

GCRF collated Input Summary and Recommendations

V3: updated 13 November 2017 – clarification of comments/priorities

The briefing information had included an initial plan to have a 5 day meeting with 4 research themed days (enabling appropriate researchers to drop in for a single day if it fits their expertise and interests) and one day for the core group (unidentified as yet) to write up scoping ideas and recommendations.

Committee Members were asked to consider what themed days should be considered and whether an alternative meeting structure should be considered.

Contributions have been compiled and sorted into 3 main categories

1. Suggestions of Topics/Themes that may be appropriate under GCRF with names of active researchers in this field (Topics/Themes/People)
2. Suggestions of different approaches models that may be appropriate for Mathematical Sciences and GCRF (Approaches)
3. Details of work (across the UK and overseas) that is underway. (Details of work)

We've attempted to collate this in the attached excel file. It is supplemented with some separate documents.

Below is a brief summary of the input and some **provisional** recommendations/options/actions as a result.

Topics/Themes/People

The list of potential topics is wide-ranging and it is beyond the scope of the meeting to cover all these themes.

Depending how you look at it, you can argue that the topics fall into two camps (1) sustainability and resilience, (2) dealing with threats.

Breaking it down further we get:

1. Healthcare, disease and epidemiology
2. Economy: sustainable agriculture, energy, water supply etc.
3. Physical Environment: climate change (effects and mitigation), air pollution, environmental hazards
4. Social Environment: disaster management systems, traffic, phones, fair resource management corruption.

Within topics 1) and 2) the feedback made consistent reference to specific areas of research that should be the priority. For topics 3) and 4) there was a wide range of possible areas mentioned and as a result no clear consensus regarding which the priority areas should be. Accordingly, the subjects to be covered under 3) and 4) are slightly less obvious at this stage.

From a practical point of view, it is recommended to have 3 themed/targeted days as part of the meeting.

Based on the collated feedback we have come up with 2 options. Both options involve a Healthcare, disease and epidemiology day as this featured so prominently in the feedback.

Option 1 – Themed by Research Areas

- i. Healthcare, disease and epidemiology and Economy (multiple suggestion, lots of names and recognised expertise)
- ii. Networks (multiple suggestion, lots of expertise – less focus in this application area)
- iii. “Sustainable” – covers a wide range of topics – pick one and use as an exemplar.

Option 2 – Themed by Application Area

- i. Healthcare, disease and epidemiology and Economy (established area – so consideration of what works and what is still needed)
- i. Physical Environment
- ii. Social Environment

Both approaches have merit (and disadvantages). We wondered whether the committee has a strong preference. Action – Committee to provide feedback on preferred Option by 10/11/17

Whatever option we go with there will be topics mentioned/suggested that are not covered. It may be appropriate to leave space in the meeting agenda – to cover some of these (e.g. Big Data – we could find out what the ATI is planning to do and report on what that is and identify who in the wider community should be involved).

Recommendation 1: Meeting has 3 themed days (see Options 1 and 2), and room in the agenda to discuss/highlight other activities

Approaches

There were numerous recommendations to consider overseas models and learn from other organisations/schemes (e.g. AIMS/ISP). There was a strong case, based on input from mathematicians with experience of teaching in Africa that one of the themes of the planned meeting should be on capacity building in mathematics and statistics in LMIC. GCRF is linked to economic development and growth. As a result, GCRF funded activities are likely to be aligned to specific areas. However, it would be useful to have a discussion about GCRF and capability and how it can complement schemes e.g. AIMS. If we could establish clarity on GCRF and capability building that would be a very useful output of the meeting.

Recommendation 2: How we can build capacity and expertise should be built into the agenda for each of the themed days. In addition, at least 1/2 day of the meeting should be focused on the general capability building themes/issues raised here. The day could include presentations on other UK/Overseas models and lead into a discussion regarding GCRF and how capability building fits in. We could attempt to get someone from GCRF to provide clarity.

Details of work

The contributions have highlighted the relevance of mathematical science to GCRF. If achievable (without too much effort) the compiled info should be kept up to date and used in the meeting write up to highlight efforts/relevance in the area. Some of the contributions were themed by GCRF objectives and it would be useful if this (time permitting) could be applied to the entire list.

Recommendation 3: compiled details of work that is happening should be updated and summarised in the final reporting.

Meeting Structure

Some considerations for 2018 meeting

- Want to balance capture wide range of views and having strong meeting focus.
- Anticipate small group of people who attend all 5 days.
- Scope for people to attend for theme days only (there will be some repetition due to need for scene-setting etc.)
- Ideally write up/recommendations and action planning will occur during the meeting
- Funding limited and want to maximise participation of delegates from relevant countries
- Timescales for visas etc. will be challenging
- Want clear outputs, ideally action plan for each themed day and Capacity Building Topic

Provisional Meeting Structure

Day 1

Morning

- 1) Scene Setting
- 2) Brief Intro to the topics for the 3 themed days
- 3) Other Work/Research to be aware of
 - a. i.e. Topics not covered in themed days but relevant to GCRF
 - b. e.g. ATI work in this area

Day 2 Themed Day (e.g. Healthcare, disease and epidemiology and Economy)

- 1) Overview of Problem
- 2) Overview of Research
- 3) Where could GCRF fit in
- 4) Building Capability and Expertise
- 5) Action Planning

Day 3 Themed Day (e.g. Networks OR Physical Environment)

- 1) Overview of Problem
- 2) Overview of Research
- 3) Where could GCRF fit in
- 4) Building Capability and Expertise
- 5) Action Planning

Day 4 Themed Day (e.g. Sustainability or Social Environment)

- 1) Overview of Problem
- 2) Overview of Research
- 3) Where could GCRF fit in
- 4) Building Capability and Expertise
- 5) Action Planning

Day 5 – Write Up and Wrap Up

- 1) Capability Building and GCRF
- 2) Summary of Days 1-4
- 3) Action Planning/Next Steps
- 4) Time for Write Up