MultiDisciplinary Food Systems Commercialisation Catalyst

Phase 1: Guidance Document

2025

Expression of Interest

Open: 12 noon (GMT) 17th April 2025

Close: 4pm (GMT) 13th June 2025

The link to the application form will be available at the Zinc website throughout the submission period. Submissions will be reviewed on a rolling basis.

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Programme Overview

Background

In partnership with UKRI BBSRC & ESRC, Zinc is proud is to launch a new initiative: the **Multidisciplinary Food Systems Commercialisation Catalyst.** This programme is designed to unite researchers from across the social sciences and biosciences to breakdown disciplinary barriers, cross-pollinate skills, ideas, and expertise. Together, participants will address key issues that relate to **building healthy, sustainable, and resilient food systems.**

This guidance document outlines how to express your interest in attending the first phase of this programme: a two-day Food Systems Sandpit event taking place in Central London on Wednesday 2nd July - Thursday 3rd July 2025. This interactive two-day workshop will bring together multidisciplinary researchers to connect, collaborate and explore innovative solutions to complex food systems challenges.

Participation in this in-person event is an important part of the process, designed to support team formation and idea development ahead of the formal grant application process. Guidance on the second phase of this programme will be shared with eligible applicants following the Sandpit.

Award Details

Researchers participating in this programme will have the chance to address a critical and timely challenge, collaborating with experts from diverse disciplinary backgrounds to develop sustainable, high-impact innovations. This is a unique opportunity to develop new ideas at the intersection of the social and biosciences, and to receive support to translate those ideas into real world impact.

Successful teams will receive:

- **£100,000** from UKRI; and
- A **6-month support programme from Zinc,** designed to help translate research into impactful enterprises.

Zinc's support programme combines structured learning sessions with peer-to-peer exchange, offering inspiration, practical tools, and personalised guidance. The experience is designed to foster both your personal growth and the development of your idea, all within a collaborative and supportive cohort environment.

About Zinc

Zinc is one of Europe's leading **mission-driven venture builders and innovation accelerators,** with over seven years of experience supporting science and technology ventures. We identify and back exceptional innovators - entrepreneurs, researchers, clinicians, and technologists - who are developing innovative solutions to improve the health of people and the planet. Through our venture-builder and innovation programmes, we've supported hundreds of scientists to turn research into real-world impact.

Our goal is to make the UK the best place in the world to launch and grow science-based ventures that tackle our most pressing societal challenges.

Process & Eligibility

Programme Overview

- **Phase One**
  - **Step 1**: Submit your expression of interest by Friday 13th June 2025. To begin, applicants are asked to submit this short form to attend the Food Systems Sandpit event, an interactive two-day workshop bringing together multidisciplinary researchers to connect, collaborate and explore innovative solutions to complex food systems challenges. Those who progress beyond this stage will be invited to submit a short video outlining their motivations and relevant skills.
  - **Step 2**: Join the Online Collaboration Platform. Successful applicants will be invited to join an online collaboration platform, where you can connect with fellow participants, explore shared interests, and begin forming potential teams. Zinc will also host a series of optional online events during this period to support networking and idea development.
  - **Step 3:** Attend the Sandpit. Participants will take part in a two-day Sandpit on Wednesday 2nd and Thursday 3rd July 2025, designed to spark collaboration, deepen discussions, and support the formation of multidisciplinary teams. During the event, teams will begin co-developing proposals for funding.
  - **Step 4**: Submit Your Application. Following the Sandpit, teams will finalise and submit their proposals through the UKRI Funding Service.
- **Phase Two**
  - **Grants Awarded:** Up to 10 teams will be selected to receive awards of up to £100,000.
  - **Zinc Support Programme:** Successful applicants will join a 6-month cohort-based support programme delivered by Zinc. This programme is designed to help teams translate their research into high-impact ventures, with structured sessions, expert guidance, and peer support.

Eligibility

In order to be eligible you must fulfil the following criteria:

- You have a background in the **social sciences** or **biosciences**.
- You are committed to building a **multidisciplinary team** that includes at least one social scientist and one bioscientist.
  - You may already have specific collaborator(s) in mind, but have not yet found the right funding opportunity.
- The project lead can commit a minimum of 50% FTE from October 2025 to March 2026.
- You are motivated to develop an impactful and sustainable enterprise that solves a relevant and pressing food systems challenge.
- You are available to attend both days of the in-person Food Systems Sandpit event in Central London on Wednesday 2nd and Thursday 3rd July 2025. This two-day interactive workshop plays an important role in the process, providing a valuable opportunity for team formation and idea development ahead of the formal grant application stage.
- You will be hosted by a UK university or other eligible research organisation for the duration of the award (minimum 6 months starting from October 2025).
- The Food Systems Sandpit is open to researchers across a range of career stages and roles, including technicians, postdoctoral research associates, fellowships and group leader positions; PhD students are not eligible to apply at this stage, but can be included in bids for grant funding as part of the following stage of this process.

We actively welcome applications from underrepresented researchers and those working with underserved communities. Zinc is committed to inclusive and accessible recruitment practices, and we ensure our assessment panels are diverse. We create spaces where differences are recognised, valued, and embraced. If you have a disability or long-term condition and require any adjustments during the application process, please contact us at catalyst@zinc.vc.

Phase 1 (Sandpit EOI): Overview

What is the Food Systems Sandpit?

The Food Systems Sandpit is a dynamic, in-person, two-day event designed to spark collaboration, creativity, and idea development. It brings together a diverse group of researchers and innovators from across the social sciences, biosciences, and beyond to co-create solutions to a shared challenge - building healthy, sustainable, and resilient food systems.

Through a series of facilitated sessions, participants will explore the challenge space, exchange knowledge, and begin forming multidisciplinary teams. You'll have the opportunity to test ideas, develop early-stage concepts, and identify collaborators with complementary skills and perspectives.

By the end of the Sandpit, teams will begin shaping proposals for funding and preparing for submission through the UKRI Funding Service. The event is designed to be inclusive, interactive, and action-oriented - creating the foundation for high-impact, research-led ventures.

Participation in this in-person event is a key part of the process, designed to support team formation ahead of the formal grant application process.

How to express interest for the sandpit?

1

Expression of Interest

1. **Background information**
2. **Problem mapping**
3. **Idea mapping**
4. **Collaborators**

2

Invite to submit video

Short video outlining your motivations and skills

3

Letter of intent of support

The first stage of the application process is open to all eligible researchers who are motivated to improve our food systems. To express your interest in attending the Sandpit, please submit the following:

1. Short expression of interest form

Once we receive your submission, we'll send you a confirmation email outlining the next steps. If your application progresses, you'll be invited to submit:

2. A short video introducing your motivations, background, and relevant skills

We will provide guidance and resources to support you at this stage, including alternative options for those unable to submit a video. Prior to attending the Sandpit event, you will also be asked to submit a letter of institutional support from your host organisation.

Phase 1: Expression of Interest

1

To begin, applicants are invited to complete a **short expression of interest form** to express their interest in attending the Sandpit event - an interactive, two-day workshop held in Central London on 2nd and 3rd July 2025. Along with some basic contact information, the registration form will ask:

Sections	Topics to cover in your summary	Example
Problem Mapping	Within the context of a healthy, sustainable, and resilient food system, which specific areas are you interested in exploring? Please describe the real-world problem(s) you would like to address. (150 words max)	*I'm interested in exploring the challenge of soil health degradation and its impact on crop nutrient density, which threatens both human health and the long-term sustainability of food production. Intensive farming practices and synthetic inputs have contributed to declining microbial diversity and organic matter in soils, reducing the nutritional quality of produce and the resilience of ecosystems. Within the wider context of building a sustainable and resilient food system, I want to focus on how we can regenerate soil ecosystems while maintaining productivity and improving the nutritional value of crops.*
Idea Mapping	Do you have one or more early idea(s) or hypotheses for how this problem might be addressed? We're looking for initial thinking, not fully developed solutions. (150 words max)	*One early hypothesis I'd like to explore is whether microbial soil amendments (e.g. engineered or naturally selected microbial consortia) can restore depleted soils and enhance nutrient uptake in crops. I'm also curious about integrating biosensing technologies to track soil microbiome changes in real time. These interventions could offer scalable solutions for farmers, reduce dependence on chemical inputs, and contribute to a healthier food system.*
Collaborators	Thinking about collaborators who you could work with to deliver on this, are there specific skillsets or areas of expertise you are interested in, and/or specific collaborators you have in mind? If so, please provide further details. If not, write N/A	*I'm particularly interested in collaborating with:* • *Social / behavioural scientists to understand farmer adoption and incentives for regenerative practices* • *Data scientists or AI specialists for modelling soil health and yield outcomes* • *Agri-tech engineers to develop or adapt soil monitoring tools* • *Potential collaborators include researchers working on land use policy, sustainable finance, and community-based food systems.*

What happens after you have submitted your form?

- After the deadline, we will process submission on a rolling basis. Submissions that meet the eligibility and scope of the funding opportunity will be progressed.
- Successful candidates at this stage will be invited to submit;
  - A short video introducing your motivations, background, and relevant skills
  - A letter of institutional support from your host organisation

Phase 1: Video submission

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After submitting your initial application, we will review applications and invite successful applicants to record a short video introducing your motivations, background, and relevant skills.

Video guidelines:

- Minimum length: 2 minutes.
- Maximum length: 3 minutes.
- Ensure your head and shoulders are clearly visible.
- Record in a well-lit environment with minimal background noise.
- If you're unable or prefer not to use your camera, you're welcome to record with your camera off or covered.

You must submit your video using the form provided in the “Invitation to Submit Video” email within 2 days of receiving the invitation and before the final application deadline.

How to upload your video:

1. Sign in to YouTube
2. Click the Upload button and select your video
3. Before uploading, set your privacy to Unlisted:
    - Go to YouTube Studio
    - Select “Videos” from the left menu
    - Hover over your video, click the pencil icon, and choose “Unlisted” under Visibility
4. Finish uploading and click “Share”
5. Copy the unlisted video link and paste it into the submission form provided via email]

If you have questions regarding the video submission, please contact catalyst@zinc.vc

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Submit the letter of support from your institution.

What happens after you submit your video?

If your application is successful:

- You will be invited to attend the in-person Food Systems Sandpit event
- Your video submission will be shared with other shortlisted participants to help spark connections and collaboration
- You will be given access to the online collaboration platform, where you can begin networking and exploring potential team formations ahead of the Sandpit
- You will be invited to join a series of hybrid events, designed to support idea development and cross-disciplinary exchange in the lead-up to the in-person event

Relevant Problems in the Food Systems Mission

Mission Context

The food system encompasses all stakeholders and activities involved in the production, processing, distribution, marketing, consumption, and disposal of food (Nguyen, 2018). Technological and scientific advances, especially during the Green Revolution, have increased the carrying capacity of agricultural land by expanded agricultural productivity, helping avert a Malthusian crisis. However, as the global population approaches 10 billion people, the pressure on our food systems is intensifying. While the core purpose of the food system is to deliver sufficient nutrition to meet global dietary needs, this goal is increasingly threatened by environmental degradation, resource scarcity, and systemic inequities. Food production already:

- Accounts for 25% of global greenhouse gas emissions
- Is the leading cause of biodiversity loss
- Drives the majority of land use change
- Is a primary source of nitrogen and phosphorus pollution
- Consumes vast amounts of freshwater
- Contributes to ocean acidification through carbon emissions

To meet projected demand by 2050, global food production must nearly double (Gladek et al., 2017). To achieve this we must both protect current levels of food production and also conserve the productive capacity of agricultural land. These two goals are interdependent - but often in tension. Balancing short-term yields with long-term resilience is the defining challenge of today's food system. Without transformation, the food system risks pushing us beyond key planetary boundaries.

Example Problems

A non-exhaustive list of relevant problems include, for example, those related to:

1. Ecological Degradation and Soil Erosion - Intensive agricultural practices - characterised by monocultures, synthetic fertilisers, reduced fallow periods, and chemical pest control - have severely degraded soils, polluted waterways, and reduced biodiversity. Around 16% of the world's soils are expected to have less than 100 years of productivity left (Ritchie, 2021), undermining the very foundation of food production. Biologically grounded innovations - such as regenerative agriculture, ecosystem-based pest control, and climate-resilient crops are urgently needed to restore degraded ecosystems while ensuring commercial viability.

2. Loss of Genetic Diversity - Our over reliance on a narrow set of crops has weakened the resilience of the food system. While over 6,000 plant species have historically been consumed, today just 12 dominate global agriculture - with wheat, maize, and rice providing more than half of global caloric intake (Awika, 2011). This lack of crop diversity heightens vulnerability to disease, climate shocks, and price volatility, as demonstrated by the 40% spike in wheat prices after the Russian invasion of Ukraine. Genetically uniform crops like the Cavendish banana are also at risk of total crop failure from pathogens like Panama disease (Drenth & Kema, 2021), threatening livelihoods and food security.

3. Dependence on Fossil Fuels and Industrial Inputs - Modern food production is heavily reliant on fossil fuels for fertilisers, mechanisation, and global transport. This dependency drives greenhouse gas emissions, exacerbates climate change, and perpetuates unsustainable practices. Transitioning to renewable energy, bio-based materials, and circular resource use presents a major technical challenge but also a transformative commercial opportunity.

4. Food Waste - Around one-third of all food produced is lost or wasted - due to inadequate storage, processing inefficiencies, and consumer habits. Reducing food waste requires both technological innovations (e.g. better cold chains, shelf-life extension) and behavioural interventions. Solving this issue is critical for both environmental sustainability and economic resilience.

Data Protection

How is personal information handled?

In accordance with the Data Protection Act 2018, the personal information that you provide within the application will specifically be used for the purpose of administering the call. The demographic information will be anonymised and viewed by Zinc and UKRI staff for diversity and equality monitoring purposes only, and will not be used for any other purpose without your specific consent.

By submitting an expression of interest, you consent to receive communications from Zinc VC and UKRI regarding the Multi-disciplinary Catalyst Awards and future Zinc activities. You may proactively manage your preferences or opt-out of communications with Zinc VC and UKRI at any time by asking to unsubscribe or by using the unsubscribe link provided in email communications.

Contact information

If you have any feedback or questions about the Awards and the submission or application process, please contact the Zinc team: catalyst@zinc.vc. We will endeavour to respond as quickly as possible within normal UK working hours. At this stage, we are unable to offer advice about individual projects beyond helping you stay in scope.