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The Power of Prizes to Spur Agricultural Innovation

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# Agenda

**Challenge Prizes** 

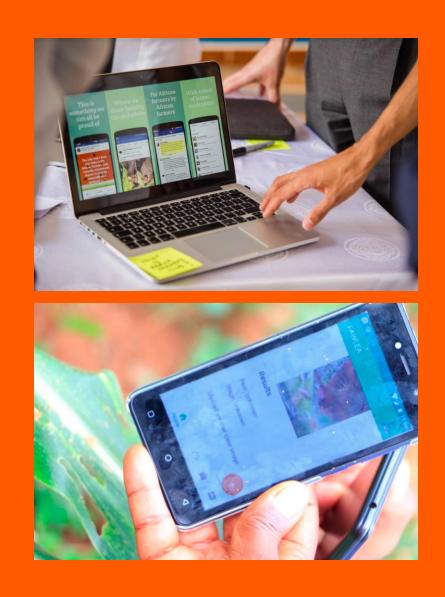
The Data Driven Farming Prize

The Fall Armyworm Tech Prize

**Prize Journeys** 

**Innovations and Innovators** 

Impact & Value of Prizes



# Challenge Prizes



Nesta is a global innovation foundation. We back new ideas to tackle the big challenges of our time.

We use our knowledge, networks, funding and skills - working in partnership with others, including governments, businesses and charities. We are a UK charity but work all over the world, supported by a financial endowment.



# **Nesta Challenges**



Challenge prizes offer a reward to whoever can first or most effectively meet a defined challenge.

We research, design, implement and evaluate challenges.

- We are experts in challenge driven innovation with a proven track record.
- We are focused on impact and societal benefit with no hidden agendas
- We nurture and listen to the innovator community and understand what will motivate them to do their best work
- We always partner and collaborate, and whatever we do, we only run prizes we are confident will have impact.

### When a Challenge Prize?

- Is there a clear goal?
- Is there a benefit to opening the challenge to new innovators?
- Would a prize definitely motivate innovators?
- Will a prize accelerate progress (rather than just reward past success)?
- Will solutions be commercially viable after the prize is finished?



### Why a Challenge Prize?

#### Create breakthrough innovations

Prizes incentivise new thinking and reward the best breakthrough solutions, wherever they come from, however they work

#### Help Innovators thrive

Prizes support and cultivate innovators by providing funding, expertise, profile-raising, investment and by building networks

#### Unlock systemic change

Prizes shape context by raising awareness, inform policy and shape the future of markets and technologies



# Agriculture Prizes



# DATA DRIVEN FARMING PRIZE





# **Data Driven Farming Prize**

The Data Driven Farming Prize was launched by USAID and Feed the Future in February 2017.

This prize sought to tools and approaches that source, analyze and translate data into actionable, timely and context-specific information for smallholder farmers to improve value from agricultural productivity in Nepal.

Four prizes totalling \$300,000 in prizes were made as follows:

- Two \$100,000 prizes to the most viable solutions
- Two \$50,000 prizes to the most significant potential solutions

The prize received 143 entries from 20 countries, including 83 entries from Nepal.

The prize selected 13 finalists, of which 6 were local solvers from Nepal and the others were from India, Canada, Israel, Germany, the UK and US.

# Fall Armyworm Tech Prize





# Fall Armyworm Tech Prize

The Fall Armyworm Tech Prize was launched in March 2018 with USAID and Feed the Future in partnership with Land O'Lakes and the Foundation for Food and Agricultural Research.

The prize sought digital tools and approaches that provide timely, context-specific information that enable smallholder farmers and those who support them to identify, treat, and track incidence of fall armyworm in Africa.

Five prizes totalling \$450,000 in prizes were made as follows:

- One grand prize of \$150,000 to the most viable solution
- Two runner-up awards of \$75,000 to the most promising solutions
- Three frontier prizes of \$50,000 to early stage developments that show the most potential

The prize received 228 entries from 34 countries, with 184 entries coming from Africa.

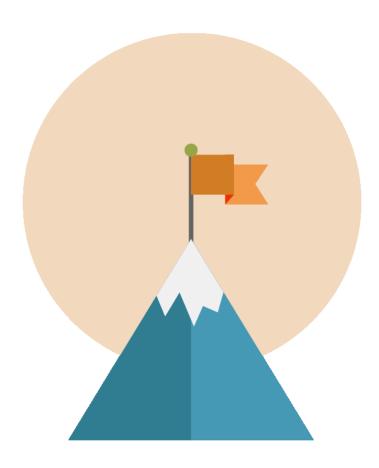
The prize had 20 finalists from all across the world, of which 13 were from Africa (Uganda, South Africa, Nigeria, Ghana and Kenya).

# Prize Journeys

#### **Prize Timeline**

- Research phase
- Design phase
- Launch call to action
  - Outreach and events
- Closing of entry period
- 1st stage assessment
- 1st judging panel
- Selection of finalists
- Co-creation event
  - Finalist support
- Testing and development phase
  - Mentoring support
- Final submission (development plan)
- Final judging panel
- Final awards announcement of prize winners

12 months total journey for both prizes





#### The Use of Incentives

Financial and non-financial incentives are critical to the success of a prize

- Seed funding
- Access to experts
- Access to users
- Testing
- Networking
- Opportunity to meet, work and collaborate with other finalists
- Prize money







# **Support and Development**

Throughout both prizes, we provided support to finalists in a variety of areas:

- Local context-specific knowledge
- Human centred design
- Impact measurement
- Partnership building
- Financial planning
- Writing business plans
- Communications and marketing
- Prototyping





# Innovations & Innovators



## **Innovators and Innovations**

#### **Data Driven Farming Prize**

Spero Analytics created a wireless soil moisture mesh network which uses soil moisture data to help Nepal farmers and other agricultural stakeholders with insights on water management, crop selection and calendars and pest management.

ICT4Agri developed KrishiGuru, a mobile and web platform capable of providing localized core context, specifically market prices, crop advisories, weather forecasts, input supply and on demand enquiries via Android and SMS.







## **Innovators and Innovations**

#### **Fall Armyworm Tech Prize**

Farm.ink adapted their AgTech solution of African Farmers Clubs to include a fall armyworm module through their chatbot on Facebook that provides gamified educational learning and reference guide material and scouting tools delivered via progressive web apps

Akorion added the EzyArmyWorm feature in the EzyAgric app uses artificial intelligence and image recognition to help farmers detect FAW at any stage of the production cycle and uses SMS and smart alert notifications to provide real-time guidance on how to detect, manage, and address the pest







# Impact & Value

## **Impact of Challenge Prizes**



INNOVATION: To understand whether the prize attracted new innovators and developed new solutions



CAPABILITIES: To understand whether the prize developed new partnerships, new capabilities and mobilized new and existing talents



ECOSYSTEM: To understand whether the prize developed new markets, attracted new investors and raised awareness



### **Data Driven Farming Prize Impact**



13 new solution prototypes and complete business plan sourced through the prize.

At least 15 new partnerships were developed during the prize.

100% of finalists have learned skills useful for their personal and business progression.

11 finalists entered the market after the prize ended.

3 finalists confirmed they had access to new funding thanks to the prize

58% of entrants from Nepal.

6 of 13 finalists were new to the agri-business sector in Nepal.



### **Fall Armyworm Tech Prize Impact**



Sourced 20 new solutions with complementary business plans (68% of finalists adapted, 32% of finalists created new solutions).

4.5 million people across Africa utilized/benefited from finalists' solutions.

92% of finalists reported that the prize contributed to their technical knowledge of fall armyworm in sub-Saharan Africa.

The topic of fall armyworm and the prize reached a global audience of 15 million.

Finalists secured 17 partnerships during the prize.

84% of finalists intend to enter African markets immediately.

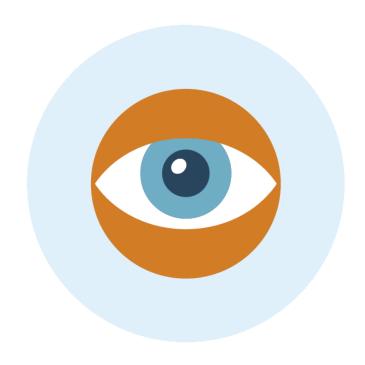


## **Catalyst for Innovation**

The prizes acted as tools to incentivise and stimulate innovation that may have not otherwise been created.

The prizes produced a new set of actors that can support development within agriculture.

The prizes attracted local solvers and generated tested solutions.



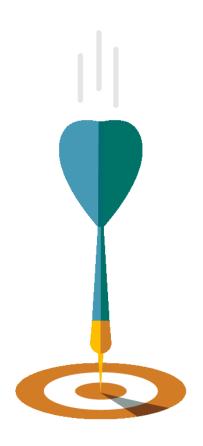


### **Improving Capacities**

The prizes supported knowledge transfer for innovators to understand the problem, but tackle it in a variety of different ways.

The prizes acted as a tool to support humancentered design approaches and co-creation in and amongst innovators.

The prizes fostered an environment for partnership and collaborations not only between innovators but between partners and prize stakeholders.



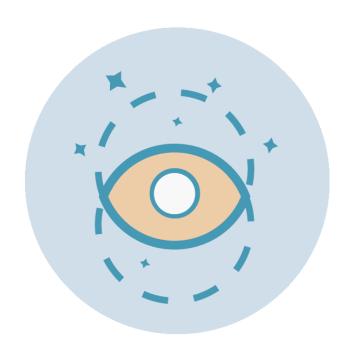


# **Building an Ecosystem**

The prizes attracted a variety of partners and prize stakeholders in tech, finance, government, telecommunications, private sector.

The prizes acted as a tool to rapidly expand awareness and inspire action.

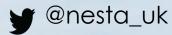
The prizes brought a mix of stakeholders to come tackle a problem and continue working on it, even after the prize has ended - a legacy.





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**Thank You** 

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