Agri-tech Catalyst Round 8: agriculture and food systems innovation

Briefing and networking event
Birmingham
22\textsuperscript{nd} March 2019
Welcome and Introductions

David Telford – Knowledge Transfer Network (KTN)
Charles Vander Broek – Knowledge Transfer Network (KTN)
Chris Danks – Knowledge Transfer Network (KTN)
Lucy Mather – Knowledge Transfer Network (KTN)
Tom Jenkins – Senior Innovation Lead, Innovate UK
Kathryn Miller – Innovation Lead, Innovate UK
Duncan Barker – Livelihoods Advisor, Department for International Development (DFID)
Innovate UK – the UK’s innovation agency

Innovate UK drives productivity and growth by supporting businesses to realise the potential of new technologies, develop ideas and make them a commercial success.

To stay competitive as an advanced economy, we need to do things that others cannot do, or to do things in different and better ways.
Investment of £2.2bn since 2007

industry match funding taking the total value of projects above £3.75bn

Up to £16bn in added value to the economy

We’ve funded around 11,000 projects

8,000 unique organisations involved

up to £7.30 for every £1 we’ve invested.

8 jobs for each organisation involved

70,000 jobs created in total
Place is key to innovation. We fund businesses throughout the UK and work closely with stakeholders in the regions and nations.

Regional managers based across the UK

Wave 1 Innovate UK investment-ready Industrial Strategy Challenge Fund awards

Innovate UK funding portfolio by postcode
Catapults: where they are

Our network of Catapult centres is located throughout the UK in areas of strategic importance to each sector.

"To innovate, we need open centres where academia and business can get together and drive forward great ideas into manufactured products. And that’s what the Catapults are delivering for us."

Juergen Maier, Chief Executive, Siemens UK

Regional Centres

Digital
- North East and Tees Valley
- Yorkshire
- Brighton
- Northern Ireland

Satellite Applications
- North East
- Scotland
- East Midlands
- South West

Transport Systems
- Milton Keynes

Cell and Gene Therapy
- Stevenage
- London

Future Cities
- London

Compound Semiconductor Applications
- South Wales

Medicines Discovery
- Alderley Park

Energy Systems
- Birmingham

High Value Manufacturing
- AMRC - Stratford
- NCC - Bristol
- CPP - Wilton/Sedgefield/Darlington
- AMRC and NAMRC - Rotherham
- MTC - Ansty
- WMG - Coventry

Offshore Renewable Energy
- Glasgow
- Blyth
- Levenmouth
Investing in science, research and innovation

We must become a more innovative economy and do more to commercialise our world leading science base to drive growth across the UK

Industrial Strategy Challenge Fund

- Industry-led and powered by multi-disciplinary research and business academic collaboration
- Develop UK industries that are fit for the future, driving progress in technologies where the UK can become a world-leader in research and commercialisation
Industrial Strategy Challenge fund – Wave 1

Leading-Edge Healthcare Challenge (including Medicines Mfg) up to £188m

Next Gen. Affordable Lightweight Materials Mfg (ATI projects) up to £26m

Faraday Battery Challenge up to £246m

Autonomous Vehicles (CCAV projects) up to £38m

Robotics and AI in extreme environments Challenge up to £93m

National Satellite Test Facility up to £99m
Industrial Strategy Challenge fund – Wave 2

Audience of the future (up to £33m)

Data to early diagnosis and precision medicine (up to £196m)

Prospering from the energy revolution (up to £102.5m)

Healthy ageing (up to £98m)

Next generation services (up to £20m)

Quantum technology (up to £20m)

Transforming construction (up to £170m)

Transforming food production (up to £90m)
Canada-UK call: Enhanced Industrial Productivity

- Funding for two areas:
  - Advanced and High Value Manufacturing (e.g. automotive, aerospace)
  - Food Production and Nutrition
- A proportion of the funding will be spent on AI enabling projects
- Industry-led CR&D – must include UK business and Canadian SME
- UK based researchers can partner or be subcontractor depending on project set up
- £10m total (£5m from UK, £5m from Canada)

Open date: 11th February 2019
Close date: 9th May 2019 5pm

Further info: https://apply-for-innovation-funding.service.gov.uk/competition/297/overview#summary
Scope: Enhanced Productivity (Food Production & Nutrition)

The following examples of Enhanced Productivity projects are illustrative only:

- Enhancing nutritional value of foods
- Novel ingredient development
- Sustainable protein development
- Food safety solutions
- Authenticity and traceability systems (e.g. blockchain)
- Processes for improved shelf life and reducing food waste
- Smart packaging
- Improved manufacturing efficiency
- Lean manufacturing
• We are **evolving and simplifying** our funding to **better suit business needs** by being more open.

• This will create **more opportunities to apply**, with **greater flexibility on scope**, **larger grant availability for single company** applicants, making our funding **better suit company business cycles**.

• To keep an eye out on our latest opportunities go to:  
  https://apply-for-innovation-funding.service.gov.uk/competition/search

• **Any further questions to be directed at Customer support:**
  • support@innovateuk.ukri.org
Opportunity to apply for a share of up to £20 million, designed to support the best game changing and/or disruptive ideas or concepts with a view to commercialisation as soon as possible.

The competition is open to any sector of the economy and any company size, universities or RTOs in any region of the UK.

Bids must be business focused and must be either:
- between 6 and 18 months with total costs between £25K and £500K and may be single or collaborative applications
- between 19 and 36 months with total costs between £25K and £2M and must be collaborative applications

Open date: 18th February 2019
Close date: 24th April 2019 12noon

Further info: https://apply-for-innovation-funding.service.gov.uk/competition/324/overview
Competition Scope
Agri-Tech Strategy

- Launched 22 July 2013
- Aims to improve the translation of research into practical application for agriculture and related industries in UK and overseas
- £160M government investment over 5yrs:
  - Agri-tech Catalyst (£70m)
  - Centres for Agricultural Innovation (£90m) – Agri-Tech Centres
We can't stop thinking about the future

Agri Tech Centres

- CHAP – Centre for Crop Health and Protection
- Agri-EPI – Agricultural Engineering Precision Innovation Centre
- Agrimetrics
- CIEL – Centre for Innovation Excellence in Livestock
To date

- £70m investment to support agricultural innovations

- Across 6 rounds

- The Catalyst offers funding for collaborative projects, taking innovative ideas from any sector or discipline with the potential to provide an economic boost to the UK Agri-Tech industry, by tackling challenges in agriculture

- £60m has been invested through Innovate UK and BBSRC

- The Department for International Development contributed £10m to the Catalyst to support the transfer of technology and new products to developing countries
Latest funding available

£10m investment to support three further rounds

Draft timeline for three rounds:

- **Round 7** – 28 August 2018 – 28 November 2018
- **Round 8** – 1 April 2019 – 5 June 2019 (this competition)
- **Round 9** – Late 2019 (timings tbc)
Agri-Tech Catalyst and DFID
DFID and the Catalyst

- DFID is investing in the Agri-Tech Catalyst to test whether it can increase the pace of development and scale of uptake of agriculture and food systems innovations in Africa by and for:
  - farmers/livestock keepers; or
  - food systems actors (such as manufacturers, processors, retailers, distributors or wholesalers).

- 75% of the poorest people are rural; depend on agriculture, livestock, forestry and fisheries for their livelihoods.

- Innovation in developing country agriculture, particularly in Africa is low, and new innovation and technology is needed to tackle emerging threats such as climate change and pests and diseases.

- To improve nutrition for all in both rural and growing urban areas, we need to make changes not only in how food is grown and produced, but also how it is processed, transported, marketed and consumed.
- Official Development Assistance (ODA) is defined as flows to countries and territories on the DAC List of ODA Recipients.

- Only research directly and primarily relevant to the problems of developing countries may be counted as ODA.

- This includes research into tropical pests, diseases, livestock and crops for developing country conditions.

- The costs may still be counted as ODA if the research is carried out in a developed country.

- ODA eligibility is a key component of the assessment process.

- Your application must clearly demonstrate that it proposes work that will benefit agriculture and food systems in Africa and how you will deliver this benefit.

- During the lifetime of your project, it may not impact large numbers of people, but you need to show how your project will build a pathway to future development impact.

- There can be benefits to the UK – companies/researchers – but this must be secondary in nature.

- Activities in the UK must clearly be for challenges in Africa, not for the UK market.
Agriculture and Food Systems

- To improve nutrition for all, we need to make changes in the food we produce, and how it is processed, transported, marketed and consumed.

- The food environment from which consumers should be able to create healthy diets is influenced by four domains of economic activity:
  - Agricultural production
  - Markets and trade systems
  - Consumer purchasing power
  - Food transformation and consumer demand

Taken from the Global Panel on Agriculture and Food Systems for Nutrition
Agri-Tech Catalyst Round 8: Scope

- Projects must show the potential to deliver impact for poor people through the uptake of agricultural and food systems technology and innovation.

- Scope of the Catalyst includes:
  - primary crop and livestock production including aquaculture
  - non-food uses of crops, excluding ornamentals
  - challenges in downstream food processing, distribution or storage and value addition
  - Improving availability and accessibility of safe, healthy and nutritious foods

- Your project’s innovations must:
  - be sustainable in the context of environmental challenges such as climate change and resource scarcity
  - minimise negative effects such as pollution, food losses and waste
Specific Themes of Interest

- The following are priorities for DFID funding. You could consider focusing on one or more themes, but note this list is not exhaustive:
  - integrating smallholders into global and local supply chains
  - meeting quality standards and improving productivity
  - increasing the value of production to smallholders
  - innovation that supports food systems to deliver nutritious, healthy and safe food
  - control of crop pests, weeds and diseases
  - reducing food losses ‘post-farm gate’ and through the value chain
  - addressing food safety issues through the value chain
  - addressing challenges in downstream food processing, distribution or storage and value addition
  - new food technologies and data-driven food systems, including for urban areas
Eligible Countries

Angela
Benin
Burkina Faso
Burundi
Cameroon
Central African Republic
Lesotho
Chad
Congo (Brazzaville)
Congo, Democratic Republic of
Côte d'Ivoire
Eritrea
Ethiopia
Gambia, The
Ghana
Guinea
Guinea-Bissau
Kenya
Liberia
Madagascar
Malawi
Mali
Mozambique
Niger
Nigeria
Rwanda
Sao Tome and Principe
Senegal
Sierra Leone
Somalia
South Africa
South Sudan
Sudan
Tanzania
Togo
Uganda
Zambia
Zimbabwe
To find out more about the Agri-Tech Catalyst, including the competition brief and Guidance for Applicants documents follow this link: https://apply-for-innovation-funding.service.gov.uk/competition/334/overview

DFID’s Conceptual Framework on Agriculture:
Types of project

Innovate UK

Market readiness

Innovate UK and its co-funders funding

Commercialisation
Prod. Prototype
System Qual.
System Dev.
Technology Demo
Technology Development
Feasibility
Knowledge

Research Councils

Fundamental Research
Early Stage Feasibility Studies
Industrial Research
Experimental Development
Market Ready Product
Project example – early stage feasibility

Developing rice resistance to two major diseases to help food security in Asia.

Partners

Bangor University

International Partners
1. Anamolbi, Nepal
2. Sher-e-Kashmir University of Agricultural Sciences and Technology, India
3. National Agricultural Research Centre, Pakistan
Project example – mid stage industrial research

Wheat research and breeding project to improve food security in India and Pakistan and benefit UK wheat growers by developing new wheat varieties using an innovative approach to hybridisation.

Partners

- KWS UK Ltd
- Indian Agricultural Research Institute
- University of Sydney and Global Crop Innovations PTY Ltd
Project example – late stage

Partners

Russell IPM Ltd

International Partners
1. Dahal Trading Concern, Nepal
2. ACI Formulations Limited, Bangladesh
3. Elgon Kenya Ltd
4. Bytrade Tanzania Ltd
5. Bangladesh Agricultural Research Institute (BARI)
6. National Agricultural Research Centre, Pakistan
7. ICIPE, Kenya
8. Association of Mango growers Tanzania
9. CEAPRED, (NGO, Nepal)
10. EPRC, (NGO, Bangladesh)

Decreasing food waste through the control of fruit flies in Asia and Africa.

#agritech  @AgriTechGov
# Eligibility criteria

<table>
<thead>
<tr>
<th>Project Eligibility</th>
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<tr>
<td>• must be collaborative</td>
<td>• must include a partner from an eligible African country, who can be the technical lead</td>
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<td>• must include a UK-based administrative lead</td>
<td>• must be carried out in the UK or an eligible African country or both</td>
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<td>• must be carried out in the UK or an eligible African country or both</td>
<td>• must include at least one business in the consortium</td>
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<tr>
<th>Project costs</th>
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<tr>
<td>• <strong>Early stage feasibility studies:</strong> £100,000 to £500,000, 12 to 18 months.</td>
<td>• <strong>Mid stage industrial research:</strong> £250,000 to £1 million, up to 3 years.</td>
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<td>• <strong>Late stage experimental development:</strong> £150,000 to £800,000, up to 18 months.</td>
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Projects must start by 1 November 2019
# Early stage and mid stage projects

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<th>UK</th>
<th>Developing Country</th>
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<tr>
<td></td>
<td>Research</td>
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<tr>
<td>Eligible:</td>
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<td>Option 1</td>
<td>X</td>
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<td>Option 2</td>
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<td>Option 3</td>
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<td>Option 4</td>
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<td>Option 8</td>
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<td>Not eligible:</td>
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<td>Option 9</td>
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<td>Option 10</td>
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<td>Option 11</td>
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<td>UK</td>
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<tr>
<td>Business</td>
<td>Business</td>
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Eligible:

| Option 1 | X | X |

Not eligible:

| Option 2 | X |
| Option 3 |   | X |
Grant intervention rates for business

For Early Stage feasibility studies and industrial research awards, you could get up to:

- 70% of eligible project costs for micro or small business
- 60% for medium-sized business
- 50% for large business

For experimental development projects which are nearer to market, you could get up to:

- 45% of eligible project costs for micro or small business
- 35% for medium-sized business
- 25% for large business
Research partner participation rules

- For early-stage feasibility studies and mid stage industrial research projects the total costs for your research partners must not exceed 50% of the total project costs.
- If your consortium contains more than one research organisation, this maximum will be shared between them.
- For late stage experimental development projects: research base partners cannot claim funding but can participate as subcontractors.
- Universities can claim 100% (80% of Full Economic Costs).
- Other research organisations can claim 100% of their project costs.
- Public Sector Organisation or Charity can claim 100% of their project costs.
# Key Dates

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Dates</th>
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<tbody>
<tr>
<td>Competition Open date</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; April 2019</td>
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<tr>
<td>Briefing and Networking Event - Birmingham</td>
<td>22&lt;sup&gt;nd&lt;/sup&gt; March 2019</td>
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<tr>
<td>Online Theme Specific Brokerage Events</td>
<td>5&lt;sup&gt;th&lt;/sup&gt; April 2019</td>
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<td>• Crop</td>
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<td>• Livestock &amp; Aquaculture</td>
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<td>• Food Systems and Nutrition</td>
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<tr>
<td>Online Competition Briefing</td>
<td>9&lt;sup&gt;th&lt;/sup&gt; April 2019</td>
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<td>Registration deadline</td>
<td>29&lt;sup&gt;th&lt;/sup&gt; May 2019</td>
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<td>Submission Deadline</td>
<td>5&lt;sup&gt;th&lt;/sup&gt; June 2019 Noon</td>
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<td>Applicants informed</td>
<td>August 2019</td>
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Application process
Application process

Register for the competition
Via competition website – application form will be emailed

Download finance form
Finance Form – for all non-academic partners claiming grant

Complete and submit documents
Use all of the space provided. Upload documents to the FTP site. Don’t leave submission until the last minute!

Scope check
Applications that are in scope will be sent for assessment. We will assign appropriate assessors to each application

Assessment and portfolio selection
Applications will be assessed by independent assessors. Innovate UK and DFID will select a portfolio from the highest quality applications

Notify applicants
By date provided

Feedback
Within 4 weeks of receiving your notification
Project Details

• Application Details
  - Title, Timescales, Research Category, Innovation Area

• Project Summary
  - Short summary and objectives of the project including what is innovative about it

• Public Description
  - Description of your project which will be published if you are successful

• Scope
  - How does your project align with the scope of this competition?
  - If your project is not in scope, it will be ineligible for funding and not sent for assessment.
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<th>Application form</th>
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<tr>
<td><strong>Application details</strong></td>
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<td><strong>Summary of proposed project</strong></td>
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<td><strong>Public description of the project</strong></td>
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<td><strong>Gateway Question</strong></td>
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<td><strong>Question 1</strong></td>
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<td><strong>Question 9</strong></td>
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<td><strong>Question 10</strong></td>
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**Other funding from public sector bodies**

**Finance summary table**
Applicant briefing webinar

- Information about the competition brief, Guidance for Applicants documents and recording of the Applicant Briefing on 9\textsuperscript{th} April are available at:
  
  https://apply-for-innovation-funding.service.gov.uk/competition/334/overview#dates

- After 9\textsuperscript{th} April this will include a recording providing detailed information about the competition process and funding rules from our Competitions team
Assessment
Application Assessment

All applications are assessed by independent assessors drawn from industry, academia and from international development backgrounds.

What do they look for?

- Clear and concise answers
- The right amount of information
  - not too much detail
  - no assumptions
- Quantification and justification
- A proposal that presents a viable opportunity for growth, a level of innovation that necessitates public sector investment and has the right team and approach to be successful

Keep your assessors engaged and interested in your proposal. You want them to be fascinated and excited by your idea!
Contact us:

Customer Support Services: 0300 321 4357 (Mon-Fri, 9am-5:30pm)
support@innovateuk.gov.uk

Knowledge Transfer Network:
https://www.ktn-uk.co.uk

Innovate UK:
https://www.gov.uk/government/organisations/innovate-uk
Thank You