WFP
World Food Programme
wfp.org

INNOVATION
ACCELERATOR

2017: A YEAR IN REVIEW

THE WFP INNOVATION ACCELERATOR

WORLD FOOD PROGRAMME

SECTION 01

AT A GLANCE

WFP's Innovation Accelerator identifies, nurtures and scales bold solutions to end hunger globally. We support WFP entrepreneurs, external start-ups and companies from our base in Munich, Germany, through funding, hands-on entrepreneurial support and a global presence, as well as access to expert networks.

WFP believes that innovation is key to achieving a world without hunger by 2030. By applying innovation best practice such as lean startup and human-centered design, the Accelerator helps entrepreneurs find out what works and what doesn't in addressing hunger. It is a place where we can be bold, and fail as well as succeed.

Through the '2016: A Year in Review' visualisation, we aim to highlight just a flavour of the big ideas and initiatives that we believe can make Zero Hunger a reality. For more information on all our activities, please visit the WFP Innovation **website**.

368K

People reached

23

Innovation projects supported

30

Countries with ongoing Accelerator-supported innovations

139

People involved in innovation projects

1K+

Ideas submitted to the Innovation Accelerator

150

Media mentions globally

759

Participants at workshops and Bootcamps

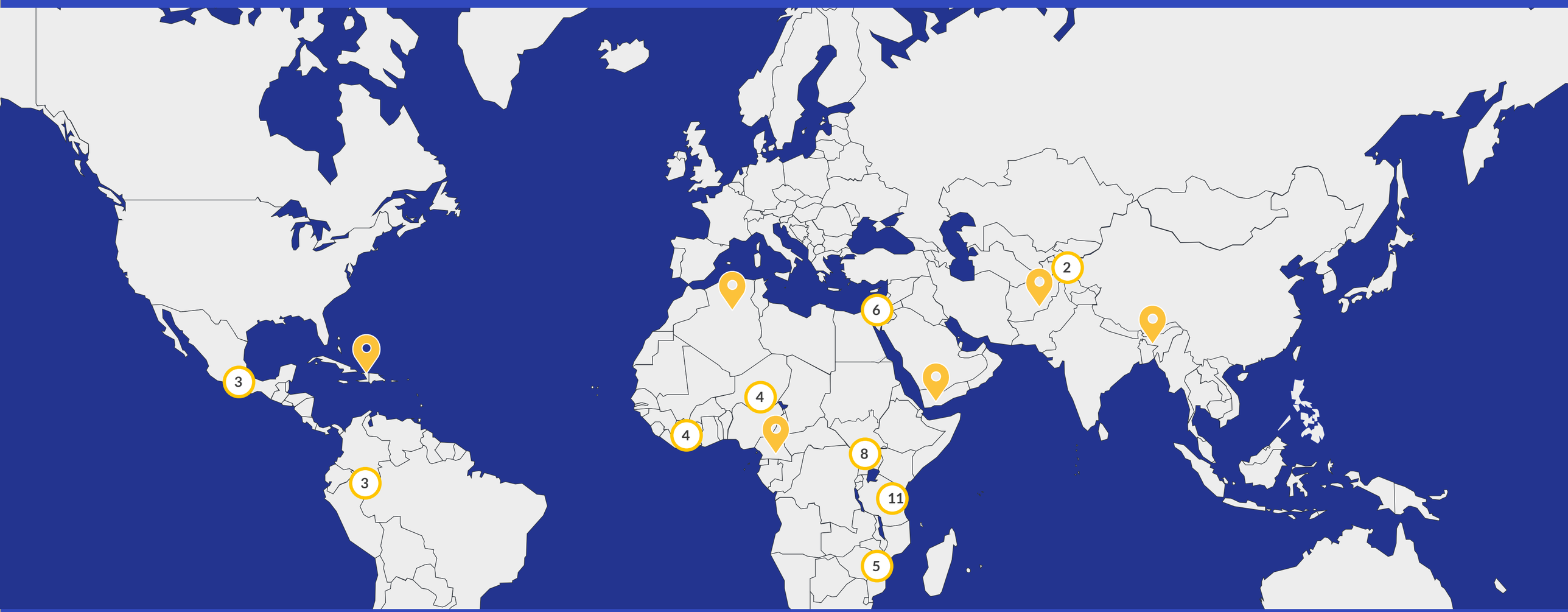
4

Innovation Bootcamps in Munich, Germany

WHERE WE WORK

23 **PROJECTS** across **30** **COUNTRIES**

Innovation projects receive funding, strategic guidance and hands-on support from the Innovation Accelerator.



The designations employed and the presentation of material in the map(s) do not imply the expression of any opinion whatsoever of WFP concerning the legal or constitutional status of any country, territory or sea area, or concerning the delimitation of frontiers.

WHERE WE WORK

23 PROJECTS across **30 COUNTRIES**

Innovation projects receive funding, strategic guidance and hands-on support from the Innovation Accelerator.

Building Blocks| Pakistan, Jordan

Farm to Market Alliance | Tanzania, Kenya, Zambia, Rwanda

Hydro-Sahrawi | Algeria

SCOPE CODA | South Sudan, Uganda, El Salvador

ShareTheMeal | Haiti, Jordan, Yemen, Nigeria, South Sudan, Lebanon, Cameroon, Bangladesh

Zero Post-Harvest Losses | Uganda, Tanzania, Burundi, Cote d'Ivoire, Rwanda, Sudan, Mali, Mozambique, Malawi, Ghana, Kenya, Zambia

Tech For Food | Iraq, Lebanon

AgriUp | Guatemala

AIMS | South Sudan, Sudan, Niger Tajikistan, Afghanistan

Cargo on Demand | Tanzania

ColdHubs | Nigeria

Farm from a Box | Tanzania

Food Computers | Jordan

Dalili | Lebanon

Groasis | Colombia

Maano – Virtual Farmers Market | Zambia

Nutrifami | Colombia

Rice Fortification | Mali

RUDA | Colombia

Self-Driving Trucks | Uganda

Storytellers | Chad, Guatemala

Sustainable School Meals | Malawi

Transformers | Kenya

SECTION 02

INNOVATION PROJECTS

WFP believes that the way forward in the fight against hunger is about identifying and testing solutions in a fast and agile way, and scaling up those that work.

The WFP Innovation Accelerator portfolio is composed of high-potential solutions that tackle some of the biggest challenges in both humanitarian and development aid. From high-tech, futuristic technologies that are transforming the global economy like blockchain, to revolutionising age-old solutions like hydroponics, the Innovation Accelerator is quickly testing the best new ideas for high-impact, sustainable food assistance.

Through the Accelerator's Sprint Programme, teams receive up to 100,000 US Dollars (USD) in investment, technological and design support, and space to reach proof of concept and develop prototypes ready for implementation. Over the course of an intensive three- to six- month sprint, innovators receive unparalleled access to WFP's global network of partners, resources and a best-in-class support structure.

Learn about some of the projects that the Accelerator supported and their accomplishments in 2017. You can see the full list of Accelerator-supported projects by visiting our **website**.

Building Blocks

WFP is testing blockchain technology to be able to deliver assistance more effectively – and potentially save millions of dollars. In early 2017, WFP ran a "proof of concept" to confirm the ability of blockchain to authenticate, record, and reconcile cash transactions in Pakistan. Shortly after, WFP implemented the innovation in Azraq refugee camp, Jordan, allowing 10,500 Syrian refugees to redeem their cash-based transfers through a blockchain-based system. By implementing the technology in that specific context, the Accelerator reduced banking fees by 98%.

In 2018, WFP aims to scale up the initiative to serve all 500,000 Syrians served by WFP in Jordan, expand to two new Country Offices and launch a UN interagency pilot.

DISCOVER MORE

Tech for food

WFP is using innovative approaches to train people whose access to food is unreliable. To empower and enable them to provide for their families, the initiative connects refugees and host communities to digital training or work opportunities with companies in Europe and the USA.

In 2017, the initiative touched the lives of more than 3,000 people by directly training 750 students — 60% of whom were female. Plans for 2018 include scaling up to additional countries such as Turkey, and the creation of a financing mechanism to ensure the self-sustainability of the initiative.

DISCOVER MORE

Hydroponics

WFP is testing hydroponics—a water-efficient and soilless cultivation technique—to understand what it takes to grow food in some of the world's toughest environments. Three different pilots are underway in Algeria, Jordan and Peru as a means of ensuring greater food security for hungry families living in harsh and cramped conditions.

In 2017, the team tested various hydroponics solutions, moving from an initial high-tech solar-powered container to the design and implementation of small, DIY household units built with locally procured materials and at 10% of the cost. The installation of 50 units resulted in the production of 2,000 kg of fresh fodder for goats, which helped increase the production of milk by 250% and the quality and quantity of meat.

DISCOVER MORE

Scope Coda

SCOPE CODA is a cutting-edge monitoring tool that optimises social protection programmes, such as nutritional support for mothers and young children, by capturing and visualising key information and outcomes in real-time. The purpose is to track improvements in the health of malnourished women and their children, and to create a consolidated database.

Following a successful pilot project in El Salvador in 2016, under the name of MAPS, the project evolved into a corporate scale-up innovation in 2017. The innovation integrated within SCOPE, WFP's beneficiary management system, with the plan to scale as a corporate tool in 10 countries in 2018 and 2019. In 2017, the first scoping missions to Tanzania and Uganda validated the solution and allowed to collect key data to inform the 2018 implementation in South Sudan and Uganda.

DISCOVER MORE

Virtual Farmers Market

The Virtual Farmers Market, also known as Maano, is an app-based information platform where farmers' surplus and buyers' demand for grains are advertised and traded virtually. The project targets smallholder farmers in rural and remote areas. The Maano app was launched on Google Playstore in April 2017, with the first transaction taking place in May. By the end of 2017, 150 metric tonnes (mt) had been traded for a total value of USD 50,000.

In 2017, Maano reached 1,196 farmers and mobilized 50 local lead farmers, strengthening the livelihoods of smallholder farmers and their families. All users —both buyers and sellers— are also benefitting from the reduced transaction costs. For example, WFP reduced procurement costs by 54% when using Maano to supply 40 schools in the HGSM programme in Zambia.

DISCOVER MORE

ShareTheMeal

ShareTheMeal is WFP's award-winning app that allows smartphone users to provide children with vital nutrition with a simple tap on their phones. Free to download, the app is a pioneering way for people to join our efforts in creating a world with zero hunger. The idea is simple: with just a tap and USD 0.50, every single smartphone user can feed a child for one full day. Users can easily see where the money goes with every donation, and can monitor the progress made collectively through social giving towards a specific fundraising goal.

In 2017, an additional 340,450 users joined the ShareTheMeal community. With a total community of over 1 million users, the initiative funded almost 10 million meals, or approximately USD 5 million.

DISCOVER MORE

Farm to Market Alliance

The public-private consortium seeks to provide smallholder farmers with access to affordable finance, quality farming inputs, predictable markets, and effective post-harvest management. Through its Digital Market Place, the project helps farmer organizations and their member farmers to aggregate and sell crops, order climate smart input and post-harvest equipment against digital receipts, track farmers input loans and receive agriculture advisory services.

In total, 80 farmer organizations digitalized their business operations and conducted transactions for a value of USD 3 million through the Digital Market Place, reaching 30,000 farmers in the process.

DISCOVER MORE

Zero Post-Harvest Losses

Zero Post-Harvest Losses (PHL) increases the availability of food worldwide and improves the lives of local communities. On average, the incomes of participating farmers have tripled, families have gained increased access to food through lean seasons and improved their health and nutrition.

In 2017, the Accelerator provided business modelling and management support including for the scale up from Uganda to Sudan, Burundi, Tanzania, Rwanda, Mozambique, and Cote d'Ivoire, with more than 25,000 new farmers receiving training and access to hermetic silos.

DISCOVER MORE

Self-Driving Trucks

This developmental project is exploring the use of artificial intelligence (AI) to help emergency coordinators deliver aid to communities affected by disaster. The innovation aims to harness the growth of self-driving and remote-controlled technologies to allow humanitarian access to conflict and disaster-struck areas, speed up the delivery of life-saving aid, and limit the risk to human life.

To develop a blueprint for this technology, in 2017, WFP and the German Aerospace Center (DLR) have elaborated the basic vehicle requirements and developed the first technical and operational concepts. This includes concepts of operation centres, from where specialists control the trucks, and global connectivity to prepare for a pilot.

DISCOVER MORE

Rapid UAV Data Analysis

The project uses artificial intelligence (AI) to analyse imagery collected by Unmanned Aerial Vehicles (UAVs) so that we can improve decision making in emergencies. Through faster and more accurate data analysis, Rapid UAV Data Analysis (RUDA) aims to help emergency coordinators better locate and access affected populations.

The first phase of RUDA saw the collection of raw imagery from WFP drones operating in Myanmar and Colombia. This data was then used to help build and train an AI algorithm, with technical support provided by AI experts from Google and the Fraunhofer Institute. To support with significant data annotation work, RUDA linked up with students of the Tech for Food project.

DISCOVER MORE

Groasis

The Dutch agriculture company provides simple planting boxes made from recycled paper to help vulnerable populations plant and grow productive trees in challenging conditions. Trees can be grown in the bucket in combination with vegetables, which allows the crops to grow in areas ravaged by heat, draught and erosion – with a chance of survival greater than 90% and using 90% less water.

Following their participation in the April 2017 Innovation Bootcamp, the Groasis team started a pilot with the WFP Colombia Country Office in Almaguer municipality, where they identified target communities and selected suitable plant species to introduce and test.

DISCOVER MORE

SECTION 03

MEET THE INNOVATORS

Habeeb Mustafa

WFP

Project:
CARGO ON DEMAND
LOCATION: TANZANIA

Read more

"The Innovation Accelerator expanded our perception, focus and vision to truly build a robust and sustainable business model that keeps delivering in the most challenging circumstances.

Ahnna Gudmunds

WFP PROJECT COORDINATOR

Project:
VIRTUAL FARMERS MARKET
LOCATION: ZAMBIA

Read more

"The Bootcamps truly accelerate innovation. Completely removed from the every-day work, it's a rare opportunity to focus 100% on your project and to get support from the great minds lined up to help you.

Mireille Makhlouf

WFP RETAIL MANAGER

Project:
DALILI
LOCATION: LEBANON

Read more

"Being part of the Innovation Bootcamp helped us gain deeper insights about our users' needs and create a simple design for our mobile app to effectively change lives of the people in need and reach a hunger-free world.

SECTION 04

PARTNERSHIPS

WFP cannot achieve its goal of Zero Hunger alone. That is why the WFP Innovation Accelerator is pursuing and nurturing strong and effective partnerships with like-minded, forward thinkers from the private sector, government, academia, our inter-agency links, international organisations and NGOs. Here are just a few of our partners, whose commitment and dedication to vulnerable communities and innovation will help us achieve a world without hunger.

Singularity University

WFP joined forces with Singularity University (SU) to launch our first external Global Impact Challenge – a call for radical innovations in the fight to end hunger by 2030.

acatech
NATIONAL ACADEMY OF SCIENCE AND ENGINEERING

With acatech and our WFP engineers, we are exploring new and sustainable energy sources that will support the people who we serve and WFP operations

DLR German Aerospace Center

DLR is opening up the world of aeronautics and space technology to WFP and supporting the self-driving and remote-controlled trucks project to reach populations that are otherwise inaccessible

Fraunhofer

Experts from Fraunhofer Institute are helping to bring hydroponics to scale, and offering their technical support in AI to the Rapid UAV Data Analysis (RUDA) project.

WE ARE GRATEFUL FOR THE TRUST AND GENEROUS SUPPORT FROM:

Federal Ministry for Economic Cooperation and Development

The German Federal Ministry of Economic Cooperation and Development

Federal Foreign Office

The German Federal Foreign Office

Bavarian State Ministry of Food, Agriculture and Forestry

The Bavarian State Ministry for Food, Agriculture and Forestry

SECTION 05

IN THE NEWS

Our innovations have been featured in some of the world's biggest publications.

THE HUFFINGTON POST

WIRED

Frankfurter Allgemeine

UPWORTHY

BBC

FAST COMPANY

SECTION 06

HOW TO GET INVOLVED

Submit your innovation

Do you have an idea with the potential to solve hunger? Apply to the WFP Innovation Accelerator and receive up to US$ 100,000 in funding, mentorship from industry experts and access to WFP's field operations worldwide.

APPLY NOW

Want to know more about our work?
Want to help fund innovation at WFP?

VISIT OUR WEBSITE

You can also reach us on:

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global.innovation@wfp.org

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