

Innovative Methods and Metrics for Agriculture and Nutrition Actions

## IMMANA Call for Applications Round 3

## Competitive Research Grants to Develop or Validate Innovative Methods and Metrics for Agriculture and Nutrition Actions

Led by London School of Hygiene & Tropical Medicine (LSHTM)



LCIRAH

The London Centre for Integrative Research on Agriculture & Health



BILL& MELINDA GATES foundation



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## **1. Funding Opportunity**

### **1.1 Background**

With just about a decade to realise the Sustainable Development Goals, making agriculture-food systems work for nutrition and health of populations has never been more urgent. Accelerated momentum is needed to develop a robust scientific evidence base to guide changes in global agriculture and food systems to nourish the world's population in a sustainable, equitable and just way.

Agriculture-food systems impact health and nutrition outcomes through multiple, dynamic, complex, direct and indirect, and often difficult to document pathways. In addition, food systems are also changing rapidly, driven by technological innovation, globalisation, rural transformation and urbanisation, environmental and political fragility and changes in food system governance among others.

The last decade has seen a proliferation of studies assessing the nature and magnitude of these relationships between agriculture-food systems and nutrition <sup>(1-3)</sup>. Several publications highlight the need for development and application of novel, feasible, scalable, field-friendly and cost-effective tools, methods and metrics to monitor and unpack how changes in agriculture-food systems can impact nutrition and health outcomes of populations across diverse contexts <sup>(4, 5)</sup>.

Significant progress has been made in this field in recent years, including through the Innovative Methods and Metrics for Agriculture and Nutrition Actions (IMMANA) programme (2015-2019)<sup>(6)</sup>. Over the past five years, IMMANA has awarded 15 competitive research Grants to develop cutting-edge methodologies and tools that are informing research, policy and practice in international development. It has trained 21 early career Fellows who are already shaping the science and policy landscape in their countries. Finally, the Agriculture, Nutrition and Health (ANH) Academy has grown exponentially, now including over 2,000 members from 770 organisations, predominantly in Africa and Asia. A summary of IMMANA's portfolio to date can be found <u>here</u>.

Despite these successes, much remains to be done. A move towards complex food systems thinking for equitable nutritional and health outcomes, within and across nations, requires an evolution of methods and metrics in agriculture-food systems and nutrition research. Examining how well the

existing methodological innovations work across contexts and at scale is becoming a priority. This Call for Applications welcomes proposals to fill these gaps to facilitate evidence-based policy investments.

# **1.2 About Innovative Methods and Metrics for Agriculture and Nutrition Actions (IMMANA)**

The Innovative Methods and Metrics for Agriculture and Nutrition Actions (IMMANA) programme aims to accelerate the development of a robust and coherent scientific evidence base which will support effective policy and investments in agriculture-food systems for improved nutrition. Following a successful five-year programme, a Phase 2 is being co-funded by UK Aid from the UK Government and the Bill & Melinda Gates Foundation. IMMANA is a partnership between the London School of Hygiene & Tropical Medicine, SOAS University of London, Tufts University and The London Centre for Integrative Research on Agriculture and Health (LCIRAH). The objectives of this second phase of IMMANA are to:

- 1. Stimulate validation and continued development of innovative methodological approaches and novel metrics in agriculture and food systems for improved health and nutrition
- 2. Deepen and expand the pool of emerging leaders skilled in developing and applying cuttingedge methods and metrics
- Convene a global research network the Agriculture, Nutrition and Health (ANH) Academy to facilitate learning, sharing and catalysing new interdisciplinary research collaborations and policy uptake of emerging evidence
- 4. Synthesise and facilitate the uptake of existing data and scientific evidence to inform policies and investments in agriculture and food systems for improved nutrition and health.

Like the first phase of IMMANA, the second phase will rest on the core pillars of research, capacity building and knowledge sharing, and consist of three synergistic **workstreams**:

- <u>IMMANA Competitive Research Grants</u> to develop <u>new, and validate existing</u> methods and metrics at the nexus of agriculture-food systems, nutrition and health (ANH)
- IMMANA Fellowships for emerging leaders in ANH research
- ANH Academy with an expanded set of activities including
  - A synthesis centre for data, tools, methods and metrics
  - Strengthening the capacity of academic institutions to offer curriculum enrichment opportunities on ANH related topics in Africa and South Asia



- A mentorship scheme for early career researchers in LMICs
- Continuation of <u>ANH Academy Weeks</u> and other online training and engagement activities

You can find more information about IMMANA on our website.

### **1.3 How to Get Involved**

We encourage researchers to participate in all aspects of IMMANA, and provide the following guidance on how IMMANA can best support your research interests:

- If you are a researcher in an institution engaged in and committed to linking research in agriculture, nutrition and health, your institution can join the Agriculture, Nutrition and Health Academy, and you can participate in its conferences, meetings and working groups. To find out more please go to <u>ANH Academy website</u>.
- If you are an early-career researcher who wants to improve skills in working across agriculture, nutrition and health programmes in a development context at another institution, then you might consider applying for an IMMANA Fellowship, for which you will need the support of your home institution and the institution that will host you. To find out more about the IMMANA Fellowships work stream, *which is now accepting applications*, please visit <u>IMMANA Fellowships webpage</u>.
- If you are a researcher who would like to develop innovative methods and metrics or adapt existing ones in diverse contexts, then you may wish, through your institution, to apply for an <u>IMMANA Grant</u>.

All Fellows and Grant holders will be expected to participate in the Agriculture, Nutrition and Health Academy and its meetings for the duration of their funded programme. We will not normally provide IMMANA Fellowships to researchers to join IMMANA Grants, but it would be acceptable in principle for an institution to host both an IMMANA grant and an IMMANA Fellowship, as long as they are clearly separate activities. For further information, please contact: <u>immana@lshtm.ac.uk</u>.

## 2. IMMANA Grant Funding

### 2.1 Objectives and Scope

The IMMANA Competitive Research Grants are aimed at accelerating the development of innovative and interdisciplinary methods, metrics and tools to advance the scientific understanding of the linkages between **agriculture and food systems** and **health and nutrition outcomes**, in order to better inform policy and programmatic actions to improve nutrition outcomes in low and middle-income countries (LMICs).

IMMANA will fund innovative research initiatives to **develop and/or validate tools, methods** and **metrics** for measuring agriculture or food system, nutrition and health interactions of importance in LMICs. We are particularly interested in the following types of proposals:

- 1. Proposals for validation, or assessing cross-context equivalence of such existing innovative methods, metrics and tools
- 2. Innovative proposals for applying existing methods, metrics and tools in novel or under researched contexts to generate new insights
- Proposals aiming to develop new quantitative and/or qualitative methodologies and construct new metrics and tools that bring together ideas and resources from different relevant disciplines, especially those guided by IMMANA Evidence and Gap Map findings (see section 2.2.1).

For the purpose of this call, **agriculture and food systems** include the production, distribution, processing, marketing and consumption of food; and people, resources and institutions involved in these processes. **Nutrition and health outcomes** include impacts on malnutrition in its broadest sense, including undernutrition, micronutrient deficiencies, and diet-related overweight, obesity and associated non-communicable diseases, as well as other impacts on human health with implications for nutrition outcomes, e.g. food borne diseases.

By **methods** we mean the processes and approaches involved in a systematic inquiry of relationships between agriculture, nutrition and health and generally refer to study design (for example, surveillance systems to monitor changes in food systems and their impacts on human and planetary health; low-cost and pragmatic evaluation designs; methods to study policy processes, governance, values; assessing trade-offs in policy investments to underpin decision-making). **Metrics** refer to



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parameters or indicators used for measurement, comparison or tracking performance (for example, the <u>Women's Empowerment in Nutrition Index</u>, or the <u>Household Water Insecurity Experience Scale</u>). A **tool** is a vehicle or aid to collect information and data to arrive at the metric or aid decision-making (for example, <u>accelerometers to measure energy expenditure</u>; interactive platforms such as <u>Optifood</u>, to design nutrition sensitive interventions for agriculture projects; or a low-cost and field friendly diagnostic tool to assess micronutrient deficiencies).

The process of **validating** a method, metric or tool here broadly refers to further testing an existing novel method, metric, or tool for its reliability and accuracy to make a reasoned judgment about whether it provides useful analytic measurement for the particular purpose(s). For example, does the method or metric represent all facets of a given construct? Does it relate, or can it establish, relationships with outcomes of interest? Does the method or metric perform comparably across contexts (cross-context equivalence)? We are interested in qualitative, quantitative, and mixed-methods studies of validation and cross-context equivalence. For example, novel application of sociocultural and political theories across contexts to establish their comparable performance across contexts would be considered eligible and relevant to this Call for Applications.

All proposals must demonstrate **innovation**. For those proposing validation of existing innovative methods, metrics or tools, a clear articulation of **demand** for the method, metric or tool in varied contexts must be presented. As well as being of **excellent scientific quality**, research supported through these Grants must demonstrate clear **development relevance**. Specifically, applicants should make a convincing argument for the **potential of the methods**, **metrics and tools proposed to be developed or validated under this grant scheme to make a meaningful impact on food systems, nutrition and health in LMICs**, for instance through their use to improve the design, monitoring or evaluation of important nutrition- and health-enhancing food system interventions or policy change. All proposals must demonstrate **translational value**, **articulating pathways to scale-up**. Proposals which build links to programmes in LMICs and which will make use of the methods developed are encouraged, but more general methods research will also be considered as long as it has development relevance. Applicants must identify how the proposal will mainstream gender and other equity concerns in the research activity and outputs. Funded projects will normally be expected to deliver outcomes that are likely to make a practical impact - either directly, or through further, more applied research - within five years.

### 2.2 Indicative Research Topics and Approaches

The IMMANA partnership will consider a wide range of proposals that address the objectives outlined above, based on selection criteria explained in the section below. We specifically *welcome proposals that align with findings in the IMMANA Evidence and Gap* -- whether development of new methods, metrics and tools; or their validation, theory-testing, novel approaches and application. However, we will also welcome other topics that meet IMMANA objectives.

We expect to fund an even split of awards between development of new methods, metrics and tools, and validation or novel approaches and application. The final allocation will depend upon the proposals received and selected based on the criteria elaborated in Section 5.

### 2.2.1 IMMANA Evidence and Gap: A brief overview

The aim of the IMMANA Evidence and Gap Map is to articulate and summarise innovations in tools, metrics and methods that have been developed and applied to understand agriculture-food systems and nutrition linkages in the last ten years. Links to the Evidence and Gap Map resources are included in Box 1.1.

#### Box 1.1: IMMANA Evidence and Gap Map resources

- A detailed methodological protocol is available <u>here.</u>
- The interactive Evidence and Gap Map can be found at <u>here</u>.
- There are additional resources and guidance documents provided <u>here</u>.

Briefly, the Evidence and Gap Map summarises the number of reports that describe new development or application of tools, metrics and methods in the agriculture-nutrition research space. However, many reports employ the same or similar methods, tools and metrics. In this Evidence and Gap Map, 'filters' can be used to select some of the individual innovations in methods, metrics and tools (which, by selecting will show all the corresponding reports of such), additional categories and sub-themes of tools, metrics and methods.

Well-populated categories do not necessarily mean that there are no 'missing pieces', as one category could be dominated by certain types of innovations. For instance, there are many reports that

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populate the Water, Sanitation and Hygiene thematic 'domain' (rows in the Map). However, this thematic domain is dominated by water footprints with very few new tools, metrics or methods (columns in the Map) on hygiene or sanitation as it relates to the agriculture-nutrition pathway. Similarly, gaps in this Evidence and Gap Map could indicate that there are sufficient, older methods, metrics and tools to measure intended relationships, or it could mean that there is a need for innovation in these areas. For example, there are fewer reports that exemplify innovation in the food security space, but there are many well-established metrics that exist to measure food security. There might be a need, however, for development of a new method or tool, or linkage with other domains that could be a useful innovation in the field.

When interpreting the Evidence and Gap Map and its results, it is important not to prioritise topics and themes only based on the number of reports (the size of the bubble in the Map) in any given category, but to delve into the diversity of tools, metrics and methods within each category. Furthermore, promising or even well-established tools, metrics or methods that exist within a certain thematic domain might still provide a unique opportunity to validate, adapt or link to other data types or domains in innovative ways.

The Evidence and Gap Map can be used to identify gaps in methods, metrics and tool development, validation and theory-testing, or novel approaches and application. Some specific gaps, categorised by thematic domain and type of tool, metric or method, are listed in boxes 1.2 and 1.3 respectively. *We encourage applicants to explore <u>the interactive Evidence and Gap Map</u> to inform the focus and justification of their proposals.* 

#### Box 1.2: Key gaps in thematic domain

- Short-term shocks, humanitarian contexts, emergencies
- Long-term vulnerability and fragility, migration, fragile states
- Food environments, food choice and dietary behaviour
- Food systems and governance
- Trade, markets and value chains for nutrition and health outcomes
- Conflicts of interest and power in food system, food industry, corporate engagement
- Linking agriculture knowledge, attitudes and practices (KAP), norms and values with nutrition and health KAP, norms and values
- Equity and inclusion, especially types other than gender



#### Box 1.3: Key gaps in type of innovation in tools, methods and metrics

- Co-production of research
- Qualitative, inquiry-led methods
- Study designs
- Instruments and devices (with the exception of mobile based applications)
- System-level tools, metrics and methods
- Implementation research
- Dynamic, surveillance, ongoing and real-time research innovation

A list of *indicative* topics drawing from the IMMANA Evidence and Gap Map are below:

- Research designs, metrics and tools to further the understanding of food systems-nutrition research in emergency or humanitarian contexts.
- Research designs, metrics and tools to study longer-term stresses and vulnerability (economic, political, environmental, migration) in relation to agriculture-food systems, dietary changes and (equity in) nutrition outcomes.
- System-level ways to measure and monitor evolution of food systems, trade, markets and value chains as they relate to nutritional outcomes across diverse settings. For example (but not limited to) methods for food system surveillance, dynamic and real-time data capture to track food system changes and their health impacts.
- Quantitative, qualitative or mixed-methods novel approaches and metrics to assess and track nutritional (equity) impact of values, power, influence, conflict, cooperation, and corporate influence in food systems. For example (but not limited to), application of socio-political theory to the nutrition and food systems policy space; co-production and inquiry-led methods.
- Innovative methods to assess trade-offs between policy choices that can underpin decisionmaking.

Equity in food systems and outcomes is a cross-cutting theme.

IMMANA places particular importance on research which brings together expertise across sectors, including agriculture, food systems, environment, water, sanitation, nutrition and health, and between disciplines including economics, sociology, anthropology, agricultural science, nutrition, epidemiology, geography, psychology, physiology, gender studies, and political science. We are

interested in applications proposing innovative use of quantitative, qualitative or mixed methods development as long as they can demonstrate practical potential to address programmatic and development needs specifically addressing the nexus between agriculture-food systems and human nutrition and health.

## **2.3 Budget and Duration of IMMANA Grants**

There will be two funding rounds (Rounds 3 and 4) for the IMMANA Phase 2 grants. Each IMMANA grant will be a maximum of **£250,000** and up to **8 grants** are expected to be awarded through a competitive selection process in each round. Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size and duration of each award will also vary. **All budgets should be submitted in pound sterling (£)**.

The maximum duration for each awarded grant is **two years** with an estimated start date of 1 December 2020 for Round 3 and 1 January 2022 for Round 4. All awarded IMMANA grants must be completed by 31 December 2023. Detailed timelines are set out under Section 3.3.

## **3. Application Process**

### **3.1 Eligibility**

Applicants must demonstrate the ability to conduct research to international standards of excellence in the topic proposed. Researchers and institutions from both developed countries and LMICs are eligible. The panel particularly welcome proposals that demonstrate strong partnerships, and the contribution they would make to further advance scientific capacity of partners from LMICs. The roles and responsibilities of all named applicants should be defined accordingly, together with a description of the added value arising from the bringing together of complementary expertise and partnerships.

Applicants may submit more than one application, provided each application is scientifically distinct.

The **concept memo** asks applicants to describe the proposed research and how it would address the aims of the programme, comprising the following elements:

- A description of the specific metric, tool or methodology the proposed project aims to develop, including how it builds on, or is distinct from, existing metrics, tools and methodologies
- A description of the way in which the proposed metric, tool or methodology will improve understanding of the complex linkages between agriculture-food systems, nutrition and health
- Its developmental relevance and pathways to scale-up and uptake, how the development and application of the metric, tool or methodology will be of interest and direct relevance to LMICs; for projects proposing validation of existing innovative methods, metrics or tools, a clear articulation of its demand and pathways to scale-up is required
- Collaborative approaches and partnership mechanisms to support the development or use of innovative methods and metrics cutting across disciplines and sectors and to strengthen research capacity in LMICs
- A brief description of the scientific significance of the research and rationale
- A summary of the research to be carried out, its scope, objectives and a brief overview of methods or approaches to be employed.

An indicative timeline and a summary of the funding required, in British pounds sterling (£), by the participating institutions, should be provided and should include estimates of each institution's costs under the following headings:

- Direct costs of the research staff (salary and salary-related costs), consumables, travel, equipment etc.
- Associated indirect and estates costs or overheads.

All applicants must be able to satisfy the published terms and conditions - a draft set of terms and conditions are published on the IMMANA Grants website; and a revised and final version will be made available with full invitation to the proposals. We highly encourage all applicants at the concept memo submission stage to ensure that the lead organization is able to meet the draft terms and conditions as these are non-negotiable.

### **3.2 Eligible Costs**

Funding may be requested for all research costs that are attributable to the project, including, for example:

- Salary costs for research staff
- Data collection
- Standard class travel related to implementation of the proposed research
- Publication costs (see end of document for information about Open Access costs)
- Equipment
- Attendance at the Agriculture, Nutrition and Health Academy annual conference held alternately in Asia and Africa (mandatory for one representative from each IMMANA Grant for the duration of the grant – this should therefore be included in the budget)
- Overhead costs these will be evaluated for value for money on a case-by-case basis at the full proposal stage and overheads cannot exceed 15% of the total grant budget
- Inflation is permitted for salaries only and this is capped at a maximum of 3% per year.

All applications will be scrutinised for value for money.

## **3.3 Timelines**

#### Round 3 (subject to minor changes)

Live webinar session	19 <sup>th</sup> November 2019
Submission of concept memos	15 <sup>th</sup> December 2019
Invitations to submit full proposals	30 <sup>th</sup> January 2020
Submission of full proposals	15 <sup>th</sup> April 2020
Notification of awards	1 <sup>st</sup> October 2020
Grants start	1 <sup>st</sup> December 2020

#### Round 4 (subject to minor changes)

Submission of concept memos	15 <sup>th</sup> January 2021
Invitations to submit full proposals	28 <sup>th</sup> February 2021
Submission of full proposals	20 <sup>th</sup> July 2021
Notification of awards	1 <sup>st</sup> November 2021
Grants start	1 <sup>st</sup> January 2022

## 4. Proposal Submission

The application and assessment process will comprise the following stages:

- Open call for concept memos
- Invitations to short-listed applicants to submit full applications
- Selection of successful proposals by an interdisciplinary and inter-<u>Independent Panel of</u>
  <u>Experts</u> and approved by the <u>IMMANA Steering Committee</u>

In order to successfully complete the proposal submission, the following steps will be required:

- Download a concept memo template which includes a case for support and indicative budget (available on the <u>IMMANA Grants webpage</u>). Please keep to within the word limits for each question. Proposals that are not submitted in the correct format will not be accepted.
- 2. Complete the template offline
- 3. Complete the online form (applicants to complete basic questions about the proposed project and individuals involved) available on <u>Submittable- the grants online submission platform</u>.
- 4. Upload the completed concept memo in the online form.



**Concept memos for Round 3 must be submitted by 15 December 2019 by 23.59 GMT** and late submissions will not be accepted. Applicants must submit their application using the online form, email submissions will not be accepted.

## **5. Selection process**

The potential of the research and its overall impact will be an important criterion in the assessment of proposals. The proposed research is expected to generate *innovative and high-quality methods, metrics and tools for application in the short to medium term for improving agriculture-food systems' contributions to nutrition and health in LMICs*. The research is expected to generate global public goods, publications in high quality scientific journals and a suite of research uptake products such as tool kits, methodological guidance, tutorials and policy engagement. The applicants and coapplicants are expected to have a demonstrable capacity to deliver high quality research in the relevant areas.

### **5.1 Review of concept memo**

At the concept memo stage, the applications will be assessed in two steps. The first step will involve an eligibility check to be followed by an assessment using the criteria described below. Concept memos that successfully pass both stages will be invited to submit a full application. During the eligibility stage of the assessment, the concept memos will be assessed against the following criteria in 'yes/no' manner whereby all criteria must be met for a concept note to be evaluated further:

- The proposed research project contributes to improved understanding of the linkages between agriculture, food systems and nutrition in LMICs.
- The proposed research project focuses on newly developing or validating an innovative metric, tool or methodology.
- The proposed research project demonstrates strong partnerships across disciplines, and countries, and the added value that would be created by the proposed partnership.
- The proposed research project demonstrates the ability to conduct research at an international standard of excellence in the topic proposed.



The concept memos that pass the eligibility check will be evaluated against the following criteria:

#### Criteria

#### 1. Innovation

Does the proposed research represent a new and imaginative approach to measuring and understanding how agriculture and food systems affect nutrition and health? Does the research involve the development of new or validation of innovative methods, metrics or tools? Does the application propose integration of existing methods into new tools, or the application of existing methods, metrics and tools in a novel way that improves and extends their utility?

#### 2. Scientific excellence and originality

Is the proposed research potentially of very high quality in relation to the highest international standards of scientific excellence in all of the sectors and disciplines that it includes? Would the project add value to existing research on the topic of the proposal? Are the methods proposed sound and is the proposed research feasible within two years?

#### 3. Development relevance

Does the proposed research address issues that present significant challenges to agriculture and food systems for improved nutrition and health in LMICs? Are the anticipated development outcomes and possible pathways to impact clearly and convincingly articulated? Have gender and other equity issues been mainstreamed in project design and objectives?

#### 4. Translational value

Translational value of the metrics, tools and methodologies to the research and/or communities: What are the pathways to uptake? Will the proposed metric, tool or methodology be of immediate relevance and interest to scientific and policy communities? Will the proposed metric, tool or methodology be validated and in a format that is readily available to other researchers or practitioners? Will the proposed metric, tool or methodology be simple and cost-efficient enough to allow a range of researchers and practitioners in LMICs to use it in research and/or programme evaluation? For proposals seeking to validate existing methods, metrics or tools, a clear articulation of demand for validation is needed.

#### 5. Collaborative approaches

The collaborative and interdisciplinary nature of the research proposed: Does the proposed research convincingly bridge the gap between the measurement of agriculture and food system processes and the measurement of nutrition and health outcomes? Does the research make a convincing argument for its selection of methods and approaches and how they will be integrated? Are there satisfactory partnership mechanisms to support inter-sectoral or interdisciplinary understanding and collaboration? How strong are the LMIC partnerships?

Assessment of concept memos will be undertaken by IMMANA project management with oversight by the Chair and Co-Chair of the Independent Panel of Experts. Each criterion is equally important and will receive a score between 1 (not competitive) and 5 (outstanding). Only concept memos with scores which are both high overall and well balanced between criteria will be invited to submit a full proposal. Due to the volume of applications we receive we will not be in a position to provide individual feedback to unsuccessful applicants at the concept memo stage.

### **5.2 Review of Full Applications**

The assessment criteria for the full application will remain the same as the initial concept memo stage and full applications will be subject to a peer-review process. The Independent Panel of Experts will assess full proposals and the peer-review reports and then recommend applications for funding. The IMMANA Steering Committee is responsible for approving the Panel's recommendations for funding.

## 6. Dissemination, Data Sharing and Intellectual Property

Information about research funded through IMMANA Grants will be made available publicly on the <u>IMMANA website</u>. Recipients of grants will also be required to provide information about their projects for UK Aid's <u>Research for Development portal</u>. Grant holders will be asked to collaborate with the funders and IMMANA project partners on research uptake and dissemination activities, which may include, among others, presentations at seminars and conferences, blogs, interviews and opinion pieces (format to be agreed).

Grant holders will be expected to promote the dissemination of the results of their research as widely as possible, based on the premise that publicly-funded research data are a public good, produced in the public interest, and should be made openly available to other researchers in a timely manner to the maximum extent possible. As well as scientific communication, emphasis is placed by the funder on engagement with potential users and beneficiaries of research, and the route to application of its outcomes. Consideration of possible pathways to impact will form an important element of the assessment of proposals.

All intellectual property rights for all materials (including but not limited to reports, data, designs, whether or not electronically stored, and technologies) produced by the investigator(s) or the

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investigators' personnel, and arising from research funded through the Grant, will be the property of the investigators' institution(s). The investigators' institution(s) will grant to the funders of the programme, if requested, a world-wide, non-exclusive, irrevocable, royalty-free license to use all such material. However, if investigator(s) wish to apply for a patent for a particular application arising out of the information, they may request that publication of data is withheld until the patent has been granted. After that time, the data must be made freely available. The funders should be consulted about any request of this kind at an early stage, and any license(s) granted must be managed in a way that is consistent with the core principles of Global Access, i.e. that the findings of the research would be disseminated promptly and broadly, and that products and technologies arising from the knowledge gained would be made available and accessible at a reasonable cost to people most in need in developing countries.

All projects will be required to comply with UK Aid's <u>Open and Enhanced Access Policy</u>, as well as Bill & Melinda Gates Foundation <u>Open Access Policy</u>. Applicants are required to include an Access and Data plan in their proposal. UK Aid, Bill & Melinda Gates Foundation and IMMANA are also partners on the <u>Global Open Data for Agriculture and Nutrition</u> (GODAN) initiative that seeks to support global efforts to make agricultural and nutritional data available, accessible, and usable for unrestricted use worldwide.

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