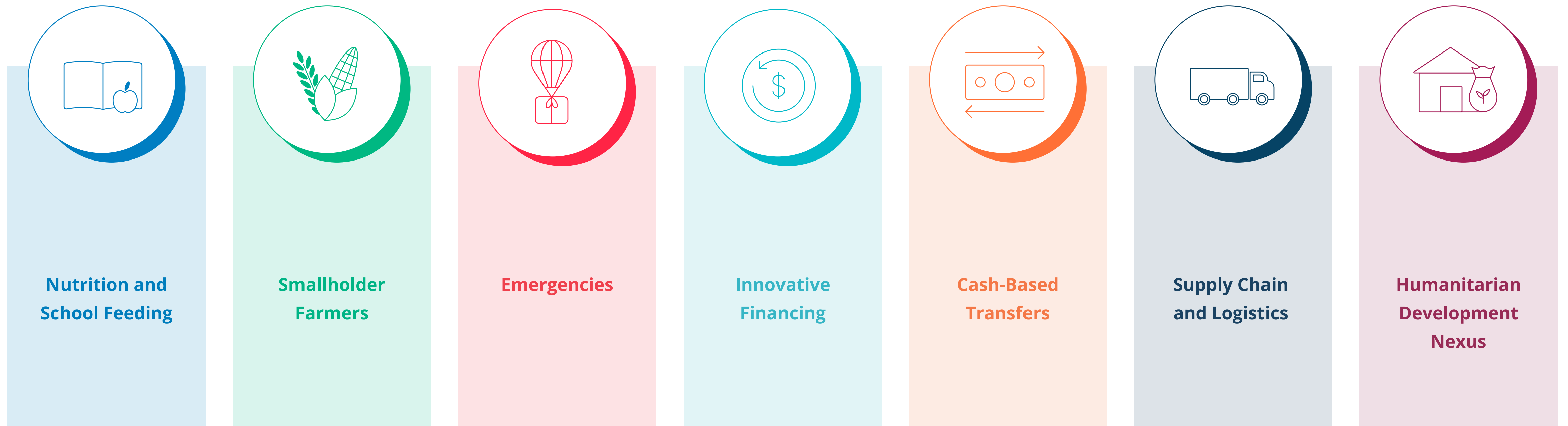


OSB

What we do

# Priority themes

These icons are a legend to demonstrate how the innovations that the WFP Innovation Accelerator supports align with WFP's corporate priorities and activities.



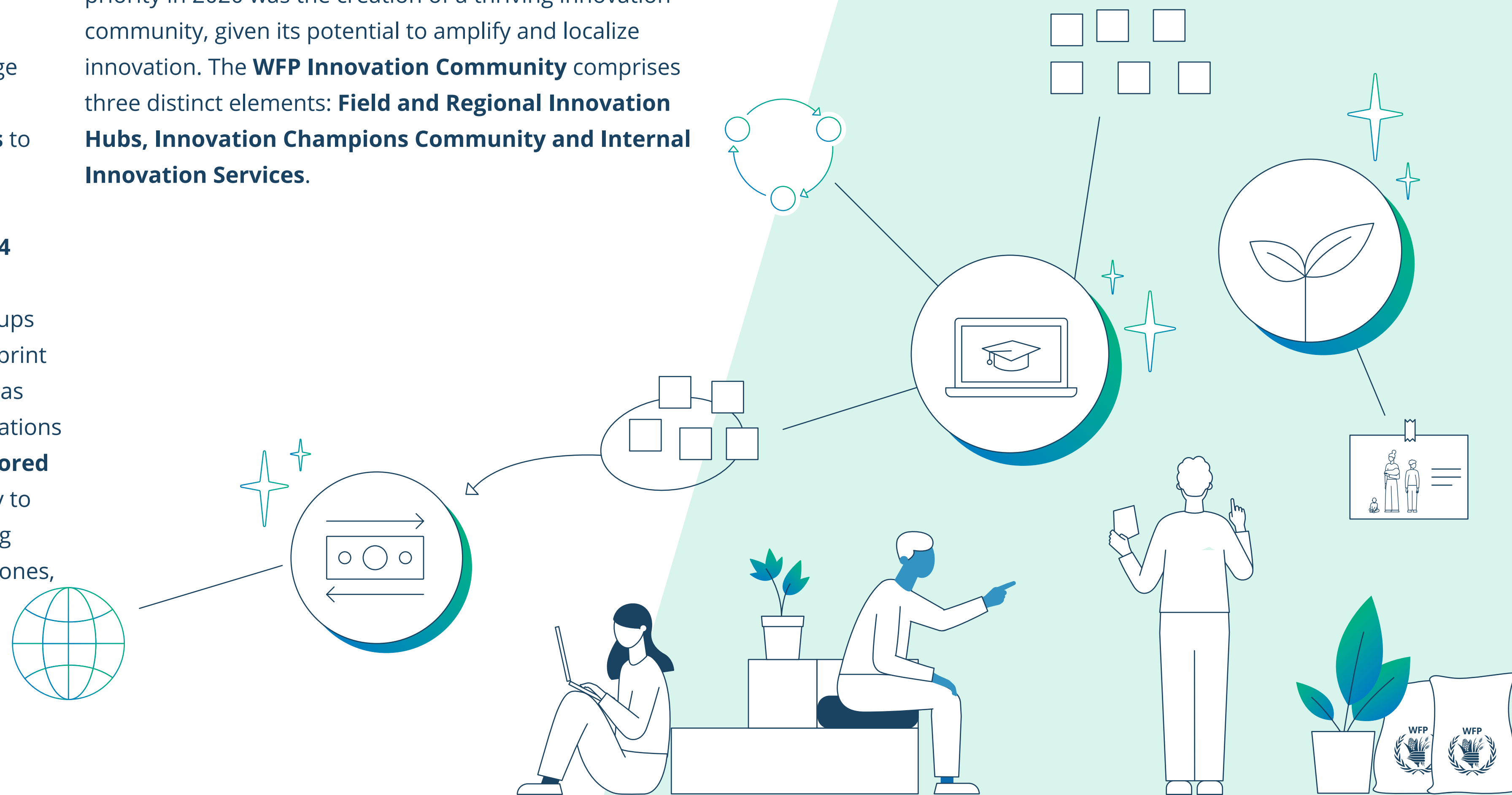


# Enabling the best innovations to scale

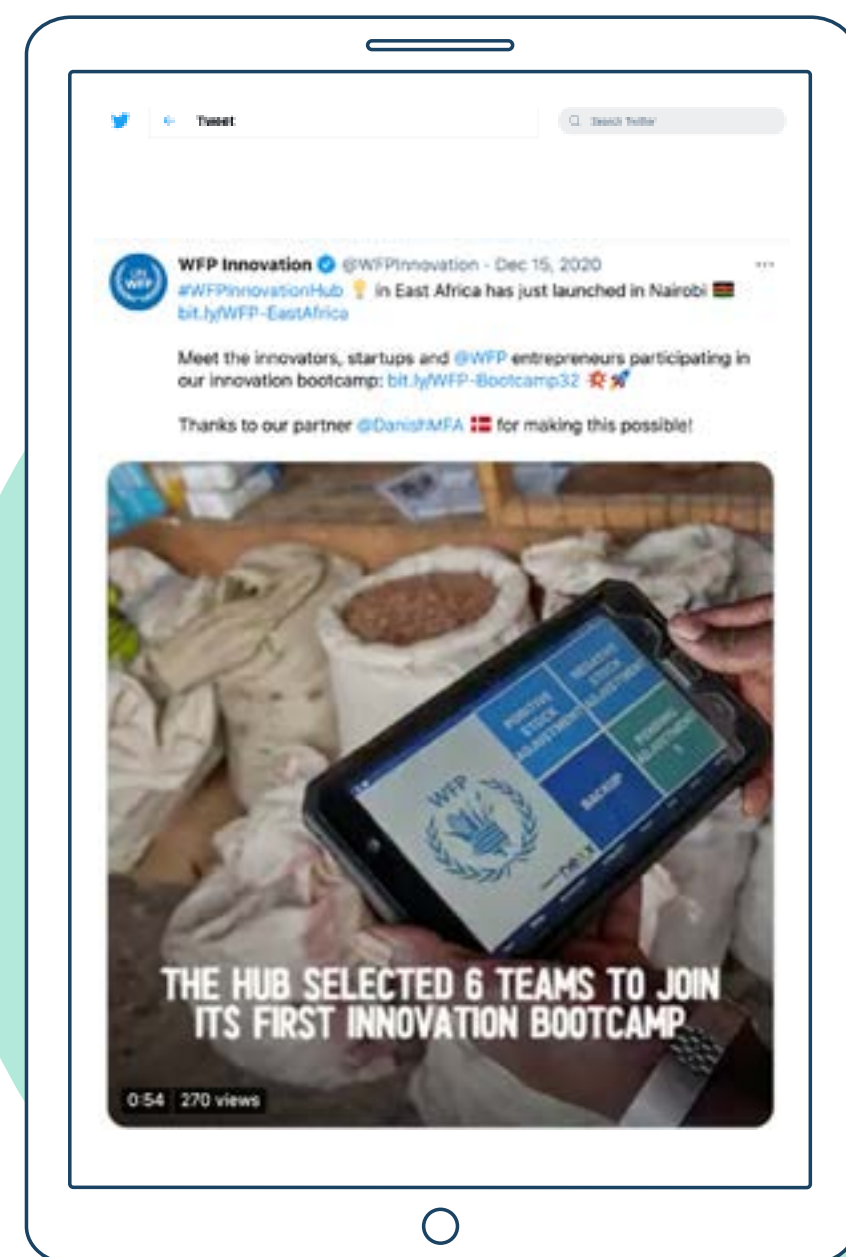
Scaling innovations is a critical component of ending world hunger by 2030. Through the Innovation Accelerator's **Scale-up Enablement Programme**, a dedicated team delivers tailored services that leverage the Accelerator's expertise, access and network, to exponentially scale the **most impactful innovations** to meet this goal.

In 2020, the Scale-up Enablement portfolio grew to **14 projects**, up from eight the year before. Three new entrants to the programme were fully external start-ups that came through the WFP Innovation Accelerator Sprint Programme. The Scale-up Enablement Programme has continued to develop its methodology to bring innovations to scale. Critical to this process is an **early-stage tailored assessment workshop** that provides an opportunity to identify gaps and design a **clear path to scale** among stakeholders that includes a project roadmap, milestones, roles and responsibilities.

To support this work of scaling innovations, a high priority in 2020 was the creation of a thriving innovation community, given its potential to amplify and localize innovation. The **WFP Innovation Community** comprises three distinct elements: **Field and Regional Innovation Hubs, Innovation Champions Community and Internal Innovation Services**.



# Innovation Hubs

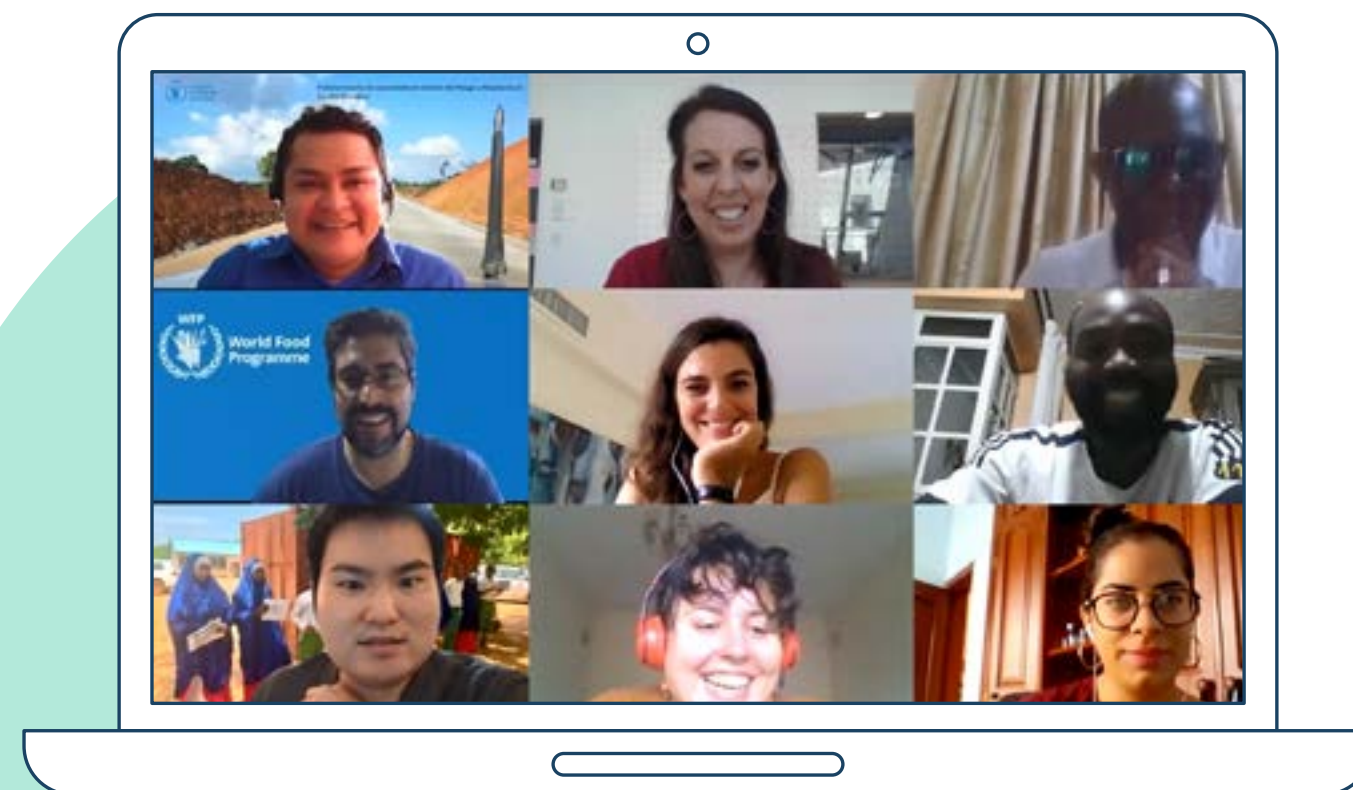


In 2020, WFP established new Innovation Hubs in [Kenya](#) and [Jordan](#). In Kenya, the WFP Innovation Hub for Eastern Africa secured US\$ 3.2 million in funding from the **Danish Ministry of Foreign Affairs**. The hub launched two innovation programmes — a Bootcamp and a Sprint Programme — in collaboration with the Accelerator and established a partnership with the **Hult Prize** to support the next generation of entrepreneurs.

# WFP Innovation Champions Community

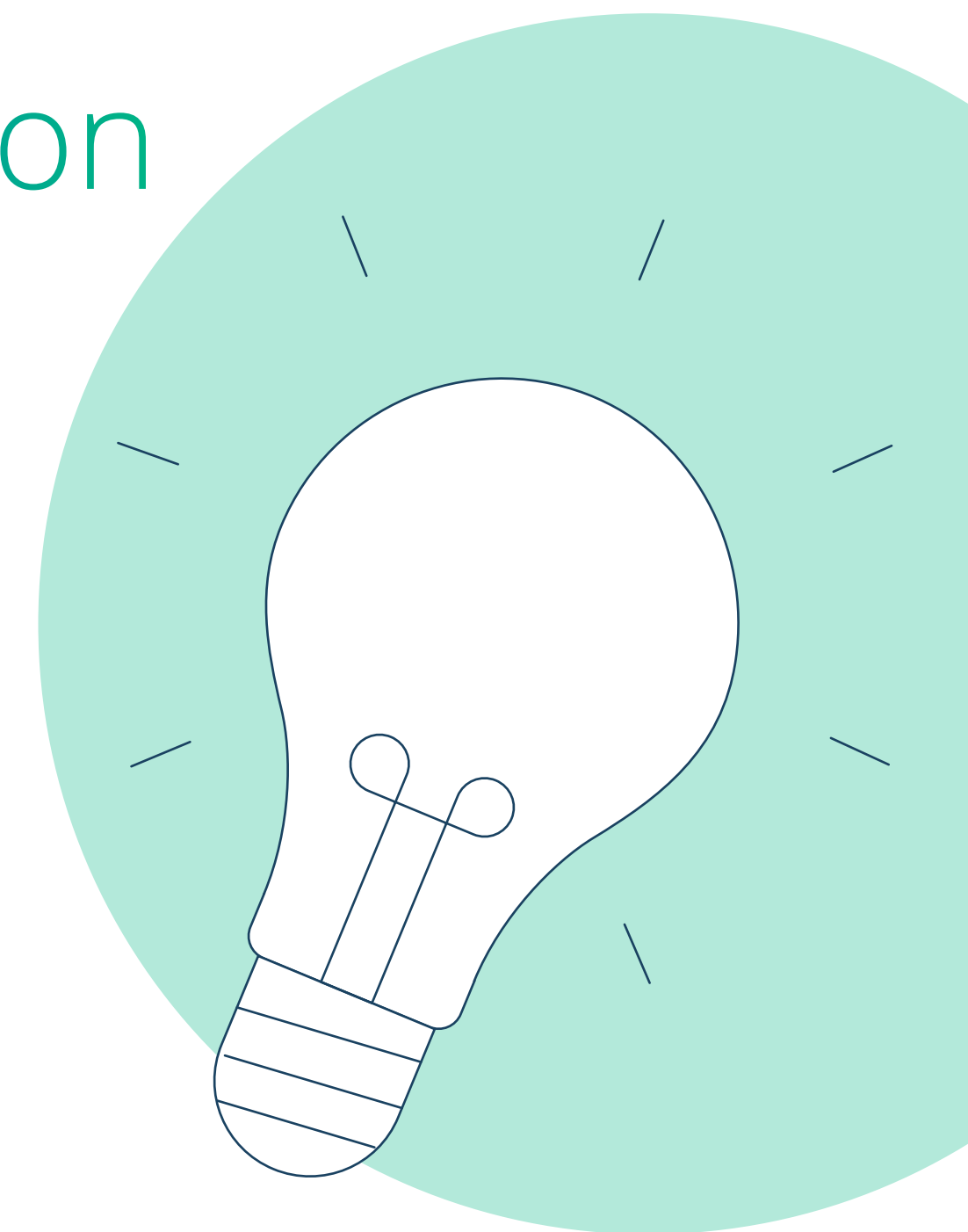
In September 2020, the Accelerator launched the WFP Innovation Champions Community. This community empowers WFP staff to become agents for change, **driving innovation within WFP** and accelerating solutions for hunger.

With a personalized approach, the community has welcomed **142 new WFP Innovation Champions**. The members represent **53 nationalities**, are located in **44 duty stations** across **31 different countries**, and bring an incredible diversity of expertise and field experience to this thriving community.



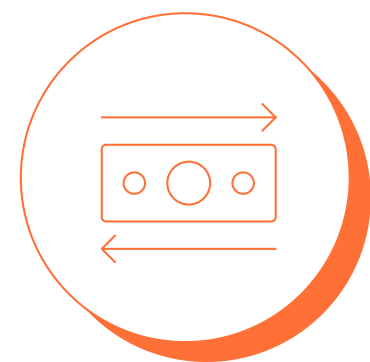
WFP Innovation Champions. In the photo: Natalie Magee, David Adomahou, Ronald Odhiambo, Paola Solis, Margherita Giordano, Daiki Tajima, Igor Carneiro, Carlos Rivas, Yasmin Swidan.

# Internal Innovation Services



The WFP Innovation Accelerator established this pillar to support **WFP Business Units and Country Offices** in strategic innovation integration and special projects. Faced with COVID-19 and travel restrictions, the team developed an **online model for innovation workshops**. It was tested through two remote workshops for **South-South and Triangular Cooperation** with over 60 participants dialling in from different locations. The lessons stemming from this experience have resulted in a leaner, scalable model for this internal innovation offering, one readily adaptable to multiple applications.





# Building Blocks

**WFP's Building Blocks project is the humanitarian sector's largest blockchain-based cash distribution system.** Operational since 2017, the project provides recipients with a blockchain-based e-wallet to make cash transfers faster, cheaper and more secure, allowing WFP to transact directly with recipients without the need for banks or other financial institutions, increasing transparency and accountability.

Building Blocks created a shared, neutral humanitarian network where other organizations can freely join and run their operations. Its design allows participating organizations to coordinate and harmonize assistance by providing shared visibility on aid allocation, enabling more equitable outcomes for beneficiaries. The network is built for flexibility and can accommodate the coordination of practically any assistance such as in-kind, cash, food, medicine, education, or shelter.

## IN 2020, BUILDING BLOCKS:

- **Launched in Lebanon** to assist with coordinating the multi-organizational humanitarian response to the August 2020 Beirut blast.
- **Launched in Bangladesh** to support a Social Safety Net Programme aimed at improved consumption of healthy food items.
- **Served 910,000 Syrian and Rohingya refugees** in Jordan and Bangladesh.
- Processed US\$ 162 million of cash-based transfers through 8.8 million transactions — **saving US\$ 1.8 million in bank fees, to date.**

## COUNTRIES:



## HIGHLIGHTS:

 **910,000** people benefited

 **US\$ 1.8 million** in bank fees saved, to date







# Cloud to Street

**Cloud to Street is a remote sensing platform to map and analyze floods in real time.** Using global satellite imagery, machine learning and cloud computing, it analyzes flooding on the ground and continuously estimates flood extents and impacts. As the platform is remote and automated, the maps and analytics are affordable, fast and accessible for governments and aid agencies left off of traditional maps. Users access a customized online flood dashboard with offline alerts and ready-made summary reports to quickly determine who on the ground is at risk before, during and after a crisis.

## COUNTRIES:



## IN 2020, CLOUD TO STREET:

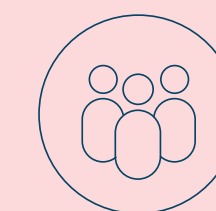
- Identified over **23,500 km<sup>2</sup>** of flood-prone land, helping protect **1.2 million people** at risk or impacted by a major flood event.
- Utilized weekly impact reports to promote better inter-agency relief targeting for flood-affected households across seven NGOs, resulting in pledged **cash vouchers for at least 780 households** and water, sanitation and hygiene (WASH) **infrastructure damage repairs for up to 265 communities** within refugee camps.
- Secured **US\$ 13.5 million in multilateral aid** by providing data to policymakers in the Congo.
- Launched a new user-centred online dashboard for data sharing training and **trained more than 70 government staff members** on using the dashboard.
- Supported the **Congo's formulation of a national emergency and response plan**, months earlier than the same flood crisis in 2019.
- Integrated the flood analytics platform into standard emergency reporting in Ghana, training representatives from **16 government offices**.

“

“Cloud to Street’s reports confirmed which specific districts were badly hit, and the locations made it easier for us to assess where exactly aid needs to be dispersed.”

**MR. NIBI DIVINE BABA**, North East Regional Officer, National Disaster Management Organization of Ghana

## HIGHLIGHTS:



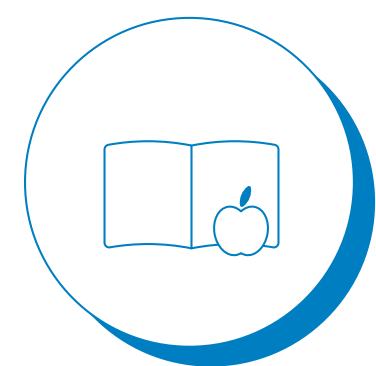
**16,000** people received WFP cash vouchers



Enabled **US\$ 13.5 million** in multilateral aid for flood-affected communities







# CODA Services

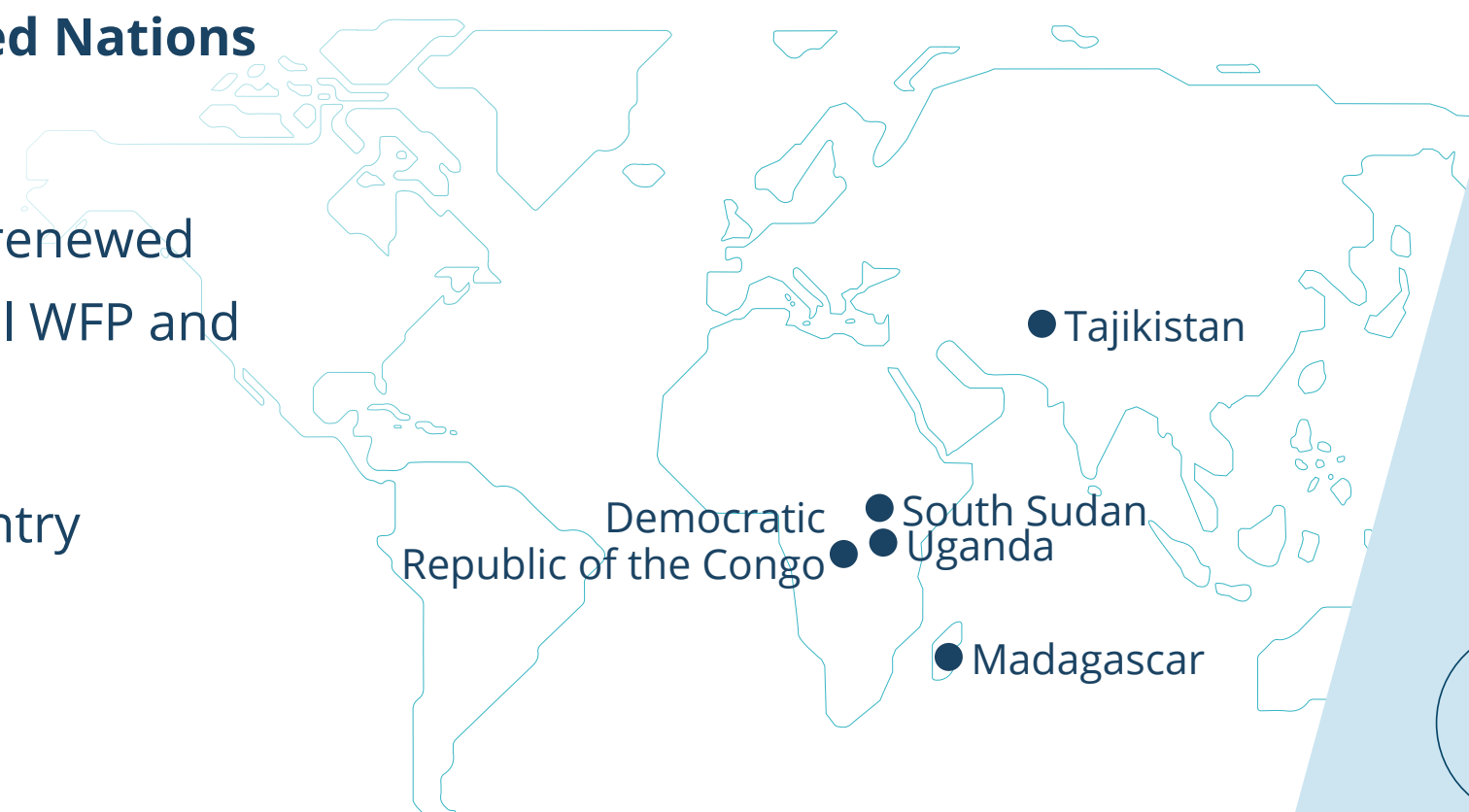
**CODA (Conditional On-Demand Assistance) Services is a digital solution designed to simplify and streamline nutrition\* programme guidelines and the recording of individualized beneficiary data.** Using a mobile device and a durable smartcard, CODA replaces paper-based records to ensure beneficiary information can be recorded, tracked and monitored at an individual-level.

## IN 2020, CODA SERVICES:

- Was recognized as a **winning solution for SDG implementation** by the United Nations Economic and Social Affairs Council and was invited to participate at the **STI Forum at United Nations Headquarters** in New York in 2021.
- Achieved system stability, leading to renewed interest and buy-in from both internal WFP and external stakeholders.
- Scaled up **30 percent** of current Country Office implementations.

- Completed the analysis and design phases of the CODA 2.0 Solution. Developed and received approval for the CODA 2.0 strategy from the Steering Committee and Project Board.
- Achieved the first fully remote digital implementation in **Afghanistan**.
- Scaled from two health facilities to 41 in **South Sudan** (two original pilot centers, 30 new static centers and nine new mobile sites).

## COUNTRIES:



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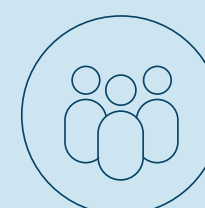
“I used to be afraid of going for my child’s nutritious food from the health center if the card was destroyed because it made the nutrition workers unhappy, but these new cards (CODA cards) cannot be easily destroyed, I always go for my services at the right time.”

**BENEFICIARY QUOTE** from South Sudan implementation (Abuk Kiir Ngor, Caregiver of beneficiary, Gabat PHCU, Aweil Centre County, Northern Bahr el Ghazal)

“CODA has made our work very easy, we no longer lose beneficiaries’ information and when they lose their cards, it takes less than a minute to issue a replacement with all the old information.”

**IMPLEMENTING PARTNER QUOTE** (South Sudan operation) - Santo Garang, Nutrition Manager, Medair, Aweil Field Office, Northern Bahr el Ghazal

## HIGHLIGHTS:



**32,118** beneficiaries reached



Scaled to **41 health facilities** in South Sudan

\* Current use cases focus on malnutrition programmes. CODA can be used for any operation that requires participants to meet a condition before receiving assistance.



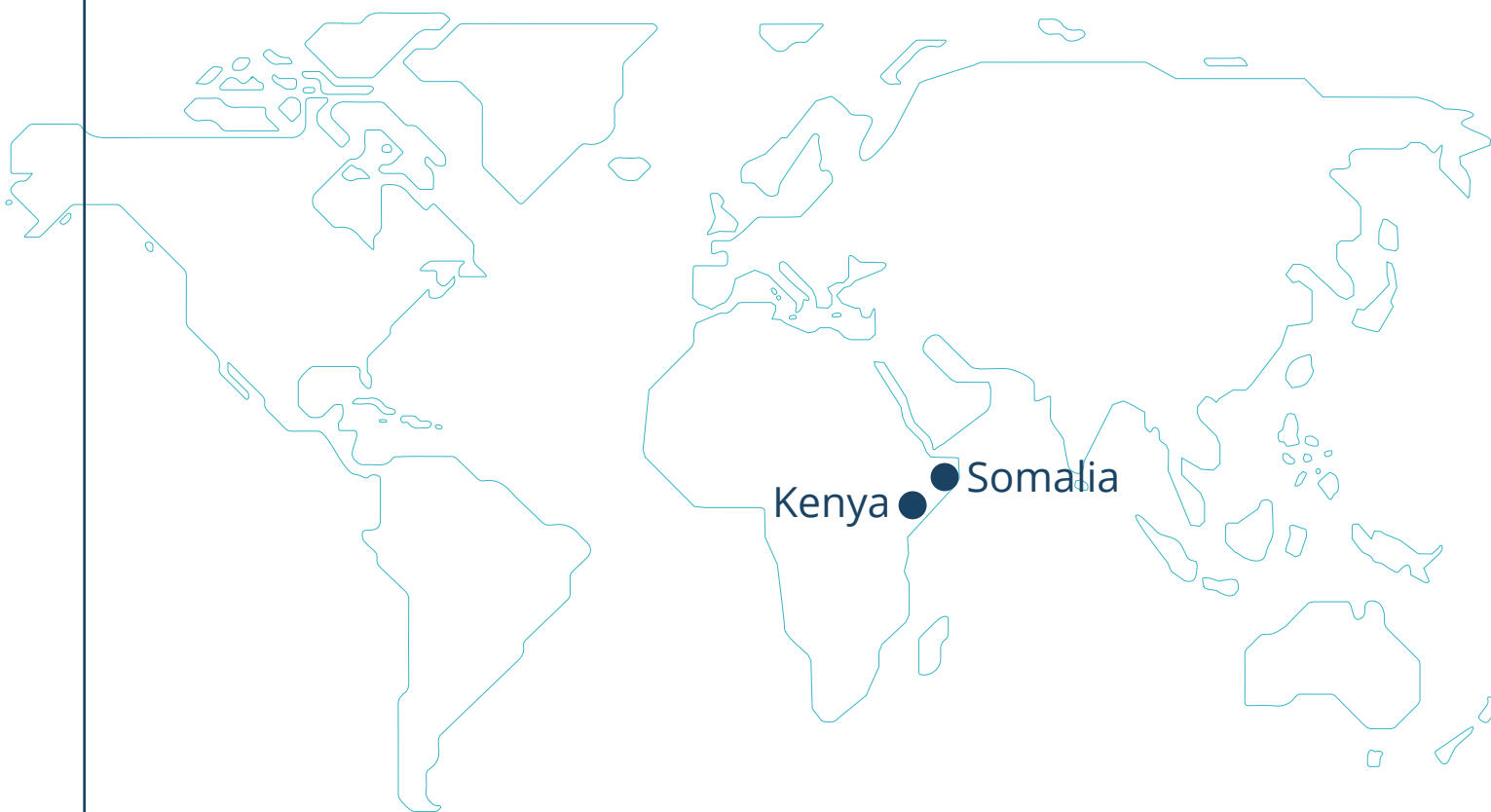


# Dalili

**Named for a word meaning “my guide” in Arabic — Dalili is a mobile app that improves the customer experience for thousands of refugee families and their host communities.** Leveraging the relationships built between WFP and its contracted retailers, Dalili collates and displays items, prices and promotions at local stores.

People receiving WFP assistance can use the Dalili app to easily find the best prices and deals from home. The application also aims to boost market efficiency, improve competition and ultimately reduce the prices for the most popular products.

## COUNTRIES:



## IN 2020, DALILI:

- Released a new trader app, **Matjari Version 2**, that addressed user needs identified through extensive research.
- Launched **Dalili Version 2** with a keen focus on user adoption and feedback collection to further refine the product.
- Used insights gained on Dalili Version 2 to **develop and release Dalili Version 3**, incorporating the two remaining key features in the product roadmap: enabling Dalili for feature phones and aggregating demand or group-buying for beneficiaries.
- Launched the **door-to-door delivery** module on the Dalili app.

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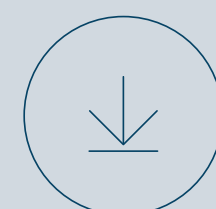
“This is what we’ve been yearning for, power in our hands to choose where to get the best prices and tell WFP how we’ve been served by the traders.”

REBECCA, Kakuma 3, Dalili User

## HIGHLIGHTS:



Launched **new versions** of the Dalili mobile app



**52,700**  
Total downloads since launch





# EMPACT

**EMPACT connects refugees, displaced people and vulnerable host communities to the future of work.** Through short, focused practical training and collaboration with the private sector, EMPACT creates new employment pathways for people who would otherwise be cut off from the global digital economy. Tailored digital training courses provide them with hard skills, such as data cleaning or picture tagging, and soft skills, bridging their way out of hunger and poverty to the future of work and self-reliance.

## COUNTRIES:



## IN 2020, EMPACT:

- Graduated from the **WFP Innovation Accelerator** to join the Asset Creation, Livelihoods and Resilience team at WFP HQ, providing a new expansion outlook.
- Adopted an **online training curriculum** in Turkey and Iraq amid the COVID-19 pandemic.
- Launched a new, **fully remote pilot in Turkey** in October 2020. One hundred people, 50 percent Turkish nationals and 50 percent Syrian refugees, participated in the EMPACT training and have been placed in pre-secured IT-related apprenticeships and jobs sourced in the global and local labour market.

“

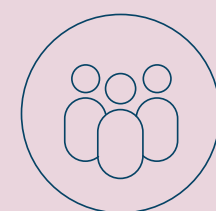
“The training allowed me to discover my true potential and believe in a bright future.”

**LINET NGINA MUTUA,**  
25, EMPACT Participant

## HIGHLIGHTS:



More than **50%** of programme participants are women



**18,097** people reached





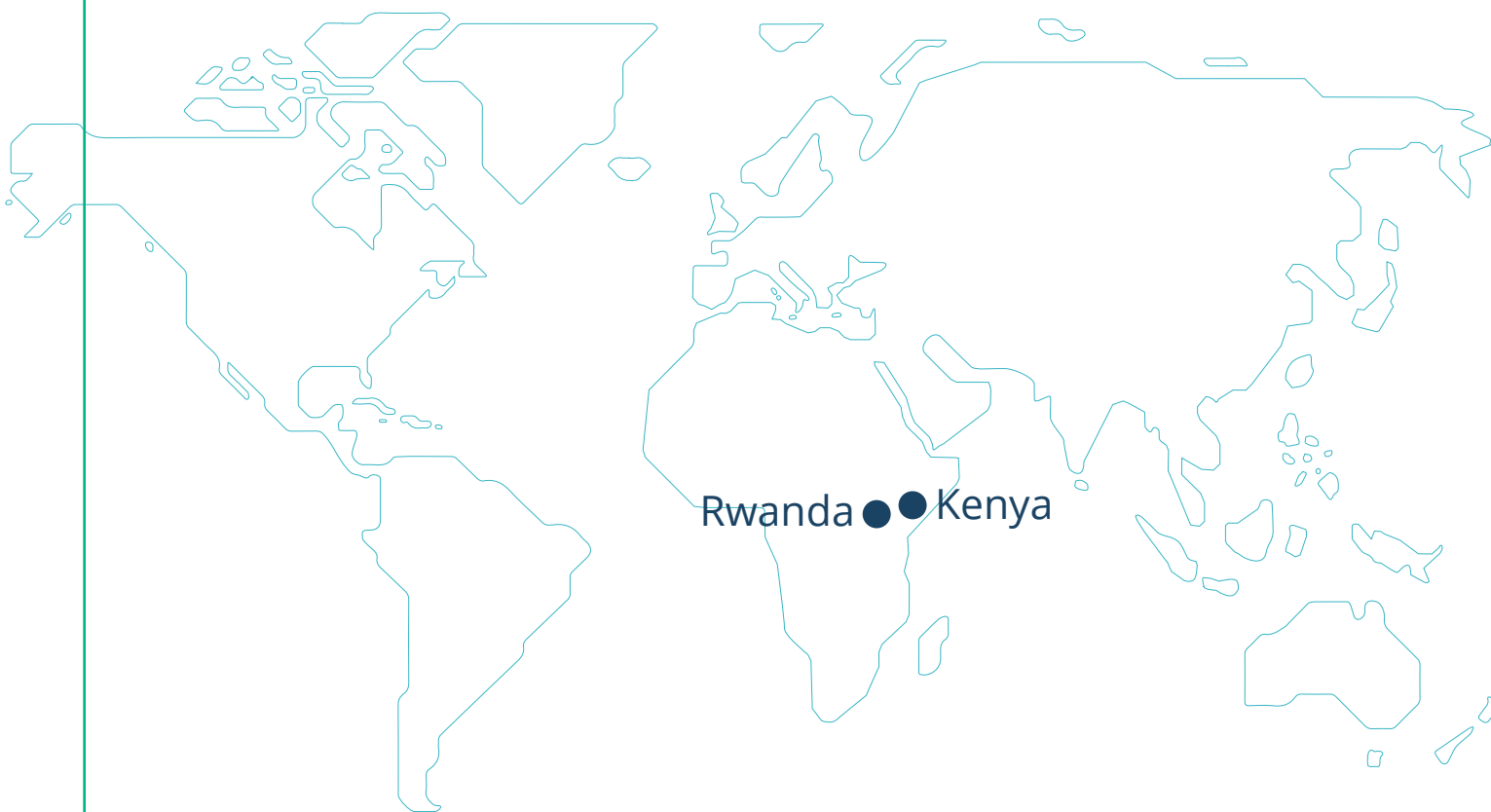


# Farm to Market Alliance

**The Farm to Market Alliance (FtMA) is a group of public and private institutions that aims to reduce hunger and poverty by providing smallholder farmers with an opportunity to engage in structured, gainful and self-sustaining food systems governed by positive commercial forces.**

The joint vision of FtMA members is to enable a sustainable agricultural system through strengthened markets, aligned with national policy priorities, to empower farmers to improve their incomes and resilience and to improve global food security.

## COUNTRIES:



## IN 2020, FTMA:

- Secured **US\$ 21 million** over three years from the Norwegian Agency for Development Cooperation and the New Zealand Ministry of Foreign Affairs and Trade to further scale in Kenya and Rwanda and re-engage operations in Zambia and Tanzania.
- Reached **644 farmer service centres (FSCs)** serving a total of **156,500 farmers**, of which 51 percent are women.
- Enabled FSCs in Kenya to earn **US\$ 428,454** in commissions from partners through an average of three income streams per FSC.
- Enabled **1,022 linkage meetings** and organized trade fairs with buying partners.

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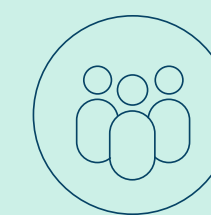
For the farmers we are working with, there is no gap in terms of market access since our Farmer Service Centers are playing a bigger role in market aggregation, and we are seeing more appreciation from farmers. We have partnered with a local network of transport providers like boda bodas and tuk tuk owners, which gives continuity of activity on the ground.”

FtMA, Kenya

## HIGHLIGHTS:



**US\$ 21 million**  
in secured funding  
in 2020



**782,500**  
people reached





# H2Grow

**WFP's H2Grow project brings locally adaptable and affordable hydroponic solutions to vulnerable communities around the world.** It employs the soilless, water-efficient agricultural technique that enables plant growth in harsh environments. By developing low-tech systems from local materials, growing fresh vegetables or animal feed in deserts, refugee camps or urban informal settlements, H2Grow supports food-insecure families to increase their access to fresh food and raise their income.

## IN 2020, H2GROW:

- Impacted more than **26,500 people** in nine countries — tripling the number of beneficiaries in comparison to 2019.
- Launched the **H2Grow platform**, a digital learning space where user-generated and localized hydroponics content is shared globally.
- Deployed **410 new hydroponics units** in the field, adding to the total of 800 active units — each unit can deliver fresh produce for six to ten years.

- Established **23 greenhouses** in **Zambia**, under the ownership of the Ministry of General Education, with monthly production of fresh vegetables averaging at 1.2 tons per site.
- Built **234 new hydroponics units**, which produced **340 tons** of animal feed in **Chad**.
- Raised funds for new hydroponics units (to be deployed in 2021) with the first **“Share the Milk”** campaign in collaboration with ShareTheMeal, WFP’s crowdfunding app.

## COUNTRIES:

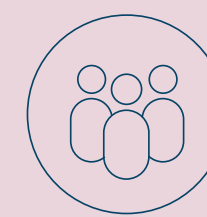


“

It is very important to create a community of practice between people who are implementing the technology in the field.”

**JEAN-FRANCOIS DONTAINE**,  
Oxfam Belgium. Oxfam is implementing hydroponics projects and has been a strong partner in Palestine, Algeria and Chad.

## HIGHLIGHTS:



**26,500**  
people reached



**410**  
**hydroponics**  
**units**  
deployed in 2020







Log.ie is a tool made for and with the humanitarian community: aiming to become the community-driven information gateway for logistics preparedness and response.

IN 2020, LOG.IE:

- Joined the WFP Innovation Accelerator Scale-up Enablement Programme.
- Built their **minimum viable product** with less than 10 percent of planned resources.
- Tested features of the tool in **Bangladesh, Cambodia, Ethiopia, Lebanon, Madagascar, Malawi** and **South Sudan**.
- Demonstrated feasibility of the **proof of concept** for ad-hoc emergency response in international contexts.
- Maintained and extended **partner engagement** with the 700+ Logistics Cluster stakeholders, including United Nations agencies, I/NGOs, academia, government agencies, and the private sector.

COUNTRIES:



“

“Thank you. We came a long way since I ran around with a handheld GPS marking bridges and potential distribution points and potential shelters in uncharted territory.”

SØREN GRØNVALD, DRC

“Cannot wait to start using it in the field. Thank you!”

ALEKSANDRA PESZKOWSKA (PAH)

HIGHLIGHTS:

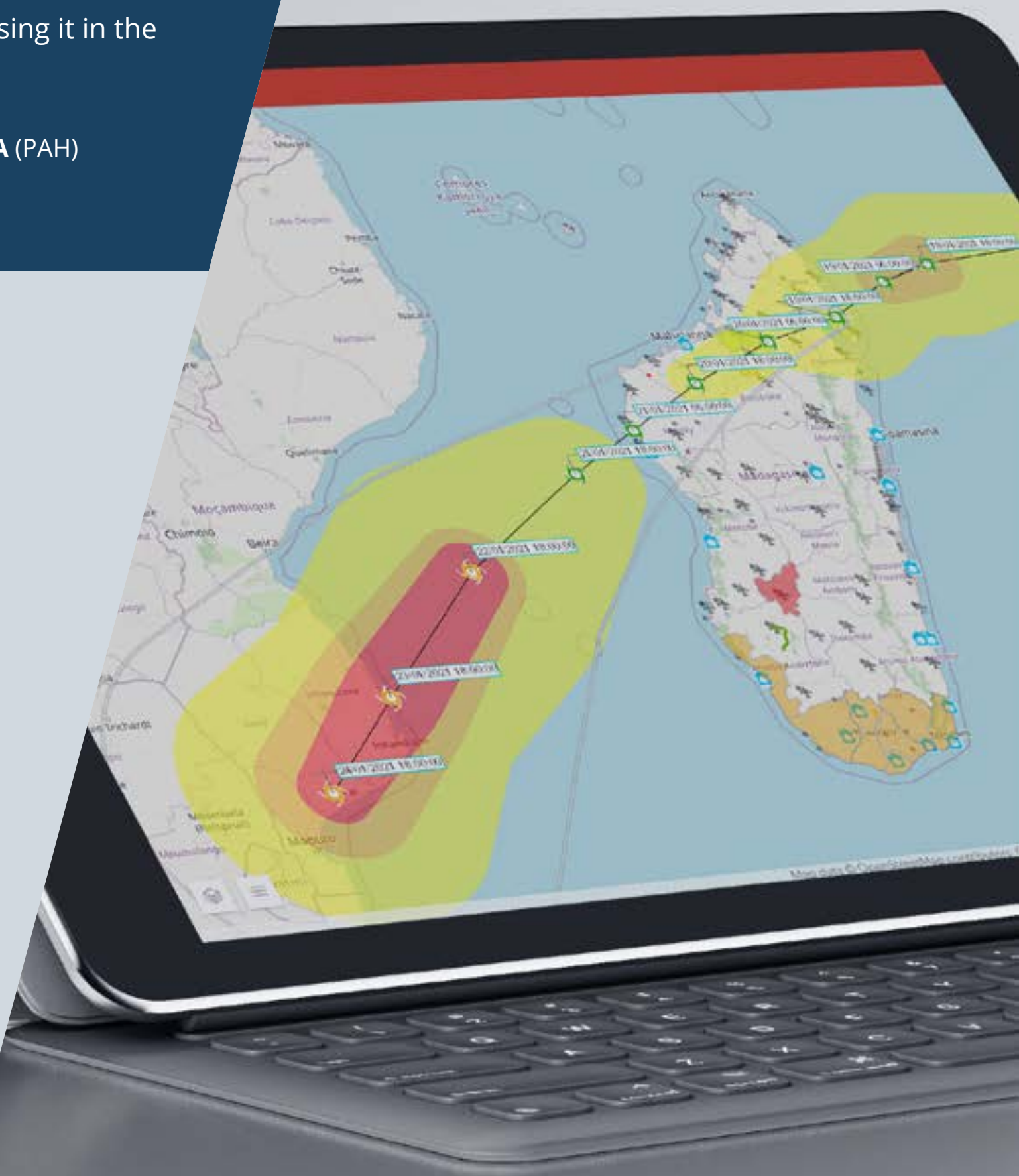


**Joined**

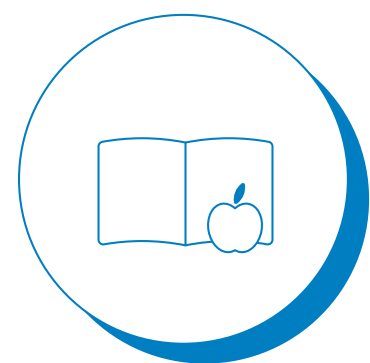
Innovation Accelerator Scale-up Enablement Programme



Built their **minimum viable product**







# PLUS School Meals

**PLUS School Meals is an online software that utilizes advanced mathematical algorithms to calculate the most cost-effective school feeding menus that meet children’s nutritional requirements,** ensures dietary diversity and optimizes impact on local economies through purchasing from local smallholder farmers.

## IN 2020, PLUS:

- Improved the **technology and infrastructure** behind PLUS menu planning, resulting in a fully-functioning software with simultaneous usage and faster flow.
- Expanded **data access** to include hundreds of thousands of food prices collected by Vulnerability Analysis and Mapping (VAM), as well as SCIPS-registered food purchases. Investments in the production of a simplified interface further **improved user experience.**

- Added increased language options, enabling PLUS availability by internal and external users in **English, French, and Spanish.**
- Was highlighted a **United Nations System Staff College Nutrition publication** (ed. 45) as one of the key initiatives worldwide in digital innovation for nutrition. The project was also mentioned in **International Telecommunication Union news online.**
- Fed **705 students** nutritious meals under the PLUS programme, despite school closures due to COVID-19.

## COUNTRIES:



“

PLUS is also an incredible tool to render complex nutritional calculations accessible to different audiences and stakeholders of school feeding programmes. We were impressed by the many features of the tool and how it allows us to align nutritional goals with costs and procurement considerations that are inherent to the programme.”

**MARIANA ROCHA,**  
Mozambique Country Office

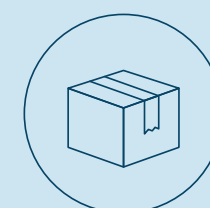
“This is a user-friendly platform to create cost effective and country specific menus. Further, the results are so informative and helpful to advocate the government about the nutrition aspects as well as the cost components of the school menus.”

**SATHSARA DEYALAGE,**  
Sri Lanka Country Office

## HIGHLIGHTS:



**20% savings**  
in food purchases



**70% increase**  
in smallholder farmer  
product purchases





# Post-Harvest Loss Reduction

**WFP's Post-Harvest Loss (PHL) Reduction project is a joint venture between WFP Programme and the WFP Innovation Accelerator created to continue providing hands-on support to Country Offices.** Such support aims to enable business models that improve household food security and income for smallholder farmers, done in partnership with different players including governments, private sector, and other relevant institutions.

## COUNTRIES:



## IN 2020, PHL:

- Contributed to the **COVID-19 response** with specific PHL guidance accompanying the WFP Medium-Term Programme Framework.
- Launched the WFP Programme-Accelerator's PHL venture which aims to support Country Offices in the creation of **sustainable business models** for post-harvest loss reduction; kicked off hands-on technical support to **Mozambique** and **South Sudan** as the first focus countries.
- Increased stakeholder interest in post-harvest loss reduction as a way of enhancing sustainability of **food systems**, securing initial budget for the central team, regional coordination role and field staff in Country Offices.

## HIGHLIGHTS:

 Over **675,000 people** impacted

 Approximately **US\$ 7 million** in funds raised in 2020





# PRISM

**PRISM tracks the impact of major climate events in order to design risk reduction activities and target disaster responses.** By bringing different data streams into a single interactive map, PRISM shows the extent of damage on drought-affected areas, the impacts on markets and the coping strategies and resilience of affected populations.

## IN 2020, PRISM:

- Grew from **Indonesia** and **Cambodia**, to an **Asia-Pacific regional initiative**, to a ready-to-scale platform led by WFP headquarters.
- Streamlined the use of satellite data across WFP by deploying the **Open Data Cube**, a geospatial data management and analysis software system designed to work with large amounts of satellite data at scale.
- Deployed a **new version of PRISM in Cambodia** which introduced satellite-based hazard monitoring products to the National Committee for Disaster Management. This version integrates live data from the government's national poverty

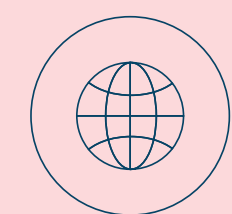
registry, IDPoor, as well as impact assessment data collected on mobile devices.

- Integrated **river gauge data** from an early warning system led by the INGO, People in Need, in Cambodia.
- Launched in Mongolia in May 2020, [bringing the platform to a new context](#) and new type of disaster unique to Central Asia.

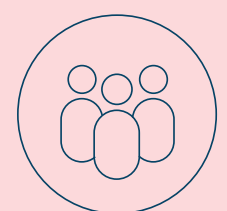
## COUNTRIES:



## HIGHLIGHTS:



Launched in **Mongolia** in May 2020



**388,392** people reached





# ShareTheMeal

**ShareTheMeal (STM) is WFP's fundraising app, allowing smartphone users to provide children with vital nutrition through a simple tap on their phones.** It costs just US\$ 0.80 to feed one child for a day. Free to download, the award-winning app is a pioneering way for people to join WFP's efforts in creating a world without hunger.

## IN 2020, SHARETHEMEAL:

- Was named by both **Google** and **Apple** as one of the [Best Apps of 2020](#), and got a [special shout out](#) from Apple CEO Tim Cook.
- Launched the first fundraising campaign for WFP's COVID-19 response in March 2020, one of the quickest-moving campaigns in history. More than **200,000 donors** from **216 countries** raised more than **US\$ 7 million** for WFP's COVID-19 response in countries around the world.
- Kick-started an innovative partnership with **Delivery Hero**, the world's largest global food network outside of China.

- Launched a fundraising campaign for the **Beirut explosion** within 48 hours of the emergency. In total, more than **35,000 people** from **171 countries** donated upwards of **US\$ 500,000** to support the emergency response in Lebanon.
- Saw a **165% increase in donations**, totaling US\$ 26.2 million. Fifty thousand people from 220 countries shared meals. At the end of the year, more than 40,000 people were a part of their monthly subscription, **The Table**, and donated a yearly total of US\$ 10 million.

## COUNTRIES:




“

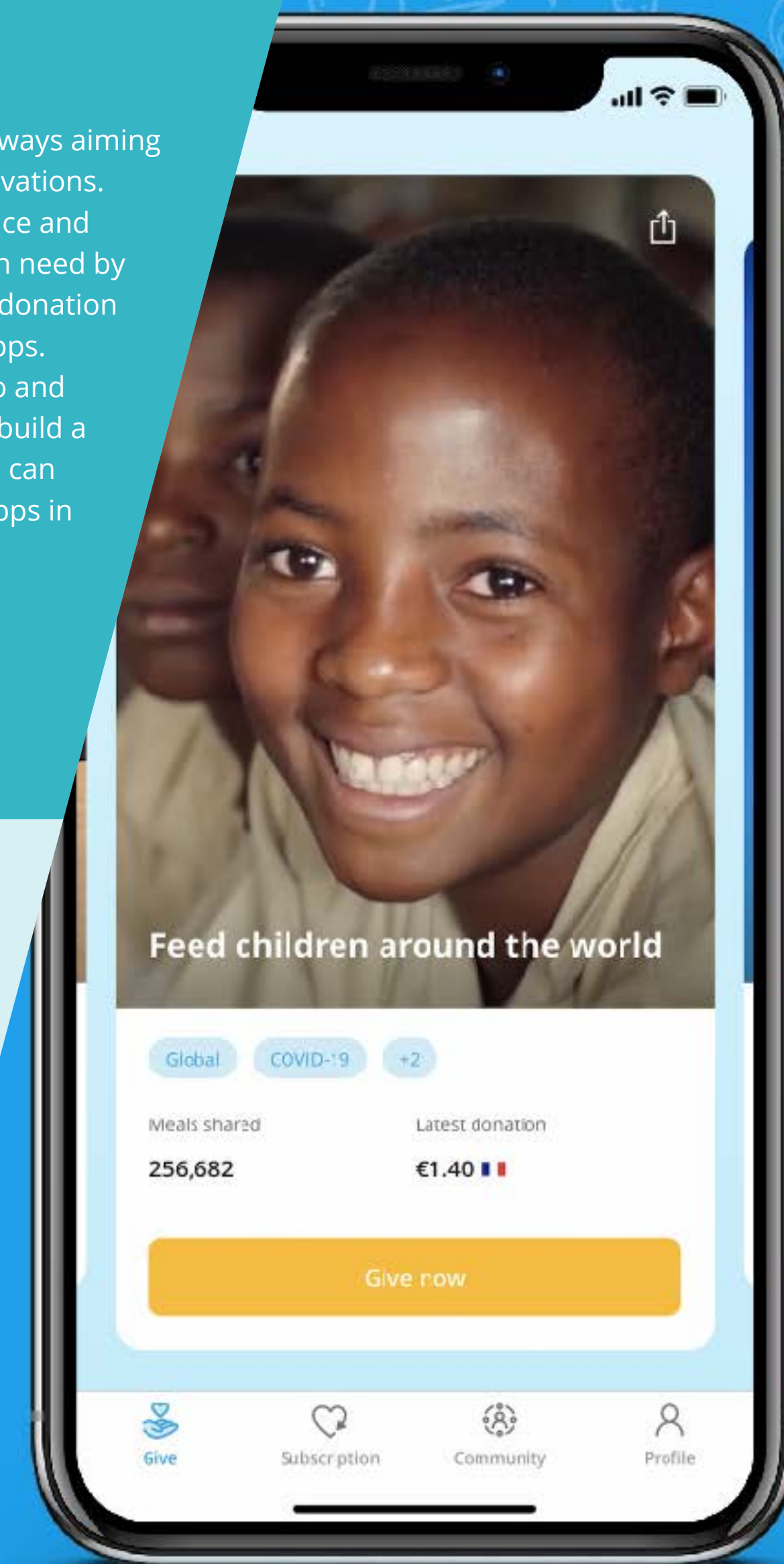
“Our team at Delivery Hero is always aiming to deliver product and tech innovations. We are now putting our experience and expertise to the service of those in need by integrating ShareTheMeal, a meal donation functionality, directly in our local apps. Tech teams from both Delivery Hero and ShareTheMeal have worked hard to build a seamless product that is scalable and can be further rolled out to more of our apps in the future.”

**CHRISTIAN VON HARDENBERG,**  
CTO at Delivery Hero

## HIGHLIGHTS:

 **US\$ 26.2 million**  
in donations through STM in 2020

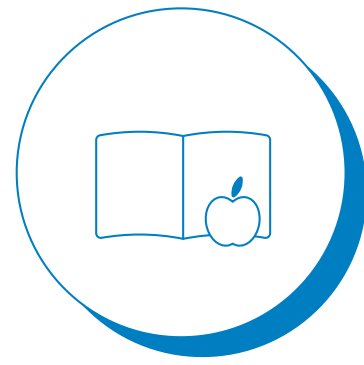
 **165%**  
increase in donations in 2020







AT THE END OF 2020, AFTER PARTICIPATING IN THE ACCELERATOR'S SPRINT PROGRAMME, TWO NUTRITION-FOCUSED STARTUPS WERE JOINTLY SELECTED BY THE BILL & MELINDA GATES FOUNDATION TO RECEIVE SUPPORT FROM THE WFP INNOVATION ACCELERATOR TO HELP DEFINE THEIR PATH TO SCALE.



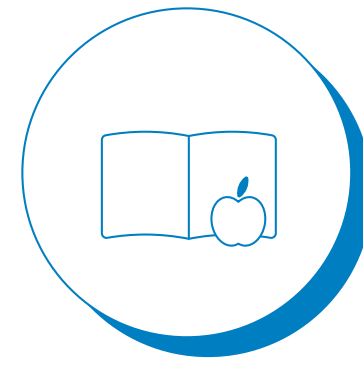
# Sanku

Sanku provides fortification tools, training and other support to small maize flour mills, enabling them to fortify their flour with essential micronutrients. Sanku developed a “dosifier” that adds micronutrients scientifically proven to improve health into the food Tanzanians eat the most.

During the Sprint Programme, the team identified that many millers were interested in fortification but unable to implement it into their process before Sanku. After the Sprint, the team will work to scale their operations in Tanzania by streamlining their distribution system, establishing additional physical distribution points and increasing their team capacity.



WFP/Sanku



# BioAnalyt

BioAnalyt is a product innovator of diagnostics and food testing aimed at making nutrition more visible, whether in humans, animals or food. Through its iCheck technology, it provides a digital solution to collect and analyze data on the quality of fortified foods to incentivize compliance with national fortification regulations.

In 2020, BioAnalyt developed its minimum viable product and ran rapid user testing trials with selected edible oil companies in **Ghana, Kenya, Malaysia** and **Nigeria** for feedback. Five companies in these countries provided feedback that helped BioAnalyt develop the updated version of iCheck Connect, a companion app for the iCheck device to store and visualize testing data for action and improve training and procurement efforts. BioAnalyt is currently testing iCheck Connect with 18 edible oil food companies among its global customer base. They plan to expand the use of iCheck Connect to additional fortified foods and government food fortification regulation agencies in 2021.



WFP/BioAnalyt

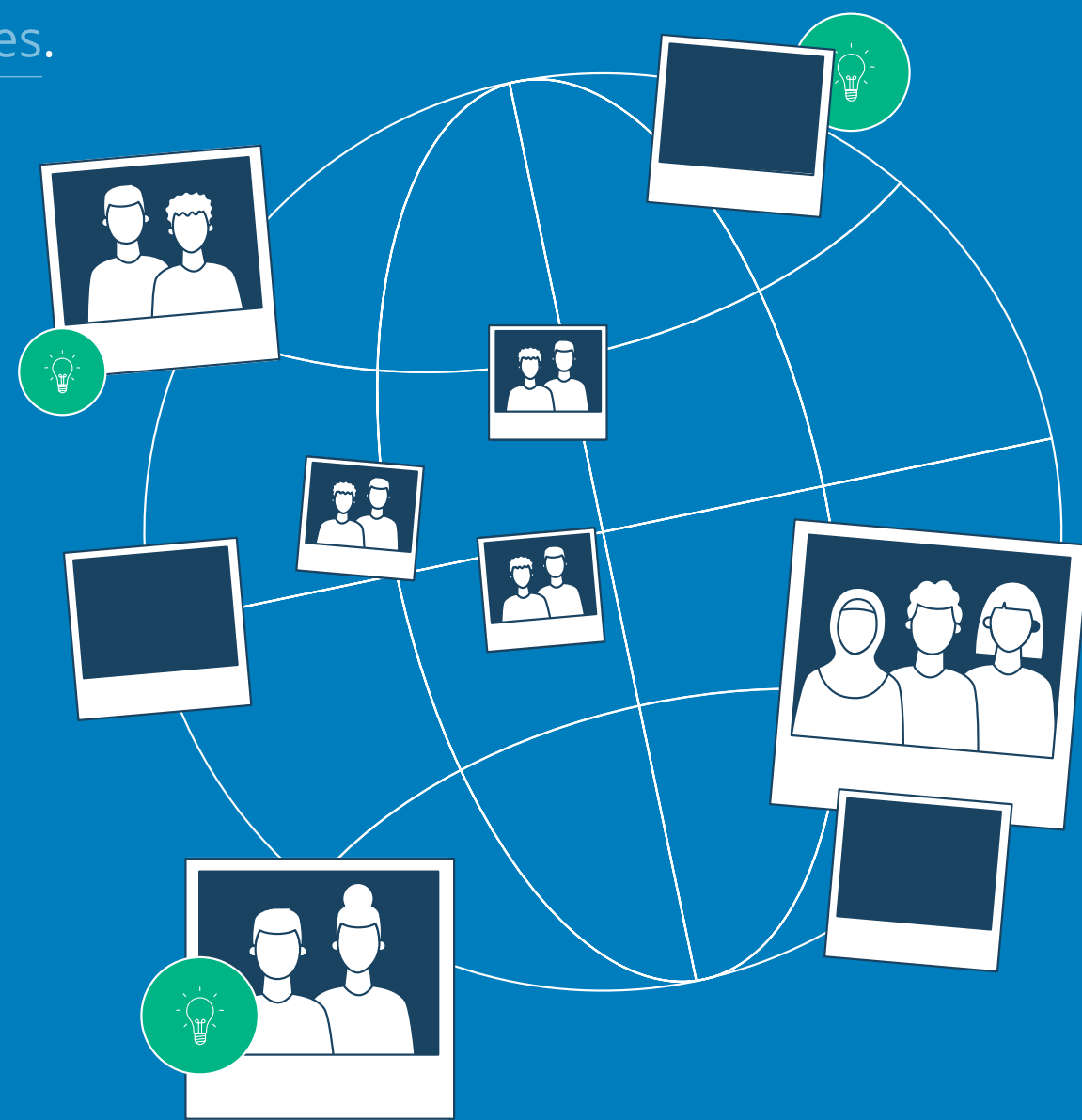


# Preparing innovators for the journey to scale

Before innovations even get to the Sprint phase, the sourcing and bootcamp process helps equip innovators to maximize impact. The team puts thought and care into every activity to achieve the best results for projects — providing value at every stage of the pipeline.

## SOURCING

The Accelerator runs an annual Innovation Challenge, utilizing our growing network of Innovation Hubs, partners, and champions to spread the word to reach the most innovative startups globally. In 2020, one of our Innovation Challenges brought in [793 applications from 95 countries](#).



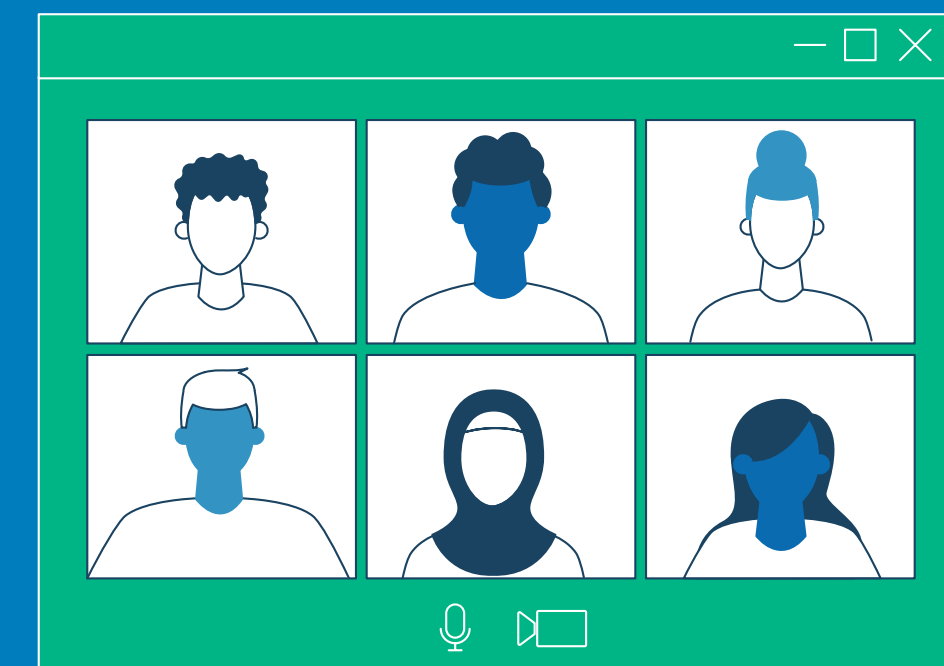
## MATCHING

Each innovation undergoes a detailed matching process to ensure that the proposed solution addresses an existing food security need identified by WFP Country Offices.



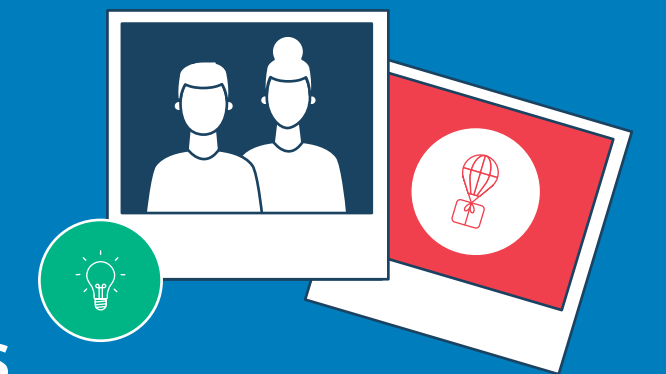
## INNOVATION BOOTCAMP

The Innovation Bootcamp is an intensive journey to help teams propel their innovations and prepare a pilot plan. The curriculum is tailored to the needs, stage and innovation type of each team, based on human-centred design and lean startup methodologies. Teams are provided with facilitators, mentors and pitch training to ideate, refine and communicate their solutions.



## MENTORS

Innovators are paired with carefully curated experts and mentors leveraging the Accelerator's global network to help them understand the problem in depth, and hone their product, pitch, and strategy.



## PITCH EVENT

Innovators have the opportunity to showcase their ideas at widely attended Pitch Events; some receiving additional contributions and interest from the extensive WFP Innovation Accelerator network.



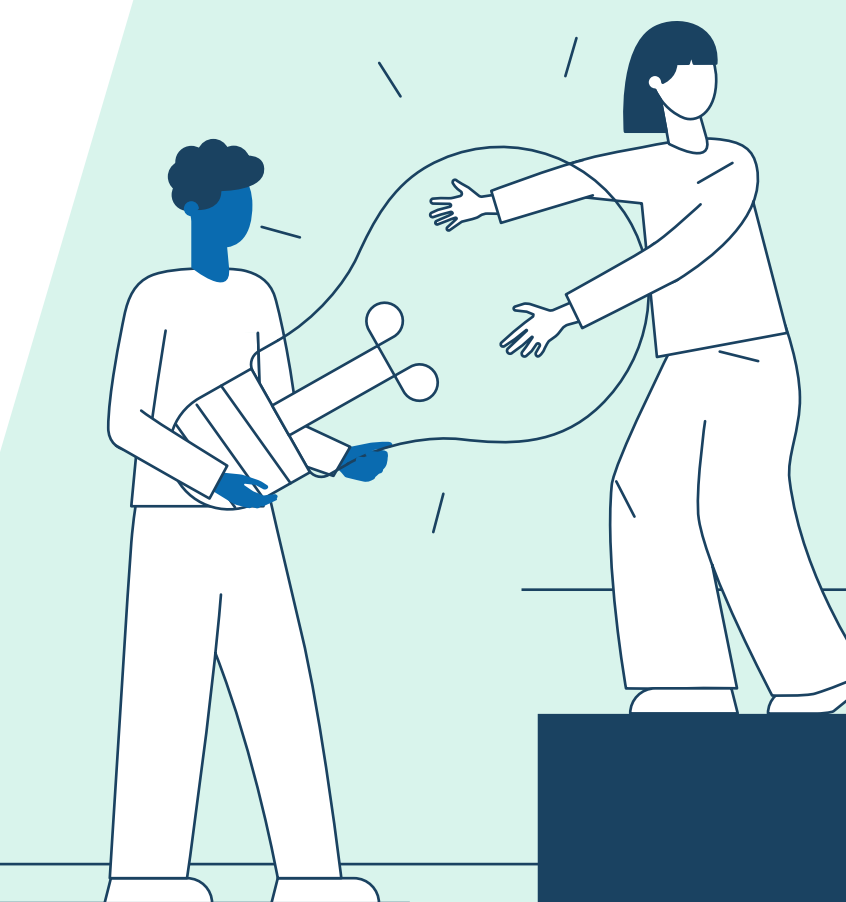
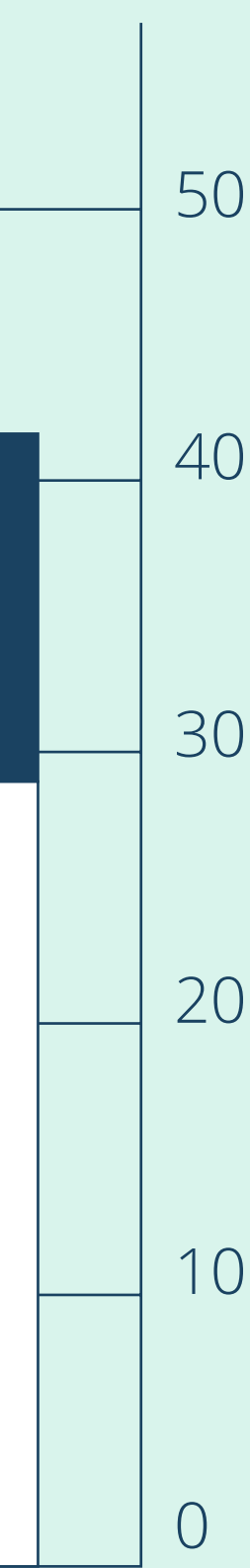
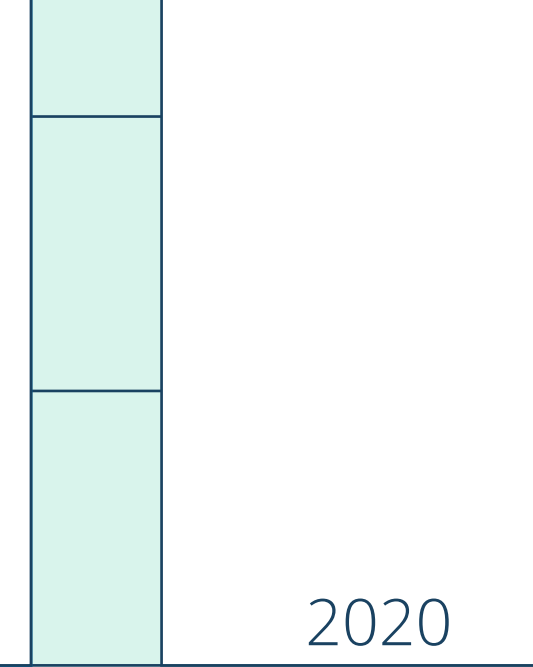
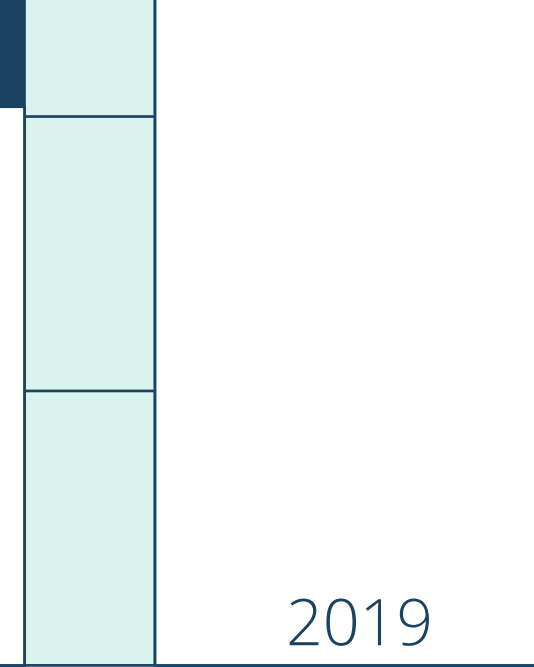
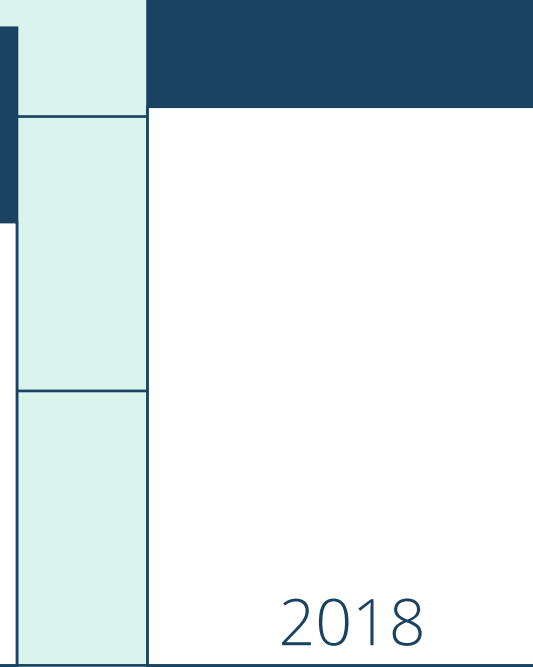
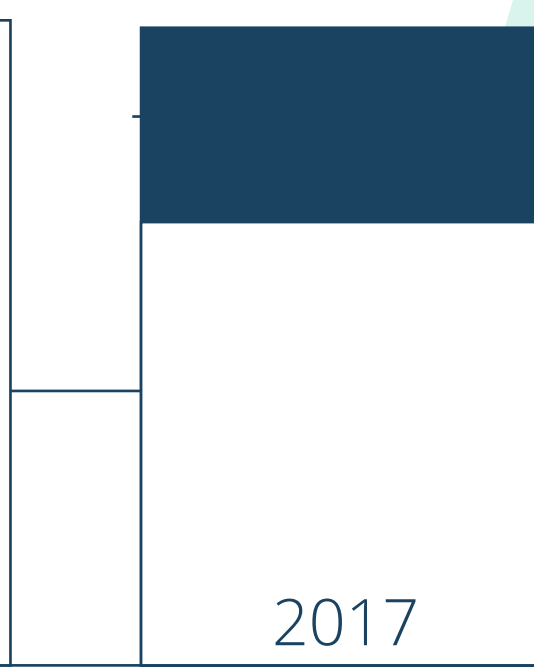
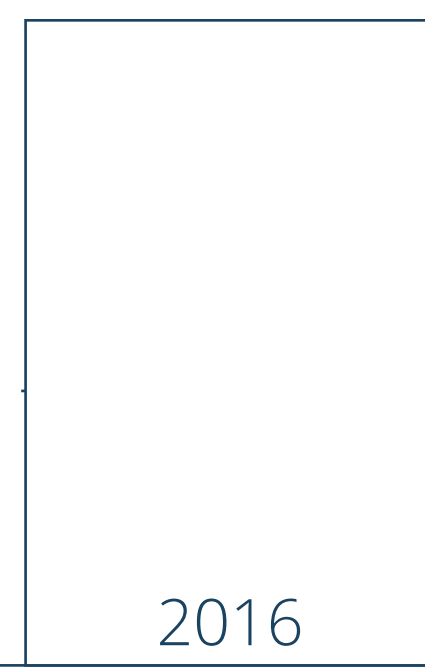
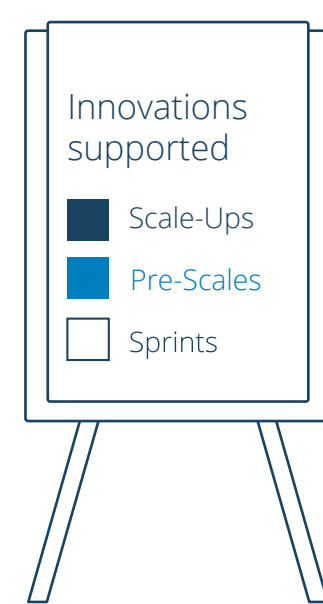
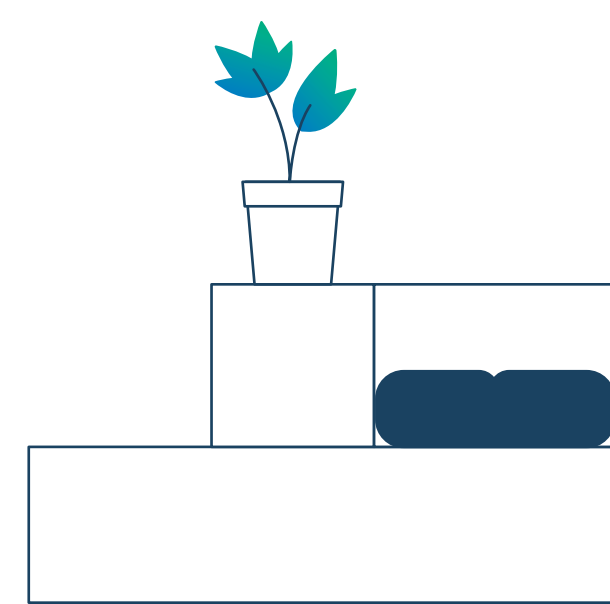


# Sprinting innovations from idea to impact

2020 was a year of design and growth, as the WFP Innovation Accelerator team pivoted their signature **Sprint Programme** to the new realities brought on by the COVID-19 pandemic.

The Sprint Programme is an intense **six-month acceleration programme** to help innovators and start-ups reach proof-of-concept and develop prototypes ready for implementation. Over the course of the programme, innovation teams have access to a diverse range of **mentors and experts, results-driven programming, and US\$ 100,000 in funding and hands on support from an experienced project manager** to design and test their ideas quickly — honing their innovations along the way.

In 2020, this process successfully occurred in a fully-remote environment, testing the creativity and innovation of both the WFP Innovation Accelerator team and the innovators they work with. In 2020, the team received over **1,280 applications** from **115 countries**, overall. Of this number, **19 new projects** went on to receive funding and technical support, growing the impact of the portfolio and pool of future scalable innovations.





# Agri-Wallet

Agri-Wallet is a **sustainable supply chain-finance service for farmers, off-takers and agro-dealers** that provides affordable finance to farmers, “earmarked” for income-generating agricultural activities. With Agri-Wallet, smallholder farmers are able to pay, save, borrow and ensure their farming activities while off-takers can buy produce from the smallholder farmers. Further up the supply chain, input dealers are able to receive their payments through Agri-Wallet.

With WFP, Agri-Wallet is working with agents and merchants to enroll farmers, enabling a scaling strategy to provide financing for more farmers in **Kenya**.

## ACHIEVEMENTS:

Within this pilot, Agri-Wallet has trained three agents and merchants and enrolled **298 farmers**. Of the enrolled farmers, 24 percent were able to unlock access to affordable finance.

## HIGHLIGHTS:

Active in **Kenya**

Enrolled **298 farmers** in the pilot



WFP/Maurice Oniango/Vallerie Namarome

# Child Growth Monitor

**Child Growth Monitor** is developing a digital tool to measure malnutrition in children under the age of five, leveraging image data and artificial intelligence, instead of physical scales and measuring boards, to produce reliable assessments. The app is expected to **make malnutrition detection cheaper, quicker and more accessible to health workers in remote clinics worldwide**.

## ACHIEVEMENTS:

Child Growth Monitor collected over 60,000 points of training data (proxy for children measured). The team made advances in improving the accuracy of the app by up to 30 percent.

The team is working on the release of a first version in 2021 that is safe for frontline health workers and children. Additional plans include starting a test project in **Uganda** with two goals: to test how algorithms work with children with dark skin, and to test the accuracy of three different smartphones.

## HIGHLIGHTS:

Active in **India**

**60,000+ children** measured for malnutrition



“During and post COVID-19 times, the Child Growth Monitor tool might have a huge impact on saving lives as the next no-touch solution to diagnose malnutrition in children”



WFP/Child Growth Monitor



# Circular Food Assistance

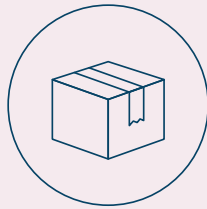
**Circular Food Assistance** leverages waste management processes within **Cox's Bazar refugee camp** to **create livelihood opportunities for the Rohingya community**. The team engages refugees in the co-creation, development, and prototyping of new end-products made from recycled food assistance wrappers. Sales proceeds will be reinvested to support more livelihoods efforts, while the process continues to be refined for further scale-up to other camps.

## ACHIEVEMENTS:

In 2020, the team **conducted five workshops**, allowing refugees themselves to identify, design and test the ways this new material can be turned into useful end-products. These workshops yielded over **40 different prototypes** — five end-products selected for production and distribution in Camp 15 in Cox's Bazar, and three identified as most suitable for commercial purposes in Dhaka.

## HIGHLIGHTS:

 Active in **Bangladesh**

 Collected over **89,000 units** of WFP packaging for upcycling



WFP/Circular Food Assistance

# Cockpit

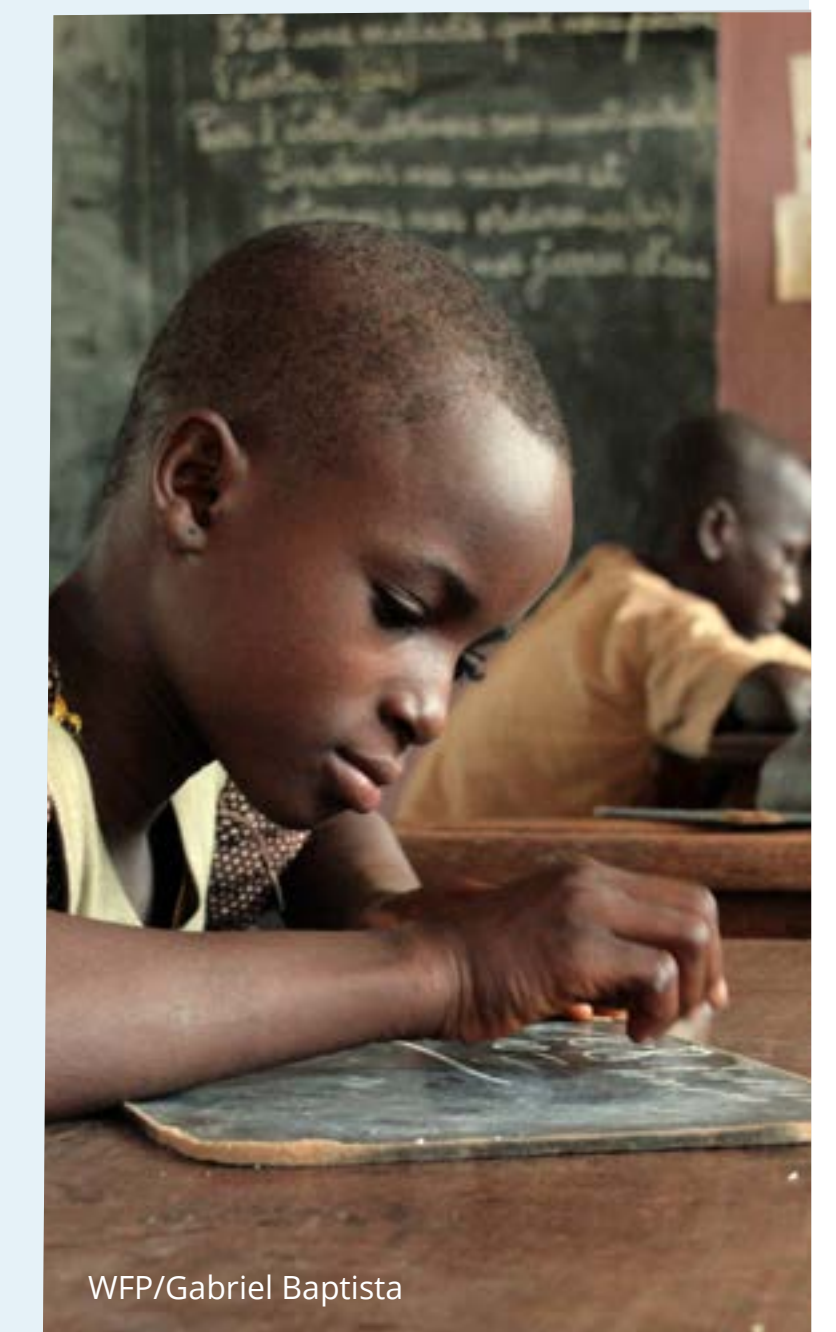
**Cockpit** is a dashboard designed to provide WFP field staff with timely access to **automated data analyzes to optimize school feeding programming**. School feeding programmes involve massive amounts of data stored in multiple digital and paper-based systems. Gathering and analyzing this data is time consuming and inefficient, hindering informed decision making. Cockpit helps to automate this process so that WFP can adapt and design school feeding activities faster and more efficiently. **This project was identified through the COVID-19 Fast Track Programme.**

## ACHIEVEMENTS:

WFP South Sudan, WFP School Meals, and WFP's Research Analysis and Mapping (RAM) teams, joined forces to **tailor the corporate Cockpit tool to South Sudan needs**. WFP South Sudan is exploring a new model with the Ministry of Education to collect data through a simple SMS system.

## HIGHLIGHTS:

 Active in **South Sudan**



WFP/Gabriel Baptista



# Decapolis

**Decapolis** provides a **traceability platform for proving the safety and quality of food** for food producers, farmers, and regulatory agencies worldwide. Decapolis validates safety and quality on a batch-by-batch basis by means of an unbroken chain of tamper-proof records using **blockchain** technology. These records contain measurements and assessments at each stage of the raw materials' sourcing, production, and fulfilment processes.

## ACHIEVEMENTS:

Decapolis registered and trained **100 smallholder farmers** on their platform. The team will help these farmers improve their practices and ensure their compliance with regulations. The objective is to reduce loss or rejection of goods with 20 percent more goods making it to a premium market, resulting in 20 percent more income for the producers. The project will also **capture and store relevant data to certify the quality of food** and provide transparency along the value chain.



## HIGHLIGHTS:

Active in **Jordan**

**100 farmers** trained

# DEFAST

**DEFAST** is a fecal sludge treatment plant that **transforms human waste into safe fertilizer and cooking briquettes** in refugee settings. This will result in improved well-being of refugees, as well as an increase in food production for the surrounding population.

## ACHIEVEMENTS:

The DEFAST team has **initiated the design phase** of the project by undertaking baseline surveys, market studies and environmental and social impact assessments. The team is also organizing demonstration activities to ensure community acceptability and desirability of DEFAST products. In 2021, phase two of the project will lead to the construction of the facility, hiring of local operators and further training for communities on how to use DEFAST organic fertilizers and cooking briquettes.



## HIGHLIGHTS:

Active in **Rwanda**

Site location determined in **Nyamagabe** district

“The DEFAST plant simplifies the process of safe sludge treatment while at the same time giving high-value products. Once we have such a facility in Nyamagabe we can go beyond and also make cooking briquettes from the toilet waste – which is possibly much more high value than fertilizers only and would also benefit refugees.”

**THACIENNE MUSHIMIYIMANA**, WFP Head of Field Office / Nyamagabe

WFP/Fidele Nteziyaremye



# Electro Methanogenic Reactors

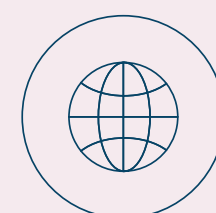
## Electro-Methanogenic Reactors (EMR)

is a bio-digesting eco-fuel project. The team's goal is to transform human waste into energy and water, reducing the operating costs of refugee camps and schools and improving nutrition. The team is testing an **innovative bio-digesting technology that turns human waste into three subsidiary products: methane, water and a fertilizing slurry.**

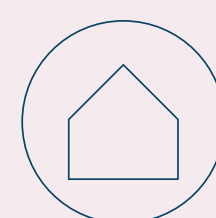
## ACHIEVEMENTS:

The launch of the project in Kenya was due to take place in March 2020, but was delayed due to COVID-19 movement restrictions. The team has identified the site where they would like to install the facility and an agreement has been drafted with support from legal counterparts. The facility is ready to be shipped to Kenya in early 2021.

## HIGHLIGHTS:



Planned for implementation  
**Kenya**



Site  
**location**  
determined



WFP/EMR

# e-Shop

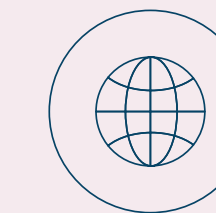
## e-Shop is an online food ordering and delivery system available on Android, iOS and Unstructured Supplementary

**Service Data (USSD).** Food insecure people in Somalia can redeem their WFP cash assistance from authorized WFP retailers who connect with delivery services to bring food to their homes. WFP Somalia designed, implemented and scaled up e-Shop to promote price transparency and competition; make nutritious food more accessible and affordable; reduce exposure to COVID-19 in the food assistance and retail process; and stimulate the market for local food suppliers, retailers and delivery agents.

## ACHIEVEMENTS:

While WFP Somalia launched e-Shop in 2018, uptake skyrocketed since the addition of the home delivery component in 2020. By March 2021, WFP Somalia had **124,137 e-Shop customers** and **1,256 retailers** registered on the platform. Comparatively, in September 2020, WFP provided cash-based assistance to **500,000 people** in Somalia. Transactions worth US\$ 16.2 million have gone through e-Shop since its launch, and 186,116 home deliveries have been made since the feature was added. With WFP Somalia having developed, implemented and proven the model in the challenging Somali context, the e-Shop team began working with WFP Innovation and Knowledge Management Division on further expansion in late 2020.

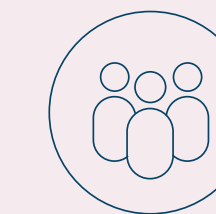
## HIGHLIGHTS\*:



Active in  
**Somalia**



**124,137**  
**e-Shop customers**  
in WFP Somalia



**1,116,696**  
**beneficiaries**  
reached

\*e-Shop highlights accurate to March 2021



WFP/Ismail Taxta





# Fenik

**Fenik units are low-cost, off-grid, mobile evaporative refrigerators that run on water.** The solution is a light weight, easy-to-carry, fully portable system that keeps perishables fresh. It requires **no electricity** to operate and is **100 percent eco-friendly** with no greenhouse gas emissions. The units allow for increases in income, household food security and reduction in post-harvest losses.

### ACHIEVEMENTS:

The Malawi Country Office purchased **300 units** to complement their livelihood operations. So far, communities were consulted in eight districts and participation criteria for the program was defined. The units will be distributed to communities in 2021 and will test the product-market fit, price point, and user desirability of the product. Local manufacturing capabilities of the units will also be explored.

### HIGHLIGHTS:



Active in **Malawi**



**300 units** purchased



WFP/Fenik



# Annapurta GrainATM

To ensure efficient and effective distribution of food grains at the last mile, WFP India has developed **Annapurta GrainATM**. Annapurta (Hindi for “fulfiller of food”) is an **automated multi-commodity dispensing machine**, which will provide beneficiaries access to their full entitlement with speed and accuracy. Annapurta ensures no denial of service, exact weighment without manual interference, and no leakages due to incorrect weighment and diversion at Fair Price Shops.

### ACHIEVEMENTS:

The Annapurta machine dispenses grain commodities based on the consumption pattern of the region. The machine is capable of **dispensing up to 50 kilograms** a minute with an accuracy of 0.01 percent. A letter of approval for the pilot and tentative locations has been provided by the Government of India’s Department of Food and Public Distribution. The National Informatic Center, the IT wing of the government, is working on updating the Point of Sale application and other infrastructure to enable smooth integration.



WFP/Nishant Aggarwal

### HIGHLIGHTS:



Active in **India**



**3 machines** developed



**5 site locations** identified

“

The solution is completely modular and robust, which allows its quick implementation and scale up, not just in different parts of India but globally as well. Annapurta can integrate with any existing or new systems and can easily accommodate variations in commodities, entitlements, speed, usage, as per the needs of various stakeholders.”

**ANKIT SOOD**, Head of Systems Reform, WFP India



# GrainMate

**GrainMate is a low cost grain moisture meter which** aims to help smallholder farmers and other stakeholders across the grain value chain avoid and reduce post-harvest losses by measuring the moisture content in their grains before storage.

## ACHIEVEMENTS:

Farmers from **35 cooperatives** have been trained on **Post Harvest Loss (PHL)** management, including humidity testing. GrainMate has conducted several experiments to showcase the benefits of measuring and storing grains at an optimal humidity level. The team's plan for 2021 is to sell the moisture meters to farmers whom they have trained on PHL management and shown the benefits of using their product.

## HIGHLIGHTS:

Active in **Ghana**

Trained farmers from **35 cooperatives**



WFP/GrainMate

# Groasis

**Groasis** supports smallholder farmers with a simple and inexpensive technology to **grow productive trees and surrounding plants** using minimal resources: the planting boxes use **90 percent less water** than regular irrigation methods, reduce the cost of planting and farming degraded land by 90 percent, and boast a plant survival rate of 90 percent.

## ACHIEVEMENTS:

Groasis in Algeria has successfully completed the pilot with **198 families**, growing various vegetables and tree fruits. The WFP Algeria Country Office received US\$ 100,000 to scale up Groasis to other families in 2021. Groasis in Colombia has received funding from the US Insight Mental Foundation to scale up to 300 additional families in 2021. The Groasis kick-off in Chad was delayed due to COVID-19 restrictions, but the team is ready to launch in early 2021.

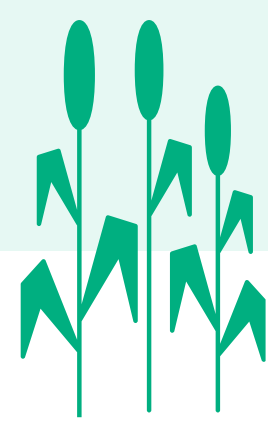
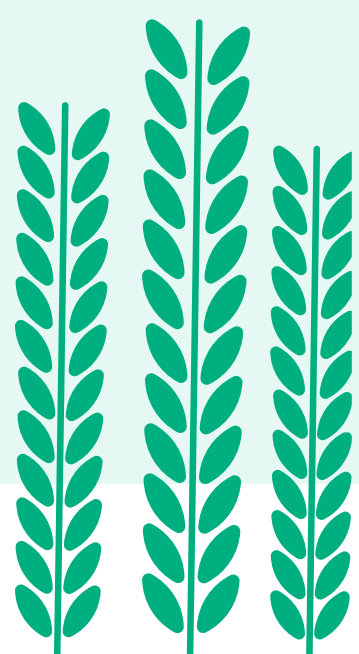
## HIGHLIGHTS:

Active in **Algeria, Chad, Colombia**

Groasis Algeria completed pilot with **198 families**



WFP/Nicolas Umhizi





# Hello Tractor

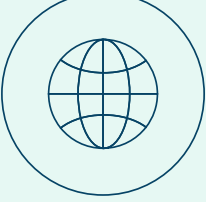

**Hello Tractor connects tractor owners with smallholder farmers**, enabling farmers to request affordable tractor services while providing enhanced security for tractor owners through remote asset tracking and virtual monitoring.

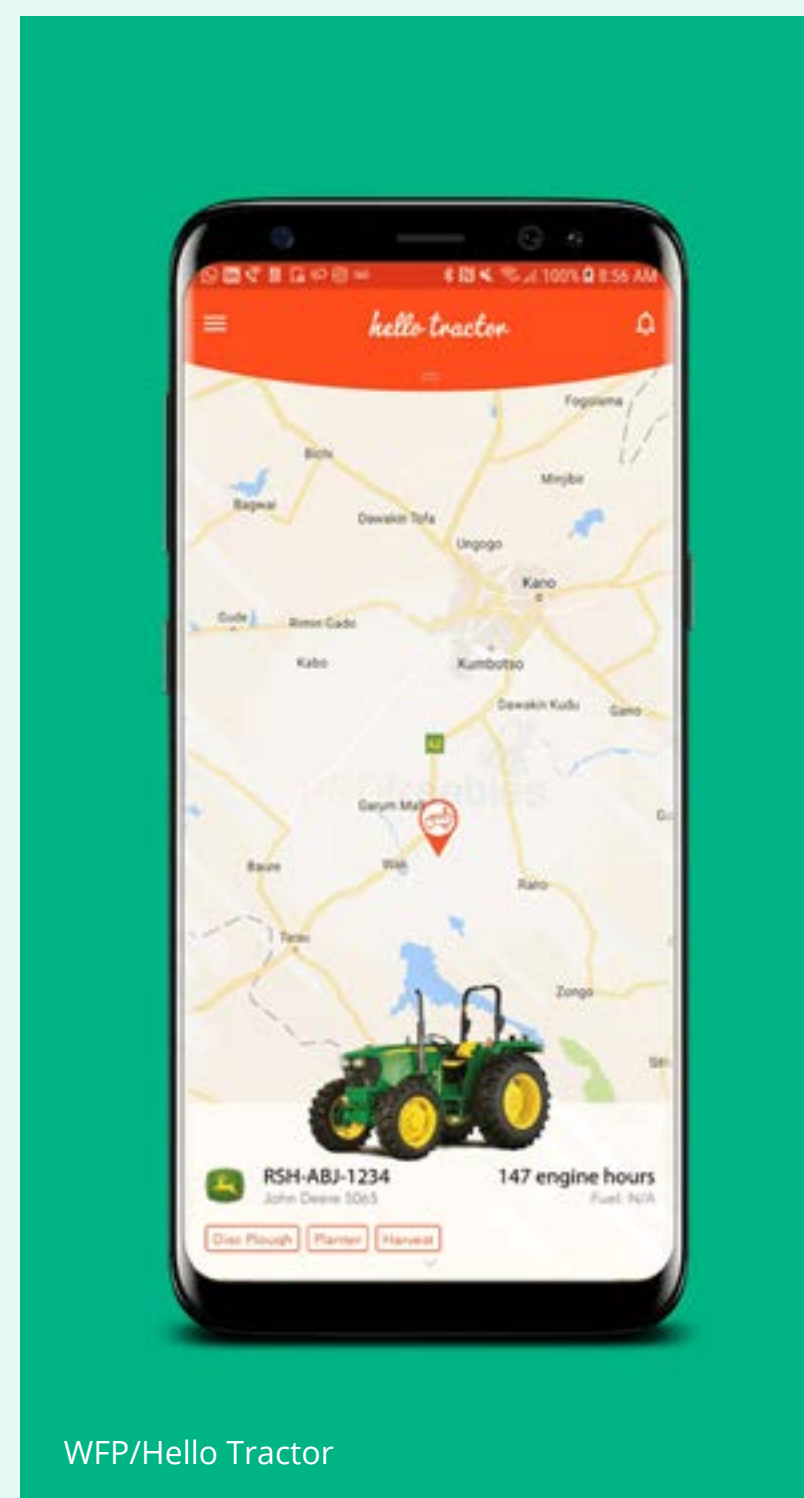
## ACHIEVEMENTS:

During 2020, the team tested and launched a route optimization solution to minimize travel time and maximize tractor utilization. During the Sprint Programme, Hello Tractor allowed **3,330 acres** to be serviced by a tractor for land preparation through its platform, onboarded more than **70 tractors** and trained **60 booking agents**.



## HIGHLIGHTS:

-  Active in **Kenya**
-  Onboarded **70 tractors** and **60 booking agents**



WFP/Hello Tractor

# Humanitarian Topographic Atlas

**Humanitarian Topographic Atlas (HTA) creates high-quality, detailed, and up-to-date topographic maps** to provide aid workers with the best information on infrastructures, population and assets during humanitarian crises. All maps produced by HTA are open source and available free of charge to any agency, NGO, organization and government.

## ACHIEVEMENTS:

The HTA team succeeded in securing access to the technical expertise needed for the design, development and delivery of automated map production capabilities. After completing tests with five pilot countries, including **Nepal** and **Syria**, HTA was officially launched and made accessible for the broader humanitarian community. While HTA currently has information on **170 countries**, the aim of the teams is to add more, including maps of developed countries, eventually completing world coverage.

## HIGHLIGHTS:

-  **170 countries** HTA mapping coverage
-  **2,188 regions**
-  **20,420 districts**

(last map update: 7/2/2021)



WFP/Louis Hamann



# HungerMap<sup>LIVE</sup>

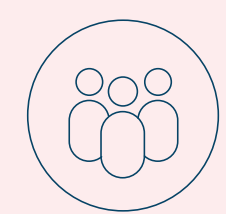
**HungerMap<sup>LIVE</sup>** leverages the power of big data and predictive analytics to track and predict food security in over 90 countries. Jointly developed by WFP and **Alibaba Cloud**, HungerMap<sup>LIVE</sup> pulls together key metrics — such as food security information, weather, population size, conflict, hazards, nutrition information and macro-economic data — to **predict and monitor the food security situation in near real-time.**

## ACHIEVEMENTS:

During 2020, the team publicly launched HungerMap<sup>LIVE</sup>, making data available for any user across the world. With COVID-19, the team quickly adapted to **support WFP’s global response to the COVID-19 outbreak.** This meant speeding up the expansion of near real-time to further countries, and collecting and displaying COVID-19 information, trends and impact.

## HIGHLIGHTS:

 Active **Globally**

 **8,966** active users two months after launch

# The Last Mile Ecosystem

**The Last Mile Ecosystem** wants fresh food to travel less miles. By creating a digital tool, the team will connect Tunisia’s School Central Kitchens to local transporter and smallholder farmers. With a digitalized school feeding food procurement system, the team will be able to **improve the nutrition of children and boost the smallholder farmers economy.**

## ACHIEVEMENTS:

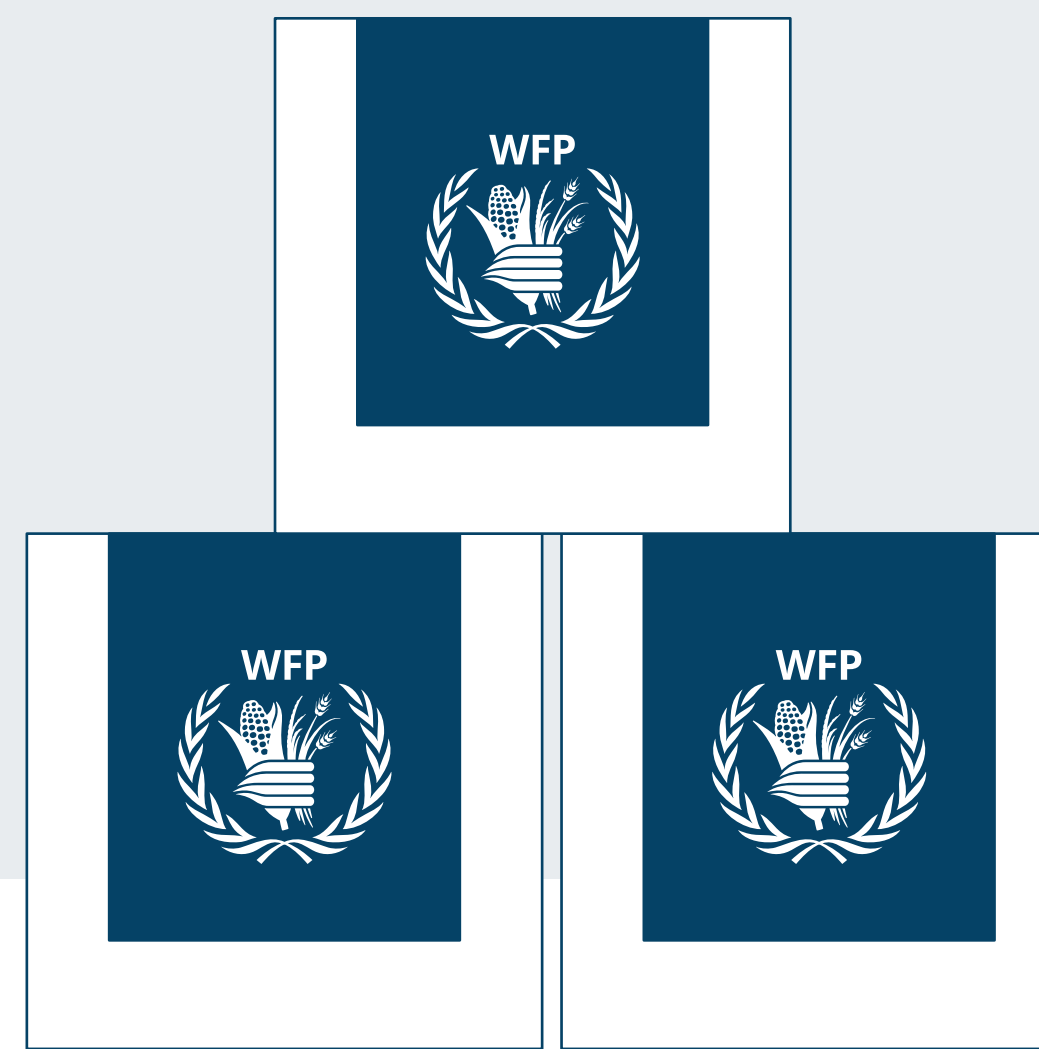
During the Sprint, the team will collect **user research** to understand the needs of local governments, central kitchens, transporters and smallholder farmers and run an initial minimum viable product to test the full process.

## HIGHLIGHTS:

 Active in **Tunisia**

 **User research** collection completed

 **Prototype** completed



WFP/Cambodia

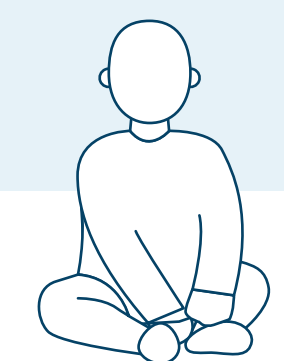
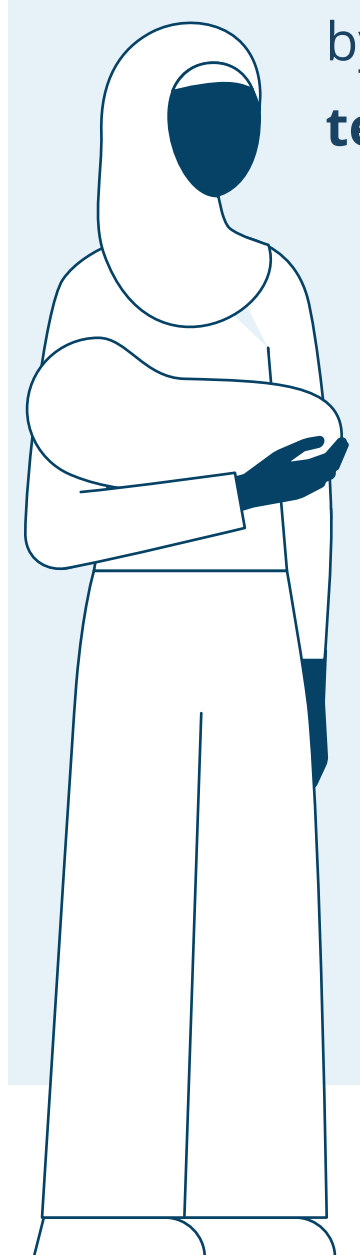


# MEZA

**MEZA** is a collaboration between WFP's Nutrition Division and Charitable Analytics International (CAI), a non-profit data science and technology organization that aims to digitize handwritten data collected from remote locations to **address the data gap faced by different stakeholders involved in the fight against malnutrition.**

## ACHIEVEMENTS:

Two main objectives of the pilot have been satisfactorily achieved: the ability of clinic workers to take photos of logbooks and send them to MEZA and the extraction of data from the photos by the **MEZA Optical Character Recognition technology.** A performance review was conducted, and the team is exploring different options including continuation of the project in the Republic of Congo or expansion to another WFP Country Office.



## HIGHLIGHTS:

 Active in **Congo**

 **50 clinic workers** trained and participated in Nutrition data collection for MEZA in the Congo



WFP/Alice Rahmoun

# NINAYO

**NINAYO** empowers smallholder farmer groups, offering them **more affordable agricultural inputs,** access to best practices and higher sales prices through a ready-to-use digital network.

## ACHIEVEMENTS:

NINAYO enrolled **20 farmers** who are willing to sell through their platform (e-fadhi). They also secured a warehouse in Kibaigwa where farmers' grains will be stored before selling them after prices go up. The 20 enrolled farmers supplied **10 metric tons of corn** to NINAYO.

## HIGHLIGHTS:

 Active in **Tanzania**

 **20 farmers** enrolled to sell their harvest through NINAYO



WFP/NINAYO



# NutriIndia

**NutriIndia** is a **monitoring and e-learning app** to provide training on hygiene and nutrition for WFP's school meal cooks. Built as an extension to WFP's Nutrifami app, another project supported by the WFP Innovation Accelerator, NutriIndia is being developed in the Indian states of Uttar Pradesh and Odisha.

## ACHIEVEMENTS:

After a successful pilot in **10 schools**, the app was re-designed to address user feedback and is now ready for a broader roll-out in 2021.

## HIGHLIGHTS:

 Active in **India**

 Pilot in **10 schools**



# Optimus

**Optimus** is an optimization tool developed by the WFP Supply Chain team. It looks at operations from an end-to-end perspective, focusing on three major decision-making dimensions: **food basket design, transfer modality selection, and the sourcing and delivery plan**. By optimizing these decisions, the team can identify operational plans that achieve programmatic goals at the lowest cost while respecting operational constraints such as funding levels and supply chain lead times.

## ACHIEVEMENTS:

The team now has a user-friendly software with an **automated data feed**, and are looking at opportunities for field use. Optimus is currently ensuring every WFP Regional Bureau has a dedicated supply chain planner, trained in using Optimus, so that all WFP Country Offices have easy access to a trained and experienced user. In parallel, they have made available **e-learning courses** that allow field users to train themselves on the app, kicking off a global rollout throughout 2021.

## HIGHLIGHTS:

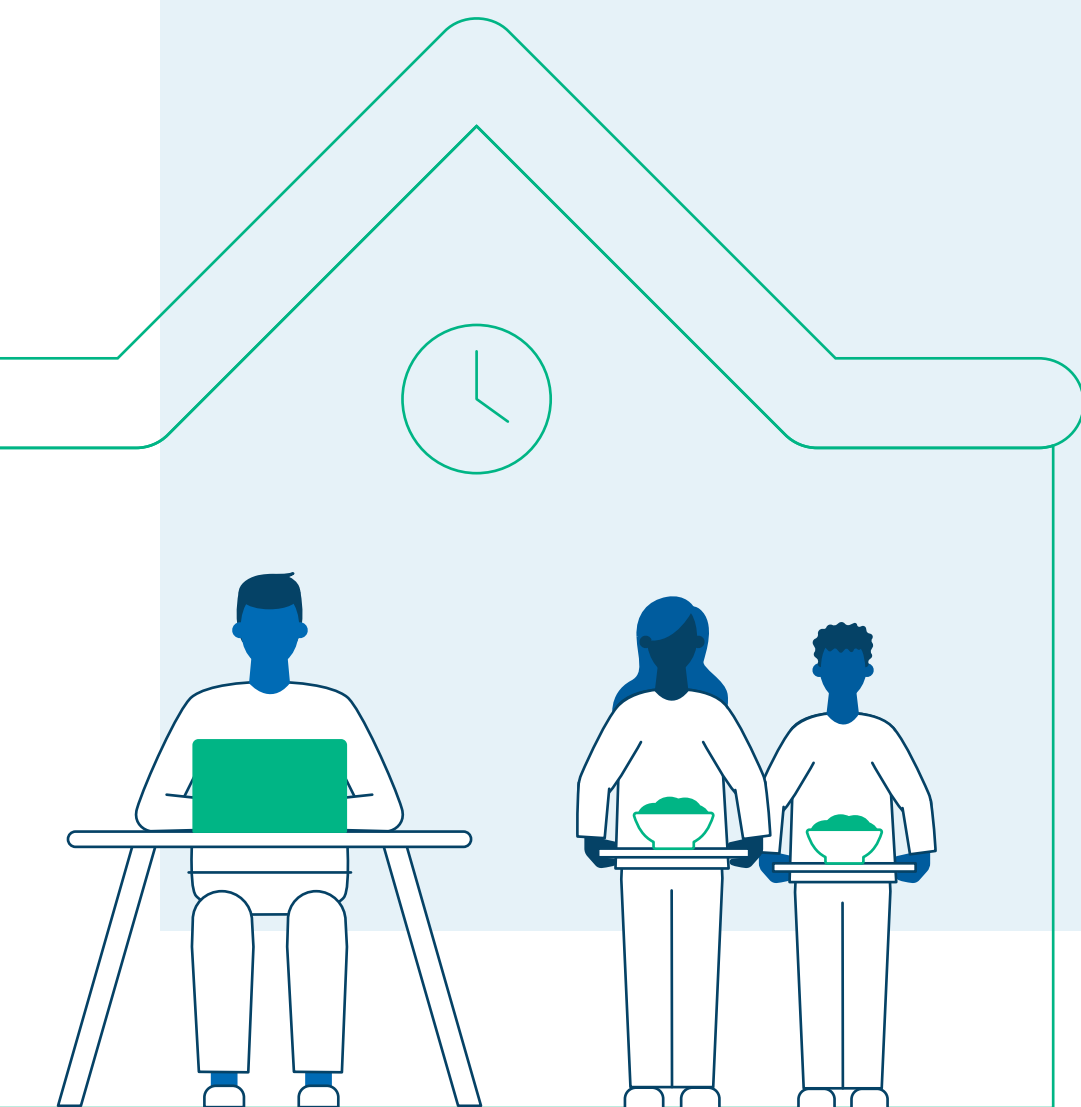
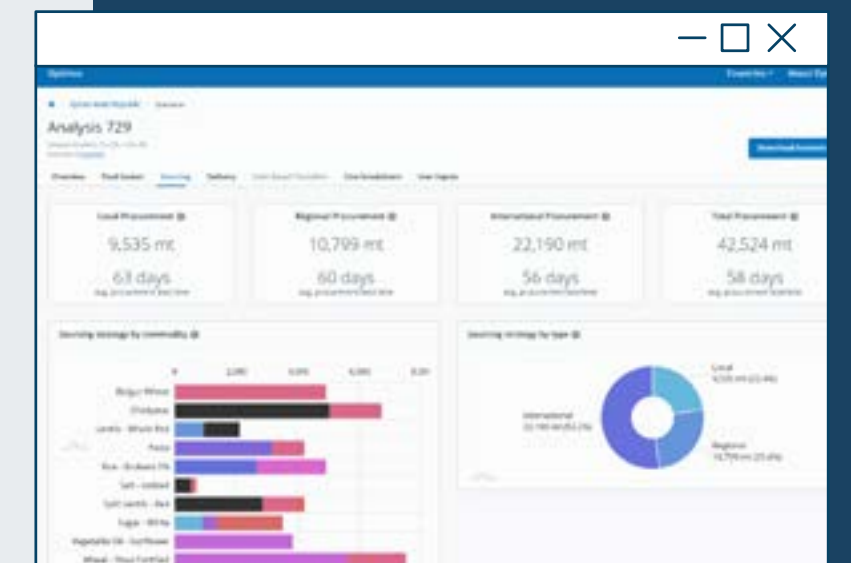
 Active **Globally**

 Rolling out to the **6 WFP Regional Bureaus**

“

It's amazing how with a few clicks, you can understand different WFP operations through well-organized data. On top of that, what is truly remarkable is that you can get practical insights about how to optimize those, at the same time.”

**SUMIT GOYAL**, WFP Regional Bureau for Asia & the Pacific





# Pesitho ECOCA

**Pesitho's ECOCA stove is a compact, efficient e-cooker** that uses solar energy to replace wood fuel. Aside from cooking, ECOCA can be used to charge phones and small appliances, making it appealing for blackout areas.

### ACHIEVEMENTS:

A **new model** of ECOCA cookers was developed after feedback from the initial tests in 2019. Fifty new families have signed up to purchase the cookers, but Pesitho has not been able to supply the cookers to Burundi yet due to COVID-19 movement restrictions.



### HIGHLIGHTS:

 Active in **Burundi** and **Malawi**

 **50 new families** have signed up to purchase the new ECOCA model



WFP/Pesitho ECOCA

# Producers Direct

**Producers Direct-Digital Cooperatives is a tool powered by blockchain technology** to create dynamic digital cooperatives specifically for the most marginalized groups — female smallholders and youth — who have limited profiles in global food value chains.

### ACHIEVEMENTS:

The team has been operating in two regions in Peru, onboarding farmers to the platform and providing training in the areas of access to markets and biosecurity. Given the impacts of COVID-19, Producers Direct and WFP Peru see the market linkage of these farmers as a high priority, and continue to work with identified female farmers by conducting user research to identify their **main needs and challenges on yield increase and access to markets.**

### HIGHLIGHTS:

 Active in **Peru**

 Supporting **81 female farmers**



WFP/Román Paredes



# Retail in a Box

**Retail in a Box** is a solution that enables a faster transition from in-kind food assistance to cash-based assistance. It also facilitates a faster recovery time for markets following emergencies by **introducing pop-up shops to communities in need**. Retail solutions enable people with the power of choice, where they can redeem their WFP cash-based assistance at these pop-up shops. WFP Country Offices pick and choose from a menu of structures and layouts to create their unique context-specific Retail in a Box. Best practices and operating procedures are included in the package to equip local people to run the stores, providing a sustainable solution.

## ACHIEVEMENTS:

Throughout the Sprint Programme, the team has implemented their project in Bangladesh and Mozambique. Additionally, the team participated in the **COVID-19 Fast Track Programme** and will be growing to an additional country in 2021, supporting the CBT and retail strategy in South Sudan.

## HIGHLIGHTS:

 Active in **Bangladesh** and **Mozambique**

 **10,783** beneficiaries thus far



WFP/Bruno Pedro

# Roambee

**Roambee** provides an on-demand, real-time shipment monitoring service which provides **insights, predictability and efficiency in logistics**. This is done using sophisticated sensors (called Bees) stored in each shipment that capture live location and condition information that can be acted upon, independent of the mode of transport.

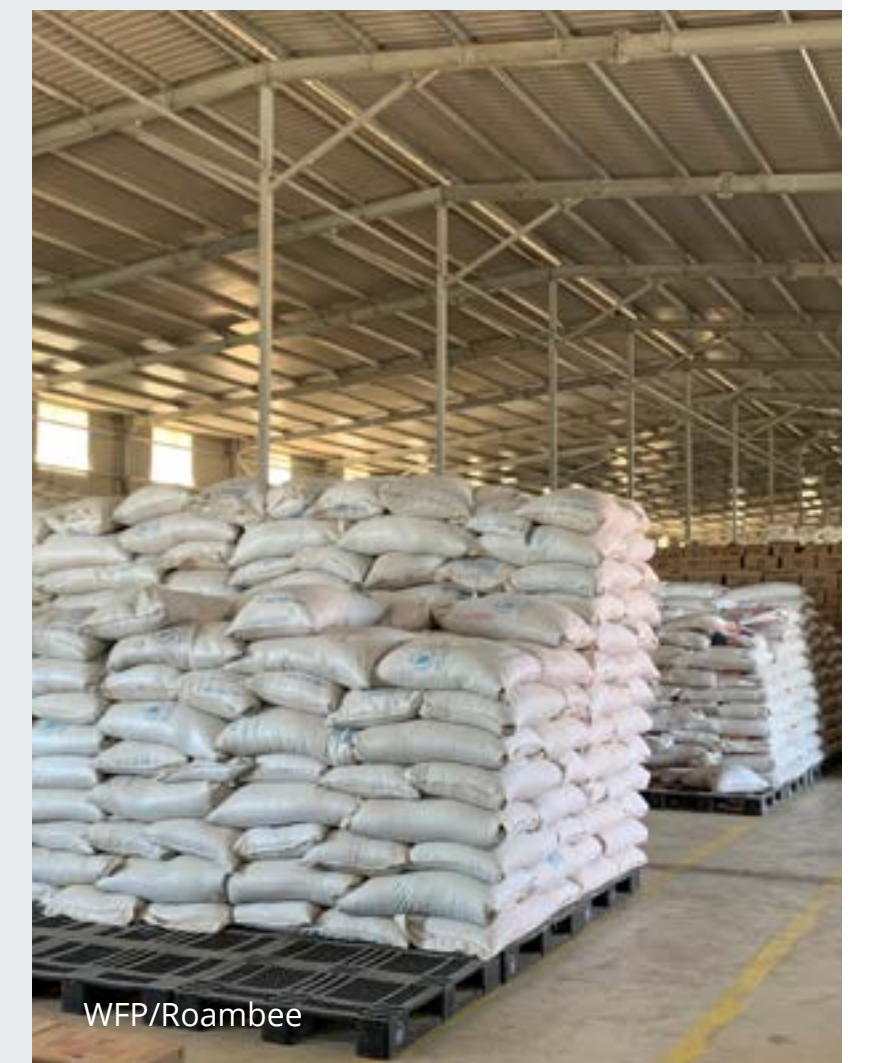
## ACHIEVEMENTS:

Together with the WFP team in Ethiopia, Roambee has been able to understand, test and **map the communications and logistics landscape** of selected major transport routes in Ethiopia. While the main learnings are still being analyzed, the Roambee team aspires to grow throughout further countries in East Africa in 2021.

## HIGHLIGHTS:

 Active in **Ethiopia**

 Devices already circulating and **testing routes in Ethiopia**



WFP/Roambee





# Saving Grains

**Saving Grains** aims to create **free markets for hermetic bags** in Ethiopia, turning millions of tons of post harvest losses into income for smallholder farmers.

### ACHIEVEMENTS:

Throughout the Sprint Programme, Saving Grains engaged with hermetic bag providers and worked with **750 smallholder farmers** in the training and testing of this solution. By the end of the agricultural season, Saving Grains will be able to assess adoption rates and work on **introducing hermetic bags as a mass market product**.

### HIGHLIGHTS:



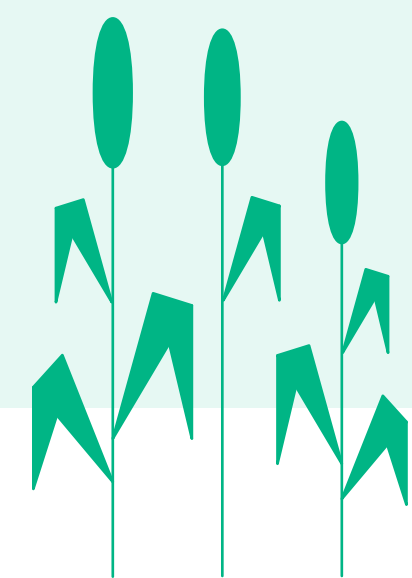
Active in **Ethiopia**



Worked with **750 smallholder farmers**



WFP/Michael Tewelde




# SHAPES

**SHAPES** is a platform that **simulates the impact of negative shocks on household income and the local economy**, and assesses the direct and indirect benefits of assistance provided to households to offset those shocks. Through SHAPES, the humanitarian community is able to quantify how much assistance it would have to commit, which informs a range of potential intervention parameters.

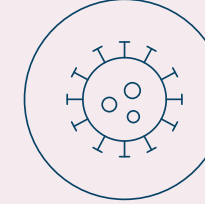
### ACHIEVEMENTS:

SHAPES can currently estimate crop yield loss as a result of **drought** and **flood** events using satellite data, and can model the income effects of hard and soft lockdowns due to **COVID-19**. Future features of SHAPES include long-range forecasts of weather-related shocks and food security disruptions through conflict.

### HIGHLIGHTS:



Active in **Mozambique**



Used in **COVID-19** pandemic to model economic impacts of lockdowns



WFP/Mehedi Rahman



# SheCan

**SheCan** is a digital financing platform that enables **private donors to support gender-transformative financial inclusion**, so that women in need can have the access to build income-generating livelihoods for themselves and their communities.

### ACHIEVEMENTS:

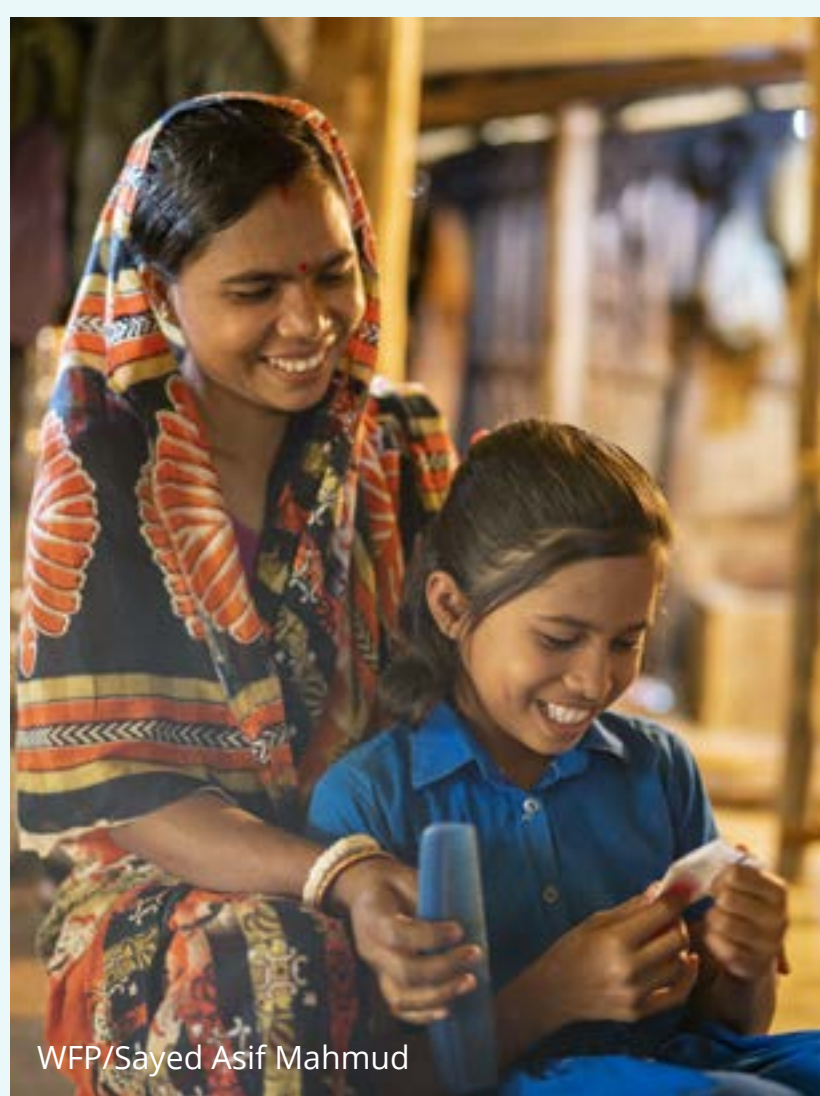
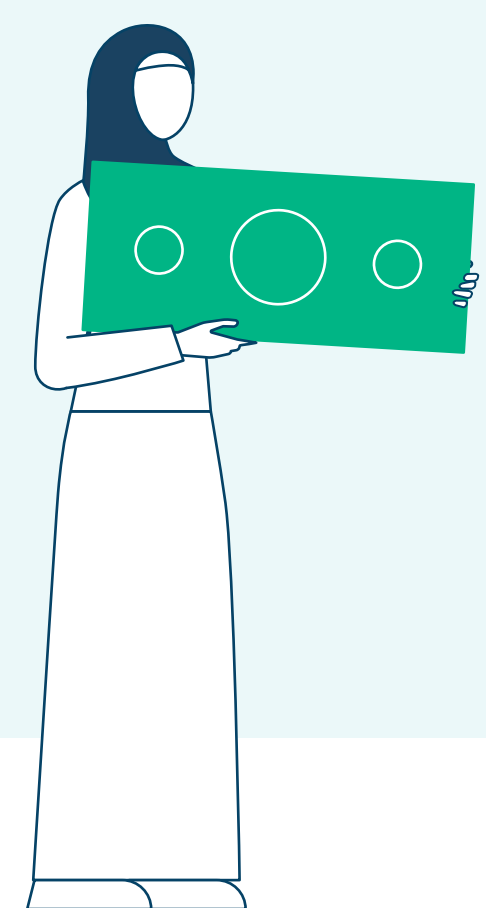
In 2020, the team has been collecting user research and developing an initial prototype of a **digital financing platform**. The platform is scheduled to launch in early 2021, leveraging innovative financing for greater impact.

### HIGHLIGHTS:

Active in **WFP HQ** (Italy/Germany)

**User research finalized;** ready to launch in 2021

Surveyed **200+** stakeholders



WFP/Sayed Asif Mahmud

# Thrive Agric

**Thrive Agric** is helping smallholder farmers obtain the best **inputs** and **machinery** for their farms, as well as providing data-driven advisory services and access to **premium markets**. Over the last three years, the start-up has worked with over **60,000 farmers** who have leveraged its technology and have improved their income by 80 percent.

### ACHIEVEMENTS:

Through a collaboration with WFP, Thrive Agric operated for the first time in Northeastern Nigeria, a very fertile region, though lacking inputs and market access as a result of instability. The team hired and trained 100 field agents in the State of Adamawa and subsequently onboarded over **12,000 smallholder farmers**. Between 2,500 and 5,000 metrics tons of commodities will be bought from smallholder farmers by Thrive Agric by the end of 2020.

### HIGHLIGHTS:

Active in **Nigeria**

Over **12,000 smallholder farmers** onboarded from Northeastern Nigeria



WFP/Thrive Agric/Favour Eze



## Support to WFP Country Offices

Given the strong track record of the WFP Innovation Accelerator in sourcing and supporting innovative solutions for the whole WFP, the Lebanon Country Office solicited support from the Innovation Accelerator to set up its new **Food Systems Grant Facility (FSGF)** to support the rehabilitation of Micro, Small and Medium-sized Enterprises (MSMEs) affected by the **Beirut port explosion** in August 2020. The support provided to MSMEs through the FSGF is expected to increase their business efficiency and competitiveness in the medium term, thereby improving the food security and resilience of food system actors in Lebanon to economic shocks and stresses.

### THE ACCELERATOR'S SUPPORT TO WFP LEBANON CO INCLUDES:

- Design **support packages** for beneficiaries of the FSGF
- Design **selection process and criteria** of beneficiaries of the FSGF
- Identify **components** of Lebanon's Food Systems to support
- Follow-up mechanisms to **track the impact** of the FSGF on the selected MSMEs

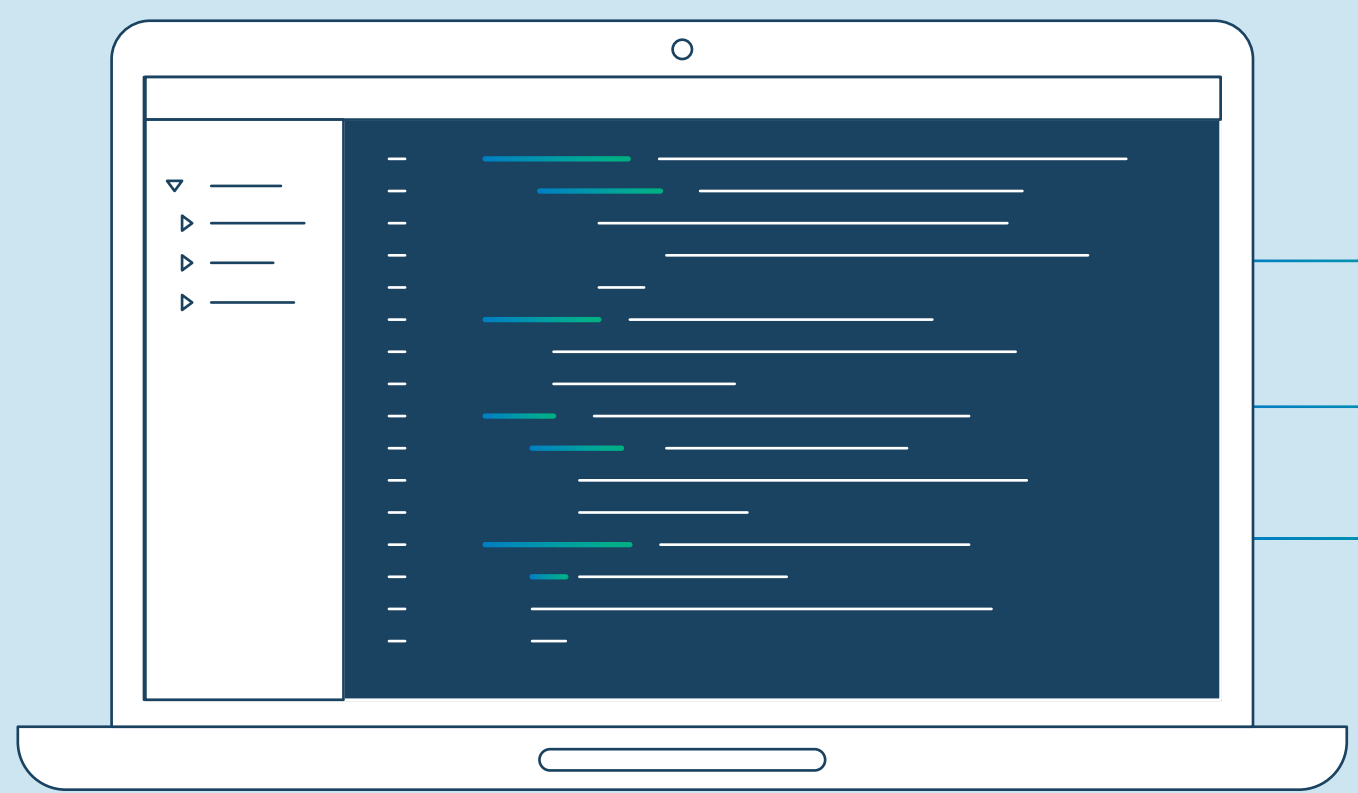




# Exploring game-changing frontier innovations

Frontier innovations are the first stage in the innovation pipeline at the WFP Innovation Accelerator. The Frontier Innovations team actively seeks **new ways of delivering humanitarian assistance** by exploring cutting-edge technologies and ideas. In collaboration with partners such as the **German Space Agency (DLR), Google, and Oxford Rhodes AI Lab**, as well as a plethora of high-tech collaborators, the Frontiers team examines

complex problems ranging from automated mapping and evaluation of damage after natural and anthropogenic disasters to how remote-piloted vehicles might support the delivery of assistance into complex environments such as live conflict. In 2020, the Frontiers team focused much of its attention on **blockchain, artificial intelligence, autonomous vehicles, and moonshot innovation.**



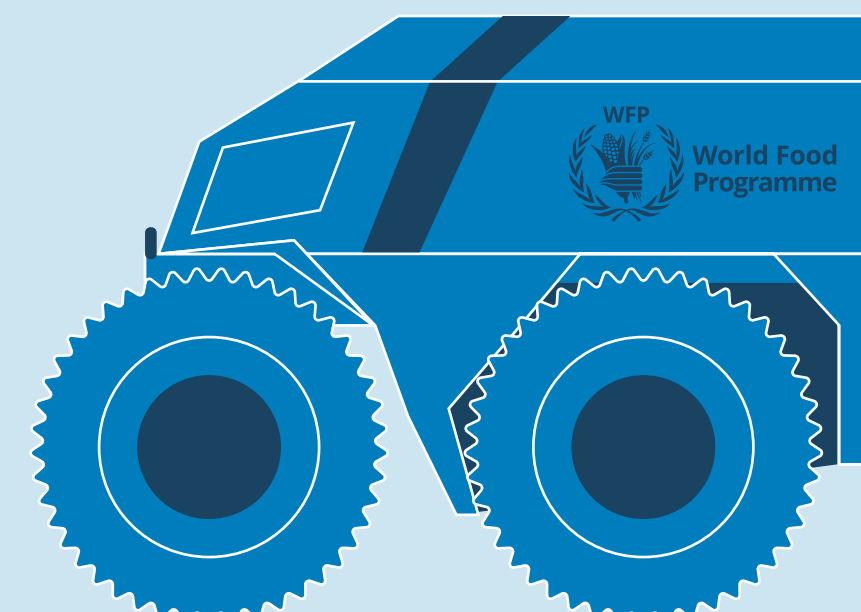


## CAN TELE-OPERATED AMPHIBIOUS VEHICLES BE USED FOR LAST-MILE DELIVERY?

# AHEAD

WFP faces increasing challenges in delivering food assistance, especially in conflict and other hazardous regions, where humanitarians take great personal risk to provide for people in need. With the support of the **German Space Agency (DLR)**, WFP aims to solve these challenges by building the capability of remote-operated robotic transport vehicles that could be used to deliver aid in challenging scenarios. Remote-operated vehicles provide a safe and secure environment to deliver life-saving support.

WFP selected an **amphibious all-terrain vehicle** which has unparalleled off-road performance, excellent maneuverability and simple engineering to serve as the **last mile-delivery system of choice**. These vehicles can be deployed to various operational contexts, such as for road assessments and deliveries on roads that are inaccessible for trucks. In 2020, the **WFP Innovation Accelerator procured the amphibious all-terrain vehicle and deployed it for the AHEAD project at the DLR premises**. The research for the project kicked off with an official partnership between DLR and WFP in October 2020.

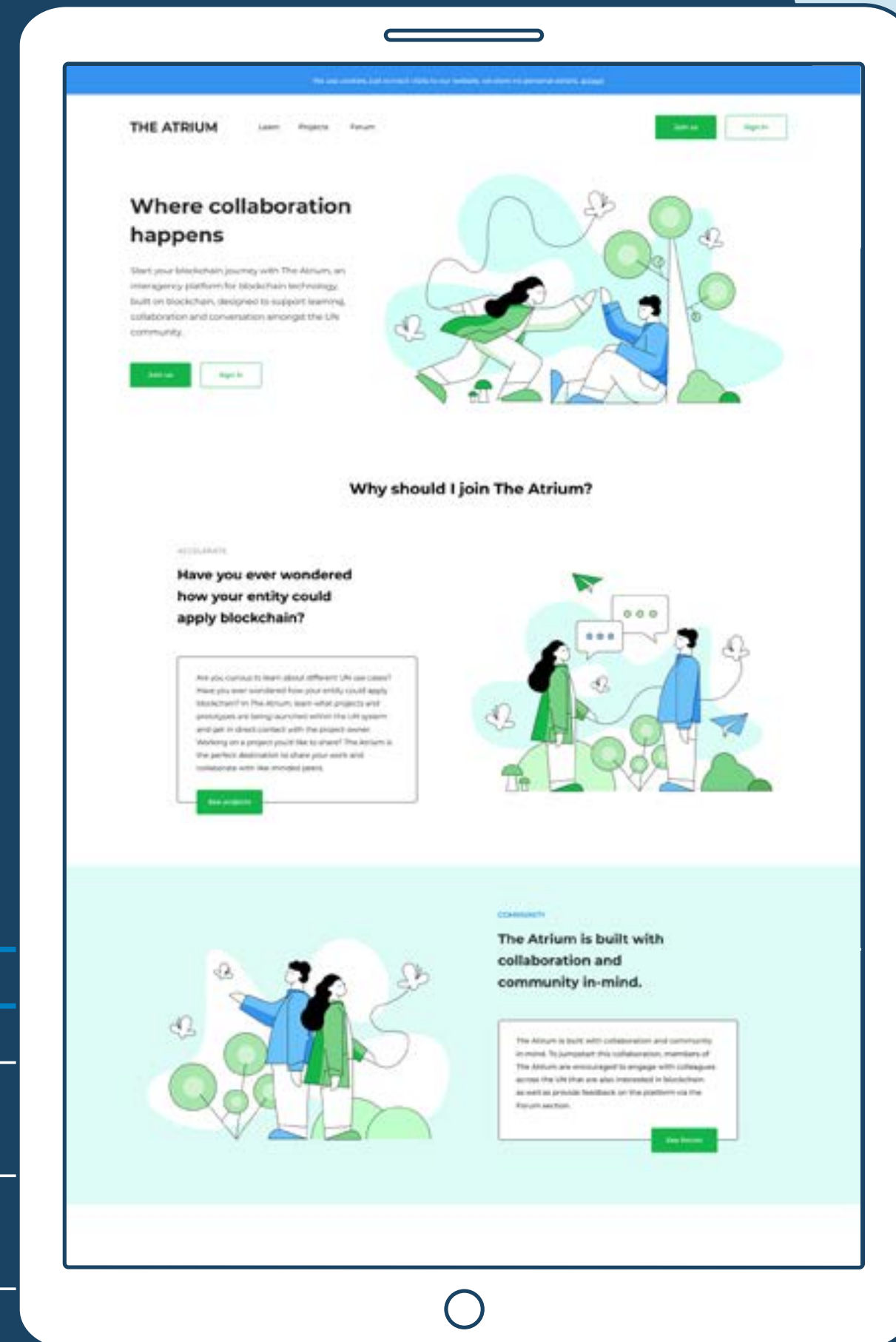




## EXPLORING APPLICATIONS OF BLOCKCHAIN IN THE HUMANITARIAN SPACE

### The Atrium

The Atrium is an **online community platform** that is being tested as a way to stimulate learning, collaboration and innovation around **blockchain applications** across the United Nations agencies. To date, the Atrium has more than 30 agencies represented contributing to 20 United Nations projects, and over **200 registered users**. A third version of the platform is being prepared for launch in early 2021 that will add new functionality to encourage further learning, collaboration and innovation.



### Blocks for Transport

Recognizing that the transportation time from the Djibouti port to WFP warehouses in Ethiopia could be significantly improved, Blocks for Transport aims to create a **decentralized, collaborative supply chain platform** that allows for the authorization, sharing, and distribution of humanitarian aid in East Africa for WFP and its partners. The **blockchain-powered platform** for the humanitarian supply chain will provide real-time insights that mitigate issues regarding visibility, compliance and fleet management.

### Digital Work for the Unbanked

Seeing the need to address the problems faced by the unbanked, the Frontiers team looked for innovative solutions. The problem statement arose from WFP's very own **EMPACT** project: how to send international payments to beneficiaries in Kenya who are unable to open bank accounts and access online payment platforms? To find the solution, the team worked with 40 Kenyan university students and are now exploring pilots in 2021 with a number of NGOs and organizations.

### Self Registration

The COVID-19 pandemic accelerated the work of **digitizing beneficiary interactions** and exploring new opportunities to provide them with greater agency and control over their data via digital remote-registration. The Frontiers team supported WFP's SCOPE division in designing an initial service structure to be piloted in Lebanon to support the crisis response.



## HOW MIGHT WE APPLY ARTIFICIAL INTELLIGENCE (AI), REMOTE SENSING AND EARTH OBSERVATION TECHNOLOGIES IN THE FIELD?

### Informal Settlement Mapping

The **Informal Settlement Mapping** tool, developed in collaboration with the **Oxford Rhodes AI Lab**, uses **AI to analyze satellite images** to identify vulnerable neighborhoods in urban areas at scale. One month after the prototype was developed, the WFP Tanzania Country Office used it to locate informal settlements in the Namanga area of Dar es Salaam. The tool is currently being improved and expanded to map all cities in sub-Saharan Africa.

### Omdena Challenge

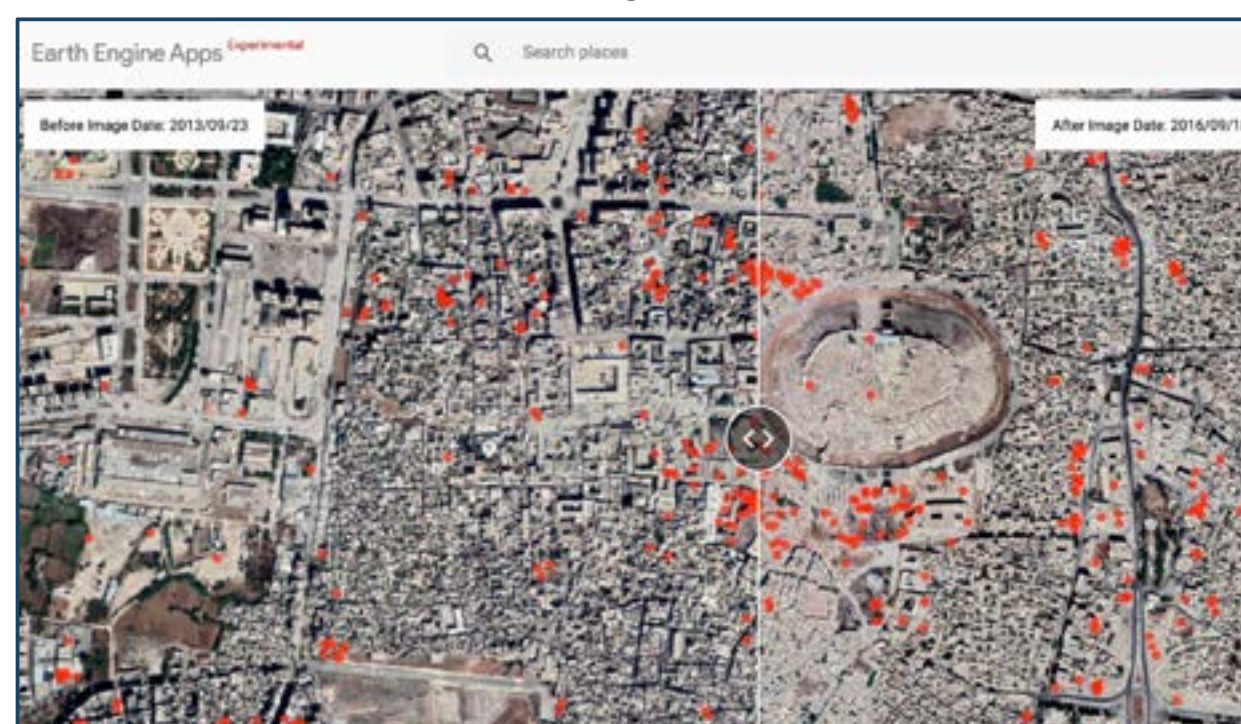
In collaboration with **Omdena**, the Frontiers team explored the application of AI and data science to build a **disaster relief planning tool** that helps WFP design the relief package required to support cyclone-stricken areas. The tool helps WFP pre-position and ship aid to affected areas as soon as a disaster strikes instead of waiting for the ground assessment. The tool was built by 40 data scientists based on the problem statement provided by WFP using open data sources on the Omdena platform.

### SKAI

A lack of on-the-ground information at the start of a humanitarian crisis is a major obstacle to a quick, effective response. In collaboration with **Google AI**, SKAI uses AI to analyze satellite images to automatically assess damage post disasters. It drastically speeds up the process of extracting insights from the ground, and enables speedy and accurate emergency response. SKAI was **utilized by WFP to conduct a damage assessment of the August 2020 Beirut explosion, Ethiopia Tigray Conflict, and Fiji Cyclone Ana**. SKAI is also now being integrated into WFP's GIS toolkits.

### Voice-to-Text AI Phone Survey Tool

COVID-19 disrupted the traditional way of collecting programmatic dietary data in-person, directly from beneficiaries based in remote areas. Without this primary data, it became challenging for WFP to assist the Government of Ethiopia in co-developing effective and fact-based, nutrition-sensitive social protection programmes. This year, the Frontiers team began supporting **WFP Ethiopia** in developing an **open-sourced AI-powered voice-based dietary survey tool** that could be more cost efficient and provide a higher quality of responses from both quantitative and qualitative data from vulnerable populations that speak languages underrepresented in existing commercial AI-tools.

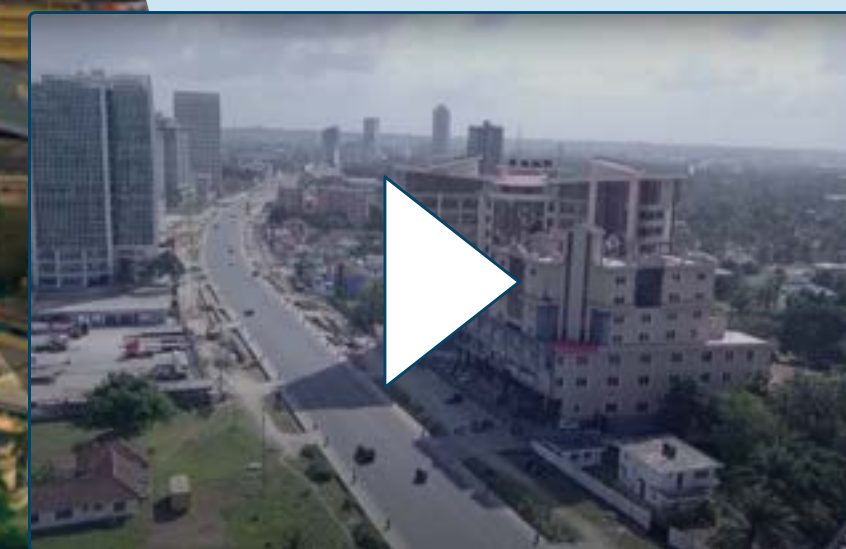




CAN WE APPLY THE “MOONSHOT INNOVATION” APPROACH TO ADDRESS CHALLENGES IN URBAN FOOD SECURITY?

# WFP-X Moonshot Launchpad

Between 2015 and 2030 the world will add 1.1 billion new city dwellers, putting urban food systems under immense pressure. In search of bold solutions that have the potential to solve food system challenges in megacities by 2030, the Frontiers team launched [WFP-X](#), with the aim of creating 100 innovative ideas in 100 days. The first cohort of the program focused on Dar es Salaam, Tanzania. A talented group of local innovators, guided by the Frontiers team, embarked on an intensive **nine-month creation journey**, starting from mapping the food system of Dar es Salaam, and including key stages such as identifying problem areas, ideating solutions, and prototyping. The cohort landed on **six promising ideas to be further funded, developed, and implemented in 2021.**

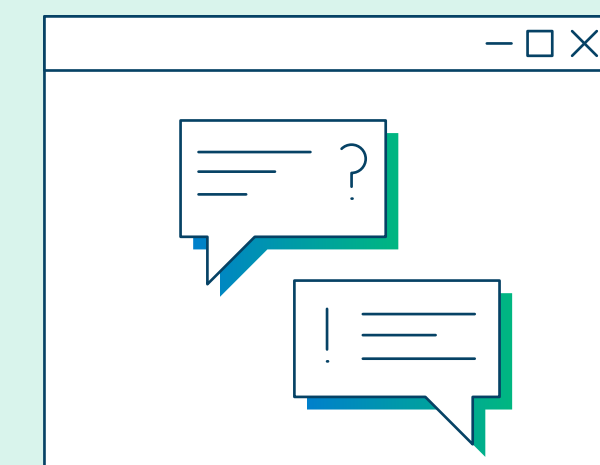
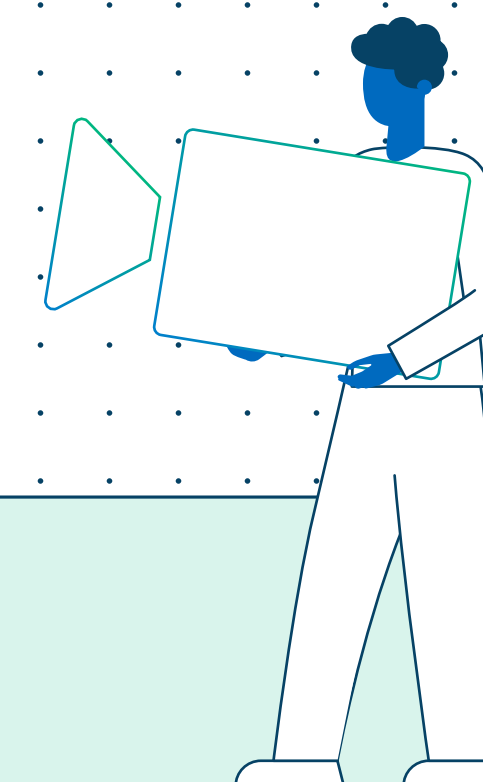
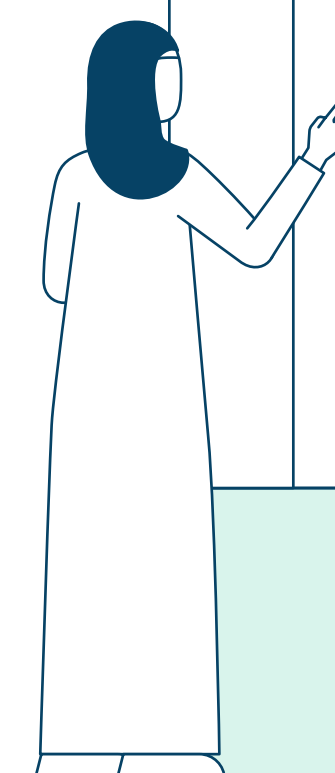
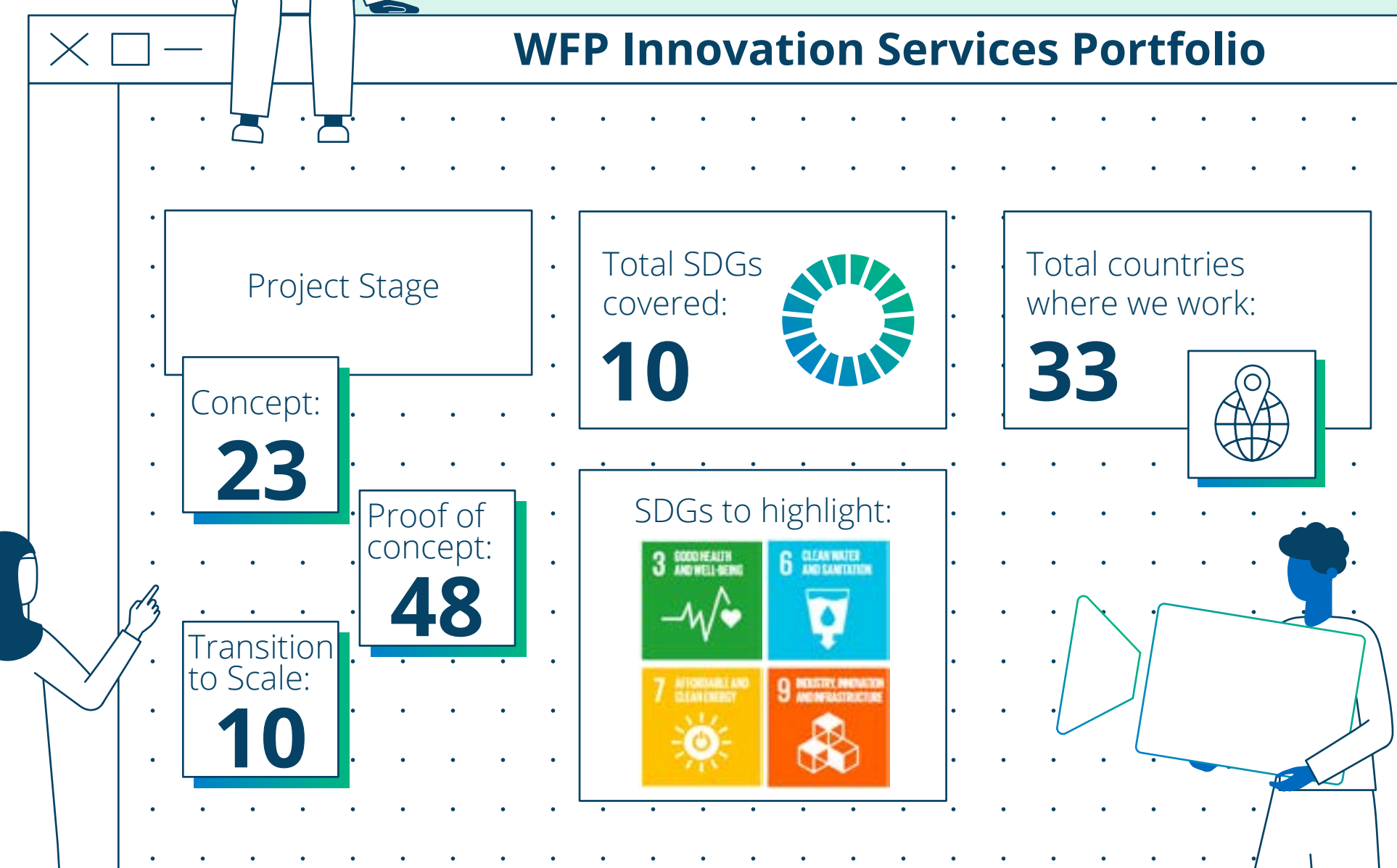
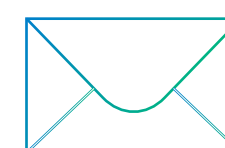
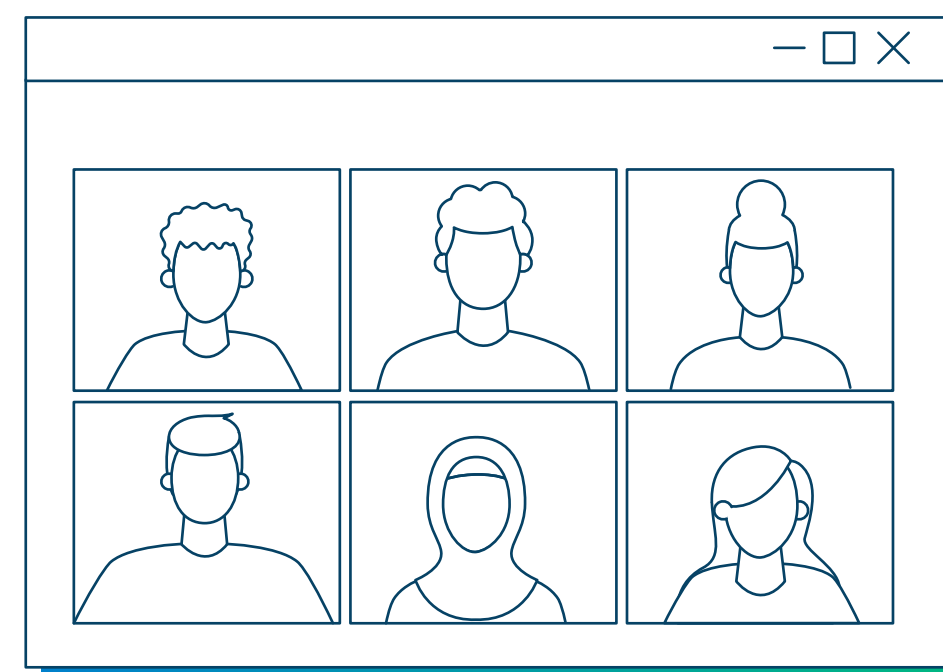




# Providing a platform for innovation services

WFP has long provided services to the wider humanitarian community, supporting partners with logistics, engineering, digital identity management, cash-based transfers and emergency telecommunications. In 2019, the WFP Innovation Accelerator built on that history to provide **innovation services to external partners** for the first time, driving progress towards the Sustainable Development Goals (SDGs). The team offers a platform of innovation services to accelerate impact-driven

ventures around the world and **strengthen the innovation ecosystem** within the United Nations, NGOs, foundations and private sector organizations. The Innovation Services team designs and delivers acceleration programmes, innovation journeys and ecosystem building activities. In 2020, the team coached **81 teams** and engaged over **500 audience members** during their highly successful **virtual pitch events**.





## CUSTOM ACCELERATION PROGRAMMES

The team works with partners to address complex challenges by immersing **early stage and transition to scale projects** in customized **six to twelve** innovation journeys. Their programmes help organizations tackle complex problems using new mindsets and skills, while providing sprint support to **design, test, and scale innovations**. By providing access and exposure to a mentor network, potential partners and funders, as well as the wider humanitarian community, teams are able to receive long-term guidance and support. For example, in 2020 the team delivered two custom acceleration programs for the **Bill & Melinda Gates Foundation Health Campaign Effectiveness Challenge** which included an innovation bootcamp, pitch event, as well as sprint support.

## INNOVATION EXPERIENCES

The team designs and facilitates innovation experiences to develop or **advance solutions to specific challenges**. Innovation teams practice new ways of working using open innovation, human-centred design and entrepreneurial frameworks. They also convene stakeholders in co-creation sessions to help organizations make sense of emerging trends and design new initiatives. An innovation experience can also be part of a custom acceleration programme. Innovation experiences range from **one-hour, to week-long experiences**, examples are a custom innovation bootcamp that will

be delivered to **MIT Solve's Maternal and Newborn Health Challenge**, or the strategy labs delivered to **the Bill & Melinda Gates Foundation Transition to Scale** teams.

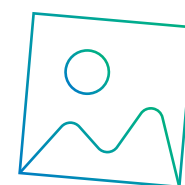
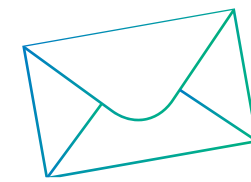
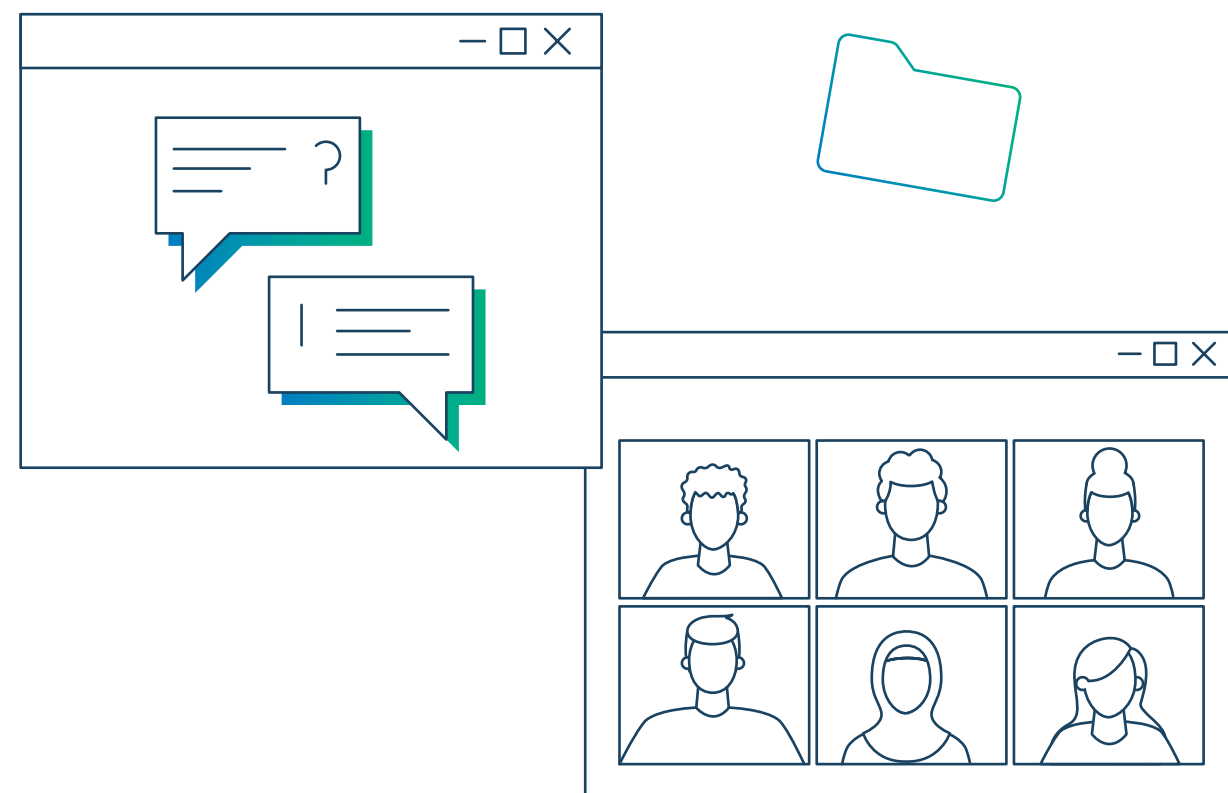
## LEARNING EXPERIENCES

The team offers capacity building services to internal and external partners to help embed innovation into the core of their work. With new challenges brought on by the COVID-19 pandemic, the team designed and implemented new ways of working and collaborating online. They now offer **Virtual Facilitation Trainings** to train other organizations in the latest virtual facilitation tools and skills that will allow them to continue enabling innovation in an interactive and engaging way. In 2020, the team upskilled **WFP** and **UNDSS** colleagues on virtual facilitation techniques, and provided human-centred design basic experiential training to the **WFP Innovation Champions Community**.





# How do we work with our partners?



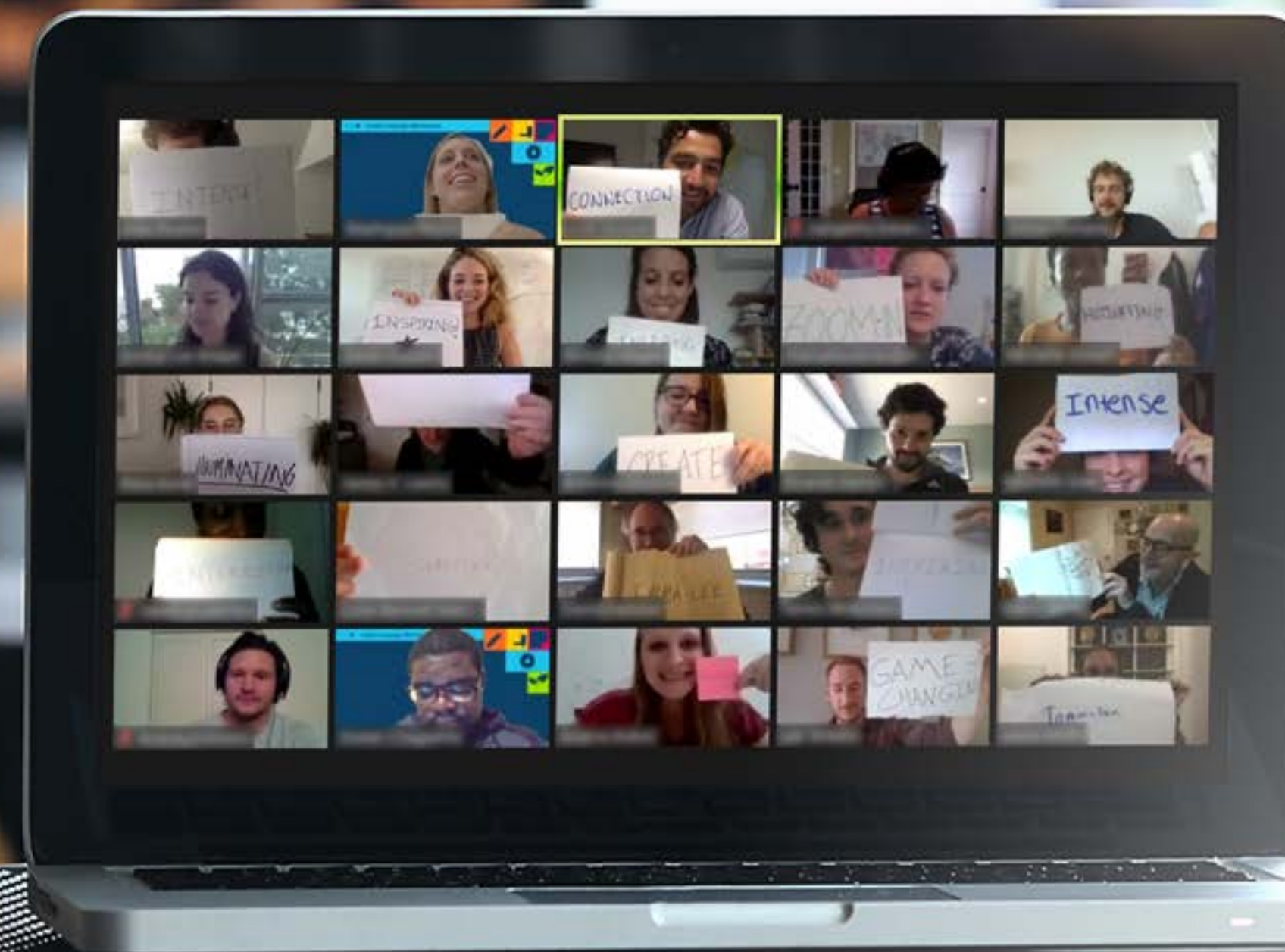
## WFP x UNFPA

Over the past two years, the WFP Innovation Accelerator collaborated with **UNFPA's Innovation Fund** to support 17 teams in designing, prototyping and testing bold solutions to help accelerate access to sexual and reproductive health and rights, and to end preventable maternal deaths. In 2020, the team supported nine Country Offices' teams to develop digital and non-digital solutions to help end preventable maternal deaths. Teams completed user research, built and tested prototypes and planned for financial sustainability with the help of their WFP coaches.

“

Working closely with the WFP Innovation Accelerator for the last 2 years has been an incredible experience and innovation journey for UNFPA and our country teams involved in our sexual and reproductive health sprint challenges. The support and exchange with WFP and experts in design thinking, frontier tech, storytelling, prototyping, and business development have made a huge difference in the way we think and approach innovation. By bringing together the best and brightest innovators between our entities, UNFPA teams were able to think like start-ups and take their innovations to the next level.”

**SYLVIA WONG**, Innovation Coordinator, UNFPA





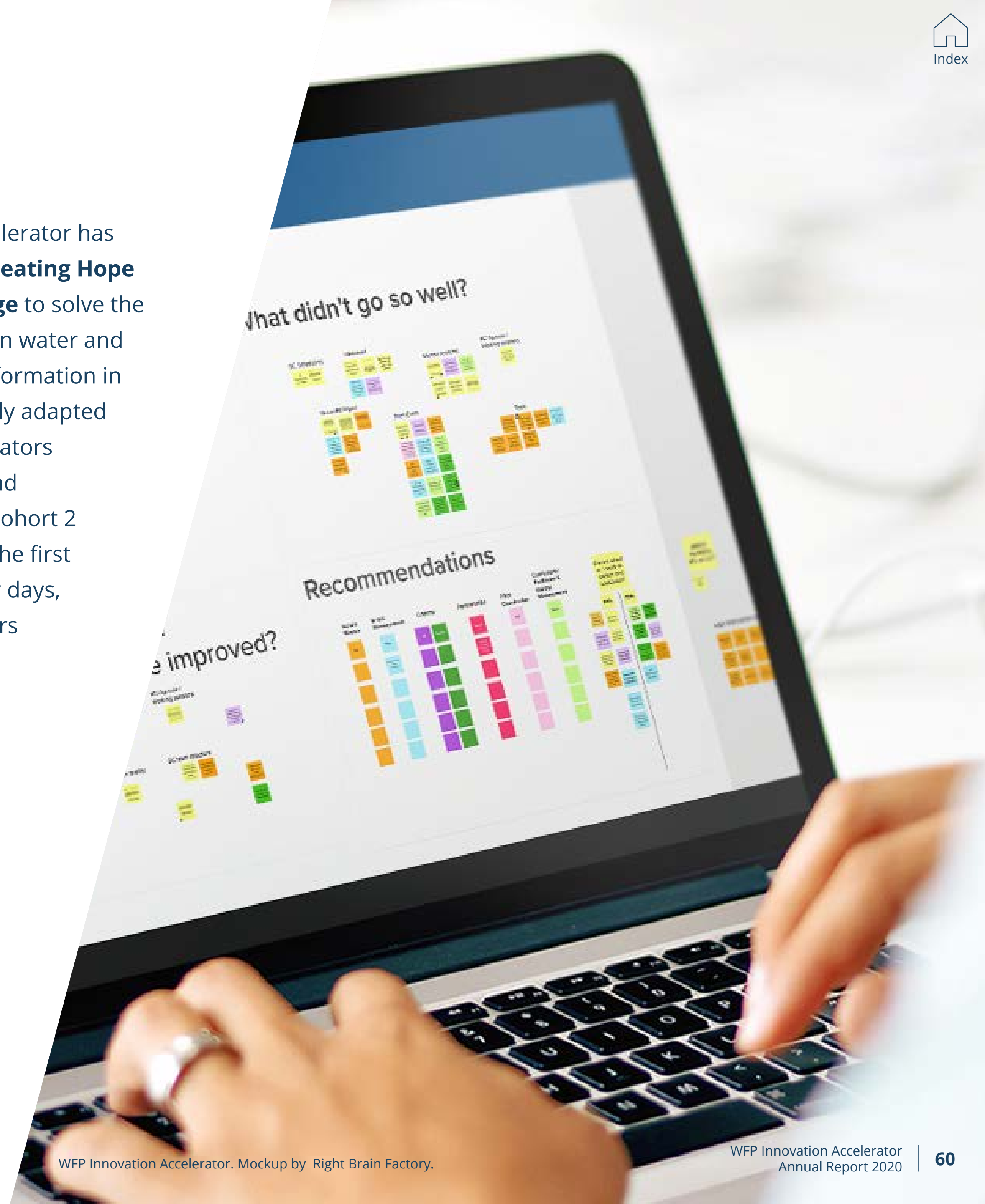
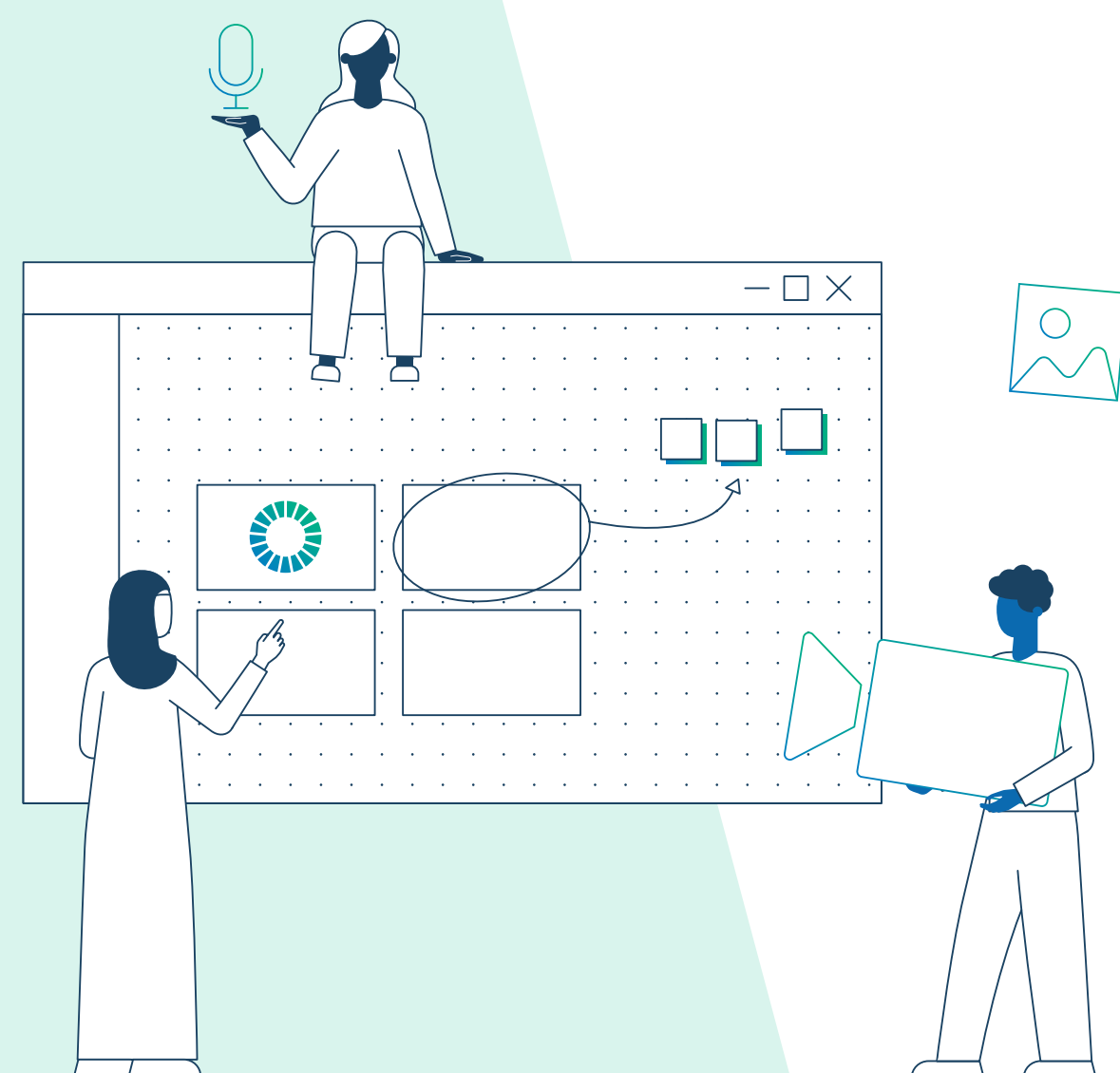
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“It was an easy decision to continue collaborating with the WFP Innovation Accelerator another year to support a second group of innovators addressing humanitarian challenges. The team helps us give tailored advice to the 55 teams that we support through the Humanitarian Grand Challenge program. In the midst of the COVID-19 pandemic, the WFP team were able to easily pivot towards a fully online innovator support experience.”

**CHRIS HOUSTON,**  
Director of Humanitarian Innovation,  
Grand Challenges Canada

## WFP x CREATING HOPE IN CONFLICT: A HUMANITARIAN GRAND CHALLENGE

Since December 2019, the WFP Innovation Accelerator has supported over 55 Innovators as part of the **Creating Hope in Conflict: A Humanitarian Grand Challenge** to solve the most pressing humanitarian challenges within water and sanitation, energy, health, and life-saving information in conflict zones. In 2020, the team successfully adapted their support programs for Cohort 1 innovators to a virtual experience, while designing and launching a second virtual program for Cohort 2 innovators. Building on learnings from the first cohort, they now offer monthly mentor days, where mentors connect with innovators regularly to support their projects.





“

“While we initially selected the WFP Accelerator because they stood out amongst our partners in many aspects, we have maintained this relationship because the team continues to excel by consistently going above and beyond. The events of this year have further proven an ability to seamlessly adapt, creatively pivot, and exceed goal expectations. After three successful in-person bootcamps we can now add to that list an incredible first virtual bootcamp experience with another close on its heels. We are beyond grateful to work with a partner who embraces looking at the bigger picture and assessing how we can be more innovative, bold, and impactful.”

**JEN JENKINS,**  
Senior Program Assistant,  
Bill & Melinda Gates  
Foundation



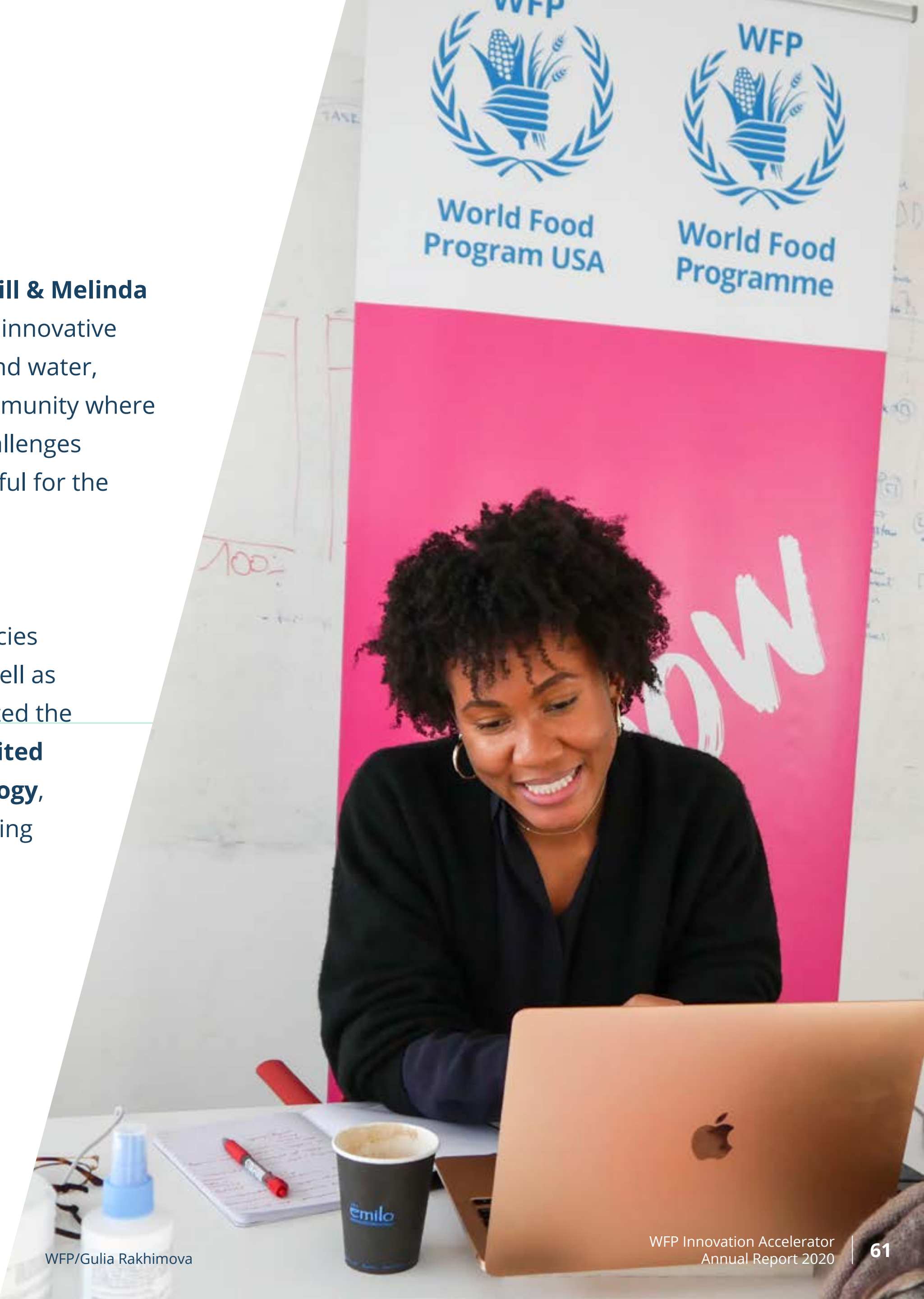
### WFP x BILL & MELINDA GATES FOUNDATION

Since June 2019, the WFP Innovation Accelerator has collaborated with the **Bill & Melinda Gates Foundation** to deliver innovation journeys for 38 teams working on innovative solutions on topics such as vaccine demand, effective health campaigns, and water, sanitation and hygiene. In 2020, the team built a strong global health community where all teams can come together to connect, share learnings and address challenges together. The value of having an ecosystem available was especially useful for the two new cohorts that joined in 2020.

### WFP x UNITED NATIONS PARTNER AGENCIES

The Accelerator collaborates closely with other United Nations agencies and offers support in capacity building, innovation bootcamps as well as knowledge sharing. For example, in March 2020, the team supported the **World Health Organization**, among other actors such as the **United Nations Office of Information and Communications Technology**, **UNAIDS** and **UNICEF**, in launching the Reboot Health & Well-being Challenge.

The challenge encouraged young people from around the world to develop solutions to one of the most urgent health challenges for the next decade: Keeping young people safe.





# Quotes from our partners

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“The transformative power of innovation — piloting, testing and scaling new ideas — can’t be done alone or in isolation. Innovation requires the development of partnerships, and the establishment of new networks to finance and scale creative ideas so the impact can be realized — and the sharing of information is key in this. Among other things, USAID has supported the Innovation Accelerator in setting up a robust Knowledge Management system to share best practices and lessons learned with the wider community. USAID looks forward to continuing the support to the Innovation Accelerator.”

**DOUG STROPES,**  
Deputy Division Director,  
USAID Bureau for  
Humanitarian Assistance



“

“We applaud the fact that WFP is continuously focused on improvement through innovation. One of the Netherlands’ main focus areas is assuring that successful innovations reach scale, and that requires learning from past innovation trajectories, collaborating across organizations and sectors, and increasing knowledge and sharing learnings. Therefore, we are proud to partner with WFP Innovation Accelerator in their Scale-up Enablement Programme, and are impressed by the reach and impact so far.”

**FIONA BURGER,**  
Senior Policy Officer for Humanitarian Affairs,  
Ministry of Foreign Affairs, Government  
of the Netherlands

“

“Luxembourg highly values WFP’s efforts to disrupt hunger and to advance the effectiveness of humanitarian action through innovative and radical thinking. The Innovation Accelerator is a perfect showcase of what WFP has been able to achieve in this regard. As a proud supporter of its work since 2018, Luxembourg remains committed to advancing innovation within the humanitarian sector while making sure that affected people remain at the center of all interventions.”

**FLORENCE ENSCH,**  
Deputy Director, Humanitarian Action  
Luxembourg Ministry of Foreign and European Affairs



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“We appreciate the unique position of the Innovation Accelerator in bringing together different actors within and beyond the United Nations system to share innovation know-how and best practices.”

**DR. ELKE LÖBEL,**  
Commissioner for Refugee Policy and Director for  
Displacement and Migration, Crisis Prevention  
and Management, BMZ, Government of Germany



04

# Conclusion



# Lessons learned from 2020: The year that changed everything

Failures, setbacks and change are an inherent part of the innovation process. Lessons learned from responding to these challenges give ground for growth, foster novel ways of thinking and spur further innovation.

Design. **Fail.** Repeat. Scale

## BECOMING THE VIRTUAL ACCELERATOR

In the wake of the COVID-19 pandemic, we shifted our entire team into “remote first” as an operating principle. In the pivot to the virtual world, we learned several things:

- **The digital space cannot replicate the in-person experience, but it opens up a multitude of opportunities.** To make virtual innovation bootcamps as effective and engaging as the in-person experience, we needed to think beyond merely transferring the existing content online. In doing so, we:
  - **Took advantage of travel limitations** by inviting a greater diversity and breadth of speakers and mentors to join us virtually, including high-level keynote speakers from within WFP and externally.
  - **Shortened virtual bootcamp days** to prevent screen fatigue for participants — understanding that in-person, there would have been multiple moments for rest and casual connection.
  - **Leveraged familiar tools** such as [Zoom or Microsoft Teams](#) instead of introducing new products, which may come with steep learning curves for participants.
  - **Created casual “meet and greet” virtual moments** to facilitate interaction and ensure the human element still existed.
  - **Added additional onboarding days** before the five-day virtual bootcamp to brief participants about the new digital format with details on agenda, technology and backup options.
- **Piloted virtual mentoring days**, where mentors offered “office hours” to connect with project teams and help them refine their ideas. We matched teams with their mentors through a webpage that catalogued mentors’ skills and availability.
- **The most useful tools are not always the newest or the fanciest but the ones that get the job done.**
  - **Invested early on in the right tools:** Mural for a digital whiteboard, to help teams map out their ideas; Slack integrations to help facilitate connection and enable “pulse checks” among our internal team; additional monitors for team members to use in their home offices.
- **Knowledge management improves organizational learning, boosts efficiency and fosters innovation. By investing in knowledge management we:**
  - **Increased and diversified our reach** through the creation of short, concise, and relevant content to share on our social media platforms — leading to rapid organic growth in our LinkedIn channel (10,000 followers in less than nine months) because of their value-add.
  - **Shared our expertise with other United Nations agencies and our humanitarian and development partners**, serving as a resource on how to run acceleration programmes, improve project identification, and systematize sourcing.
- **Diversified our mentor pool and expanded Sprint project support**, recognizing that some early stage teams have product management needs as well.



## Six elements for social impact innovation



Whether through a new technology, creative business model, or novel application of an existing solution, innovators can set off on the road towards social impact. Having worked with **321 innovation teams since 2015**, we have collated key takeaways for innovators beginning their social impact journeys:

- **Aim at social impact from day one:** Designing solutions to be inclusive should not be an afterthought. Embedding innovative solutions in humanitarian operations means adapting them to the realities of the countries where WFP operates. By applying techniques such as [human-centred design](#) and lean start-up, teams can work together with the end-users of their solution, supporting real community needs instead of assumed ones.
- **Build a strong and cohesive core team:** A founding team is the backbone of any emerging startup. Clear leadership is vital, especially in [remote teams](#), to guide team members towards a shared goal, facilitate cohesion and build trust. When everybody clearly understands the project's goals and their roles, the team can work more effectively.
- **Solicit honest feedback early on:** Innovators come from diverse backgrounds; many new ventures need guidance on topics ranging from product development to logistics. Reaching out to experienced mentors who will not hesitate to provide direct feedback to social impact ventures can be crucial to a project's success.
- **Consider the most vulnerable:** The humanitarian principle of “do no harm” is a cornerstone of social impact innovation. Innovators must find safe ways to test their minimum viable product. For example, solutions that involve personal data collection should also ensure the privacy and security of information.
- **Develop a robust financial plan:** Financial sustainability is a prerequisite for continued social impact. Innovators should have a financial plan with a sustainable funding model.
- **Integrate a pathway to scale:** Scaling up solutions to tackle real-world problems is often the difference between a good idea and a game-changing one. Building a product for 100 people might be good for a small business, but for global impact, a project requires a scalable business model.



## Lessons from the Accelerator projects

Recognizing the importance of knowledge management, **H2Grow** launched a digital platform at the end of 2020 to act as a global knowledge hub on hydroponics. The team learned how powerful of a catalyst a global community of practitioners and experts can be when given a platform to connect. Shared learnings across countries translated into critical improvements and decreased overall costs, resulting in access to more fresh, nutritious food for communities. In the development of this platform, the team also utilized best practices such as adapting digital solutions to the tools available to their audience — leading to a WhatsApp integration so farmers could connect more easily and download content offline to account for slow or limited-connectivity.

The **EMPACT** curriculum, which trains young people in tech and soft skills, was designed for in-person settings that were no longer feasible in the pandemic. Faced with physical distancing rules that hindered the implementation of new cohorts, the EMPACT team reacted by developing a fully online curriculum. The human-centred design approach was critical for the success of the pivot. The team iterated and adopted the new online format according to learners' and trainers' needs. Participants who didn't have computers and internet access, received all the necessary equipment; implementing partners created ad-hoc online content and trained their employees on how to use e-learning and teaching software.





One of the questions we are most often asked is: **what are the enabling factors for scaling?** Faced with the COVID-19 pandemic, we have many lessons learned on best practices for helping projects to reach scale.

- Customized support, including for project and product management, is critical for projects to continue on the path to scale. However, not everything should be customized. **A balance between tailored support and systemization** (i.e.: institutionalization of internal best practices and investment in knowledge management) is important for projects to succeed in their scaling goals.
- Full stakeholder buy-in is critical — **signed Scale-up Enablement Agreements** which outline timelines, milestones, and roles and responsibilities help align entities on strategy and a path to scale. These agreements occur after a successful **Scale-up Enablement Assessment Workshop**, where stakeholders convene for a moment of deep analysis and reflection about the project's trajectory and workplan.
- While the Munich office is the hub of the Accelerator's work, the heart is in the field — where humanitarian needs are greatest, and the most promising innovative solutions can be applied, tested and scaled. **That's why strong field and in-country relationships are essential to successful implementation and long-term sustainability.** In 2020, we worked even more closely with WFP Country Offices to drive forward implementation of projects and source innovative ideas of field staff through our Innovation Challenges; and tapped into the expertise of WFP colleagues worldwide through our WFP Innovation Champions Community.
- Sound **business models** are key for longer-term product strategies and roadmaps. Co-created roadmaps — such as the ones we developed to help guide our engagement with the Bill & Melinda Gates Foundation to support startups Sanku and BioAnalyt — emphasized value and impact delivery, ensuring the project's financial future with each iteration.





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## INNOVATION ACCELERATOR

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