



Innovative Methods and Metrics for
Agriculture and Nutrition Actions

**IMMANA
Call for Applications
Round 4**

**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)



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The
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Of
Sheffield.

LCIRAH

The London Centre for
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1. Funding Opportunity

1.1 Background

With just about a decade to realise the Sustainable Development Goals, making agriculture and 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 and 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 other aspects.

The last decade has seen a proliferation of studies assessing the nature and magnitude of these relationships between agriculture and food systems and nutrition ⁽¹⁻³⁾. 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 and food systems can impact nutrition and health outcomes of populations across diverse contexts ^(4,5).

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⁽⁶⁾. Over the past six 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 awarded 27 Fellowships to early career researchers who are already shaping the science and policy landscape in their countries. Finally, the Agriculture, Nutrition and Health (ANH) Academy has grown exponentially, with over 3,800 members from over 100 countries, predominantly in Africa and Asia.

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 and 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 and 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 through the Foreign, Commonwealth and Development Office (FCDO) and the Bill & Melinda Gates Foundation. IMMANA is a partnership between the London School of Hygiene & Tropical Medicine, Tufts University, The University of Sheffield 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 cutting-edge methods and metrics.
3. 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**:

- [IMMANA Competitive Research Grants](#) to develop *new, and validate existing* methods and metrics at the nexus of agriculture and 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 [ANH Academy Weeks](#) 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, you can join the Agriculture, Nutrition and Health Academy, and participate in its conferences, meetings and working groups. To find out more please go to [ANH Academy website](#).
- If you are an early-career researcher who wants to improve your 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 [IMMANA Fellowships webpage](#).
- 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 [IMMANA Grant](#).

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: immana@lshtm.ac.uk.

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 systems and their nutrition and health interactions of importance in LMICs. We are particularly interested in the following types of proposals:

1. Proposals for validation (in the broadest sense) 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.
3. 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, nutrient adequacy, 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 parameters or indicators used for measurement, comparison or tracking performance (for example, the [Women's Empowerment in Nutrition Index](#), or the [Household Water Insecurity Experience Scale](#)).

A **tool** is a vehicle or aid to collect information and data to arrive at the metric or aid decision-making (for example, [accelerometers to measure energy expenditure](#); interactive platforms such as [Optifood](#), 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 its 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 impact**. Target **stakeholder groups** and **research uptake** outputs and activities must be included.

Proposals must demonstrate **equitable partnerships with LMIC institutions**, including but not limited to project governance, decision-making, responsibilities and resources. 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 proposals that address the objectives outlined above, based on the priority topics and selection criteria explained in the sections below. We are specifically *seeking proposals that align with findings in the IMMANA Evidence and Gap Map* - whether development of new methods, metrics and tools; or their validation, theory-testing, and/or novel application. However, we will also consider other topics that have a well-justified potential to expand the [IMMANA Grants portfolio](#).

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

2.2.1 IMMANA Evidence and Gap Map: 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 and 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 [here](#).
- The interactive Evidence and Gap Map can be found at [here](#).
- There are additional resources and guidance documents provided [here](#).

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 field. However, many reports employ the same or similar methods, tools and metrics. In this Evidence and Gap Map, ‘filters’ can be used to select groups of individual innovations in methods, metrics and tools, as well as additional categories and sub-themes of tools, metrics and methods. Filters can be selected to show all corresponding reports.

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

populate the Water, Sanitation and Hygiene (WASH) thematic ‘domain’ (rows in the Map). However, the majority of reports in the cell at the intersection of methods and WASH are about crop 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.

Box 1.2: Key gaps in thematic domain

- Shocks, humanitarian contexts, emergencies, fragile states
- Long-term vulnerability and fragility, migration, displacement
- Food system governance, political economy, norms and values
- Trade, markets and value chains for nutrition and health outcomes
- Conflicts of interest and power in food system, food industry, corporate engagement (commercial determinants of health)
- Equity and inclusion
- Pandemics and nutrition

We request that applicants explore [the interactive Evidence and Gap Map](#) to inform the focus and justification of their proposals.

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

- Study designs
- Participatory research methods
- Qualitative methods
- 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

Given that this is the final round of IMMANA Grants, we especially encourage applications focused on the gaps indicated in Boxes 1.2 and 1.3. Below is a list of *indicative examples* drawing from the IMMANA Evidence and Gap Map:

- Research designs, metrics and tools to further the understanding of food systems-nutrition interactions and dynamics in contexts impacted by humanitarian emergencies, and/or ongoing conflict or fragility, for instance in the context of pandemics such as COVID-19.
- Research designs, metrics and tools to study longer-term stresses and vulnerability (economic, political, environmental, migration) in relation to agriculture and food systems, and (equity in) dietary change and/or other nutrition outcomes.
- System-level ways to measure and monitor evolution of food systems, trade, markets and value chains as they relate to dietary changes (or dietary quality) and 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 diet, nutrition, and 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 field; participatory and inquiry-led methods.
- Innovative methods to assess trade-offs between policy choices that can underpin decision-making. As examples, these could focus on trade-offs between health, economic and environmental outcomes; cost and income for food producers and nutritional value for consumers; taxes and tariffs that benefit some sectors, producers or consumers but disadvantage others; or policies that potentially exacerbate inequity.

Given the current [IMMANA Grant portfolio](#), the results of the IMMANA Evidence and Gap Map and other initiatives dedicated to some of these topics, we will only consider **validation** proposals in these areas which are of *exceptional value proposition and quality*:

- ICTs (specifically mobile based applications relating to food consumption)
- Women’s empowerment metrics and methods (except gender equity metrics)
- Food consumption metrics and methods
- Food environment metrics and methods
- Food choice/dietary behaviour
- Use of cameras and phones to measure care giving, dietary intake, time-use

IMMANA places particular importance on research which brings together expertise across sectors, including agriculture (including land and water dwelling plants and animals), and allied sectors, food systems, environment, water, sanitation, nutrition and health, and between disciplines including economics, sociology, anthropology, agricultural science, nutrition and health sciences, 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 and food systems and human nutrition and health.

2.3 Budget and Duration of IMMANA 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 January 2022. All awarded IMMANA grants must be completed by 31 January 2024. Detailed timelines are set out under Section 3.3.

3. Application Process

3.1 Eligibility

In order for applications to be deemed eligible, they must fulfil the following criteria:

- 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 as lead institutions.
- Fall within the IMMANA objectives outlined in Section 2.1 or within one of the priority themes/topics outlined in Section 2.2.
- Demonstrate strong and equitable partnerships. Concept notes must clearly show meaningful, collaborative relationships with LMICS evidenced by management and scientific contributions, and capacity and learning exchange. 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 brief description of the scientific significance of the research and rationale.
- Its research uptake plans and pathways to impact; 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.
- A description of collaboration and partnership mechanisms to create truly equitable research group, project activities and outputs.
- A description of the interdisciplinary and multi-sectoral aspects of the project and ways in which it will strengthen research capacity in LMICs.
- 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 organisation 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.

Timelines

Round 4 (subject to minor changes)

Release of RFP	11 th November 2020
Round 4 webinar	26 th November 2020
Submission of concept memos	21 st January 2021
Invitations to submit full proposals	15 th February 2021
Submission of full proposals	10 th May 2021
Notification of awards	1 st November 2021
Grants start	1 st 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-[Independent Panel of Experts](#) and approval by the [IMMANA Steering Committee](#)

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

1. Download a concept memo template which includes a case for support and indicative budget (available on the [IMMANA Grants webpage](#)). 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 [Submittable- the grants online submission platform](#).
4. Upload the completed concept memo in the online form.

Concept memos for Round 4 must be submitted by 21 January 2021 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 and 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 co-applicants 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 a 'yes/no' manner whereby all criteria must be met for a concept note to be evaluated further:

- Demonstrates the ability to conduct research at an international standard of excellence in the topic proposed.
- Falls within the IMMANA objectives outlined in Section 2.1 and/or within one of the priority themes/topics outlined in Section 2.2.
- Demonstrates strong and equitable partnerships. Concept notes must clearly show meaningful, collaborative relationships with LMIC researchers evidenced by management and scientific contributions and capacity and learning exchange.

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

Criteria
1. Innovation
For Development proposals To what extent does the proposed research present a new and creative approach to measuring and understanding how agriculture and food systems affect diets, nutrition and health? Based on the proposal and your expertise, is the proposed research different from– and likely to be an improvement over - existing metrics, tools or methods? Does this proposal seek to fill gaps identified in the IMMANA Evidence and Gap Map and priorities identified in the RFP?

OR For Validation/Application proposals

Is there a clear justification of demand for the validation/application of the proposed metric, tool or method? Does the application clearly explain and justify why and how their process of validation or application is novel, needed and useful? Does this proposal seek to fill gaps identified in the IMMANA Evidence and Gap Map and priorities identified in the RFP?

2. Scientific excellence**2.1 Rationale**

- To what degree will this project add value to existing research on the topic of the proposal and fill research gaps?
- To what extent is the proposed research justified in relation the IMMANA Evidence and Gap Map and/or IMMANA objectives?

2.2 Methodology

- Are the proposed research methods clearly described and appropriate for the questions to be answered? Is the proposed research demonstrably of highest international standards of scientific excellence in all of the sectors and disciplines that it includes?
- Have gender and equity considerations been clearly articulated in the research proposal?
- Is the proposed research feasible within two years with requested resources?

3. Research uptake plans and pathways to impact

How well has the proposed research project planned to assess and promote adoption and transferability of the tool, metric or methodology? To what degree does the proposal demonstrate a feasible and realistic plan to assess and disseminate lessons learned and considerations for uptake or transfer? Has the project clearly targeted specific stakeholder groups for uptake and set out concrete measures to engage them? Is there any evidence of stakeholder demand and expressed interest to use the potential results and outcomes?

4. Collaboration

- 4.1 Is there evidence in the proposal of strong LMIC and equitable partnerships? Does the proposal reflect equitable partnerships with LMICs institutions including but not limited to project governance, decision-making, responsibilities and resources? Are there satisfactory partnership mechanisms to support equitable collaboration? Is there evidence of structures and work allocation that will support equitable partnerships?
- 4.2 Is the application interdisciplinary in both expertise and proposed methodology? Does it involve two or more disciplines and sectors and does the methodology explicate how these disciplines will be drawn upon in developing or validating the tool, methods and metric proposed? Do the methodology, resource allocation and team reflect this?

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 publicly available on the [IMMANA website](#). Recipients of grants will also be required to provide information about their projects to the Foreign, Commonwealth and Development Office (FCDO) [Research for Development portal](#). 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.

Intellectual property rights for all materials (including but not limited to reports, data, designs, whether electronically stored, and technologies) produced by the investigator(s) or the 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 FCDO's [Open and Enhanced Access Policy](#), as well as Bill & Melinda Gates Foundation [Open Access Policy](#). Applicants are required to include an Access and Data plan in their proposal. FCDO, Bill & Melinda Gates Foundation and IMMANA are also partners on the [Global Open Data for Agriculture and Nutrition](#) (GODAN) initiative that seeks to support global efforts to make agricultural and nutritional data available, accessible, and usable for unrestricted use worldwide.

7. References

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