

ALLIANCE COUNCIL MEETING

Meeting Room 101, International Congress Centre, Tsukuba, Japan

Tuesday 29 August – Wednesday 30 August 2017

Meeting Report

OVERVIEW

The seventh Global Research Alliance on Agricultural Greenhouse Gases (“the Alliance”) Council meeting took place on Tuesday 29 and Wednesday 30 August 2017 in Tsukuba, Japan. Following the meeting, an international symposium on Agricultural Greenhouse Gas Mitigation was held, jointly hosted by the Japan International Research Centre for Agricultural Sciences (JIRCAS) and the National Agriculture and Food Research Organisation (NARO). A field trip was organised on the Friday to visit the Institute of Agro-Environmental Sciences (NIAES), NARO and its free-air CO₂ enrichment facility.

Japanese State Minister of Agriculture, Forestry and Fisheries, Mr. Yousuke Isozaki opened the meeting on Tuesday morning and welcomed all delegates to Japan.

This report is a summary of the key discussions and outcomes from the meeting.

PARTICIPANTS

The meeting was attended by 74 representatives from 27 countries and invited guests:

- **Alliance Members attending:** Argentina, Canada, Chile, China, Egypt, France, Germany, Ghana, Indonesia, Italy, Japan, Lithuania, Malaysia, Mexico, the Netherlands, New Zealand, Philippines, South Africa, Spain, Sri Lanka, Switzerland, Thailand, United Kingdom, Uruguay, the United States of America, Viet Nam, Zimbabwe.
- **Alliance Members unable to attend:** Australia, Belgium, Bolivia, Brazil, Colombia, Costa Rica, Denmark, Dominican Republic, Ecuador, Finland, Honduras, Ireland, Nicaragua, Norway, Panama, Paraguay, Peru, Poland, Republic of Korea, Sweden, and Tunisia.
- **Observer Countries:** Guinea, India, Kenya, Rwanda, Senegal, Tanzania
- **Invited Partners attending:**, CGIAR-CCAFS, CGIAR - IRRI, UNEP-CCAC, FAO
- **Other invited organisations attending:** WBCSD, GAA, ADB
- Refer to Appendix 1 for a full participants list.

KEY OUTCOMES OF MEETING AND ACTION POINTS

Outcomes
Council
<i>Germany</i> confirmed as incoming vice-chair.
Encourage GRA members to consider being the vice-chair from 2018.
Proposal from Germany to host a GRA conference. Council Chair and Vice-Chair to work with Secretariat to prepare a concept note to describe the conference (multi-stakeholder) to take a decision as soon as possible and consult members and partners.
GRA Flagships – Confirm the four GRA Flagships as presented, subject to agreed actions.
Invitation for GRA members participate in the GHG Nexus initiative to link ERAGAS and SusAn to the GRA Flagships. Secretariat to send detailed information to members following the meeting.
Members encouraged to participate in joint programming, utilise existing mechanisms such as APEC, GCF, regional platforms (e.g. INIAs) to align research agenda with GRA.
Priority actions related to on-farm adoption of practices and technologies: circulate report of discussions and consider how to update Strategic Plan accordingly.
Research Groups
Call for expressions of interest from members for the role of 3 rd Co-Chair for the Paddy Rice Research Group and the Livestock Research Group. Secretariat to provide Terms of Reference and interested members to contact Research Group Co-Chairs.
Request for a member to support coordinators to lead Networks (e.g. the Animal Health Network). Interested members to contact RG Co-Chairs.
Research Group Co-Chairs will work with the Secretariat to develop an inventory of capability building needs.
Research Group Co-Chairs will work with the Secretariat to conduct survey of possible fellowships from members and partners, e.g. post-doc opportunities to support implementation of Flagships.
Research Groups to develop a more integrated cross-group approach to capability building.
Partners
GRA Secretariat to re-issue invitations to the Asian Development Bank and International Fund for Agricultural Development to be partners of the GRA.
Accepted the request for partnership from the International Soil Reference and Information Centre (ISRIC).
GRA will pursue partnerships (send invitation letters) with the following organisations: Global Agri-business Alliance (GAA) World Business Council on Sustainable Development (WBCSD) Sustainable Agriculture Initiative Platform (SAI Platform)

International Fertiliser Development Centre (IFDC)
Caribbean Agricultural Research & Development Institute (CARDI)
Forum for Agricultural Research in Africa (FARA)
Secretariat
Continue with regional GRA Council teleconferences.
Remove the members area from the GRA Website to open access.
Consolidate the priority actions in Strategic Plan, and update to include actions from this meeting and on Flagships.

SUMMARY OF DISCUSSIONS

OPENING REMARKS

1. State Minister of Agriculture, Forestry and Fisheries, Mr Yousuke Isozaki, opened the meeting and noted the outcomes of the Paris Agreement which aims to limit the warming of global temperatures 2°C. The 5th assessment report produced by the Intergovernmental panel on Climate Change (IPCC) has shown without a doubt that warming is occurring and that agricultural activities and deforestation contribute to this. It is important that together we continue to seek mitigate the contribution of agriculture to this rise in global temperatures.
2. Japan has been member of the Alliance since it was launched in 2009, and has been active in the Vice-Chair role, appointing Dr Masa Iwanaga, President of JIRCAS. Japan has led the Paddy Rice Research Group since the establishment of this group and supported the collaborative activities of this group. To promote a better understanding of agricultural greenhouse gas mitigation research and practices Japan invited all participants to attend the “JIRCAS-NARO International Symposium on Agricultural Greenhouse Gas Mitigation” and exchange views with Japanese scientists, policy makers and students.
3. As outgoing Chair, Hector Cortes Gomez-Rueda Minister-Counsellor at the Embassy of **Mexico** in Japan congratulated Japan for assuming the Chair and wished it well for its term of Chair.
4. As Chair of the 7th Council meeting Dr Iwanaga began by noting that Japan is strongly supportive of the Alliance and is determined to facilitate the Alliance mission. Japan has placed a strong emphasis on growing participation in the Alliance and has invited several observer countries and potential partners to the meeting. The Alliance has an ambitious strategy with clear objectives, four strong working groups that will continue to grow as the Flagships develop, it is important that we continue to support the Research groups and Flagships through the development of joint programming and supporting actions in the Alliance strategic plan.

PREVIOUS COUNCIL MINUTES AND IDENTIFICATION OF THE NEXT CHAIR

5. The minutes from the previous Alliance Council meeting in Mexico City, Mexico were reviewed and approved. The agenda for the 2017 Council meeting was then adopted by Members.
6. Prior to the meeting the Council had been informed that Germany was willing to become the Vice-Chair and host the 2018 meeting of the Council. There was strong support from Members for Germany’s nomination.

7. Dr Hartmut Stalb, Head of Research and Innovation, Federal Ministry of Food and Agriculture, Germany, began by noting that Germany as a founding member of the Alliance looks forward to increasing participation in Alliance activities. The Paris agreement had raised the awareness of the Challenges we are facing from climate change higher than ever, especially in the areas of agriculture and food security. The German government is participating in regional and global level activities and has just launched a national research call. Germany is supporting the organisation of COP23, to be held in Bonn later this year and planning for COP24. Research institutes in Germany cover a broad range of relevant topics, and some are already involved in the Flagships, but Germany will be encouraging a greater participation from researchers in the Alliance's work.

ANNOUNCEMENTS FROM MEMBER COUNTRIES

8. **Japan** would like to see better coordination of initiatives related to agricultural greenhouse gas research to make the biggest impact toward reaching the goals of the Paris Agreement. To meet this objective, Japan hosted a side event (G7 follow-up meeting) at COP22 in November 2016 and as Council Vice-Chair participated in a side event at the FAO General Assembly last July. Japan would like to encourage more participation from Asian and African countries in the Alliance and to facilitate this invited 5 countries and the Asian Development Bank (ADB) as observers to the Council Meeting, and supported 5 Alliance Members to attend the meeting as well as hosting an international symposium on agricultural greenhouse gas mitigation following the Council meeting. Japan, in cooperation with New Zealand and Mexico, has applied for funding from APEC to support capacity building activities related to water management in rice and would like to explore the possibility of hosting a side event at COP23 with the Alliance.

9. **Indonesia** has a number of policies to support efforts and funding for activities and capacity building related to the Alliance. Programmes include: climate smart soil management, assessing the impact of climate change on food production systems and pest management, maintaining and enhancing agricultural soils and encouraging sustainable agriculture practices. Indonesia supports all Flagships and was involved in scoping projects that sit under these.

10. **New Zealand** continues to support the annual GRA-WFO study tour, most recently this was held in New Zealand, and involved a workshop that identified ways to improve communication between farmers and scientists. New Zealand will be sponsoring several countries to attend this year's study tour in Rome. New Zealand is also sponsoring a new area of work under CODEX Alimentarius to develop draft guidelines for chemicals present in food at low level, this would include nitrogen inhibitors and methane inhibitors. The guidelines will ensure that new agricultural innovations can be easily adopted by countries. New Zealand is also pleased to announce a new scholarship programme in support of the Alliance. This scholarship is in partnership with GCIAR - Climate Change, Agriculture and Food Security (CCAFS) and will build the capacities of early career scientist's and support flagships. The first call for applications will be announced at COP23 in November.

11. **Netherlands** are organising an Alliance workshop in The Gambia, involving 26 countries alongside a meeting of Africa Rice to share information about the Alliance and encourage membership. The Netherlands is happy to arrange this with support of Switzerland, the Chair of the Alliance and the Special Representative.

12. **Canada** have continued to invest in domestic activities, \$27 million funding is offered to institutes across Canada. Internationally Agriculture and Agri-Food Canada have provided funding to support 'twinning' of domestic research with Alliance activities, and ensure that Canada is effectively leading the Integrative Research Group and Inventory Flagship. Canada's page on the Alliance website has recently been updated to provide details on all current projects and will soon include the most recently funded projects.

13. **China** has a number of activities that contribute to reducing agricultural greenhouse gas emissions. In livestock systems China is implementing control of ammonia emissions (from housed livestock) as part of a livestock and manure strategy. The Ministry of Agriculture has held a series of workshops to address climate change related to greenhouse gas emissions.

14. **Ghana** is strongly backing activities of the Alliance, and has nominated several contacts to be involved in Flagship taskforces. Ghana is open to collaboration in research and development activities and has interests in all Research Groups.

SECRETARIAT REPORT

15. The Alliance Secretariat provided an update to the Group on activities of the Alliance since the last Council meeting, including new Members and Partners and recent improvements to the website.

16. The Alliance now has 48 Member Countries, with South Africa and Zimbabwe joining in the past year. Following the decisions at the last Council meeting the Alliance now works with 14 Partner organisations, the new Partners are: FACCE-JPI, GODAN and FONTAGRO. The Alliance has also become an accredited observer of the IPCC and the Alliance Secretariat is an affiliate to the 4/1000 soil carbon initiative, ensuring coordination of activities between this organisation and the Alliance.

17. The finalisation of the Alliance Strategic Plan provided clear direction to the Secretariat's activities over the last year. To support the strategic plan the 'At a Glance' document was developed as a snapshot to capture our activities to date and to be used as a baseline when revising the strategy in the future.

18. An action of the strategic plan was the establishment of regional teleconferences on a quarterly basis. These calls were initiated so that the Secretariat could report on activities to all members. As the participation from members in these calls had been disappointingly low the Secretariat asked if Members wished to continue with these calls or if another form of reporting, such as emailed newsletters or website posts would be preferred.

19. Recent updates to the Alliance website had provided additional space for each of the four Research Groups to showcase key projects and outcomes. The website now includes a resource library, so that all of the Alliance outputs and documents are located in one place and visitors to the site are easily able to search by document type and research group. As the resource library provides document storage the Secretariat suggested to the Council that all meeting documents and presentations should also be stored in this area. In the interest of open access the Secretariat proposes the member area, which require as login to access, is removed and the publically accessible resource library is used instead.

Decision

- Agree to continue with regional teleconferences, the Secretariat will look for ways to make participating easier and provide earlier notification of the times.
- Agree to place meeting documents and presentations in the Alliance website resource library, and remove the member's area, which requires a login to access, making all information on the Alliance website publicly available.

RESEARCH GROUPS REPORT

20. The Research Group Co-Chairs presented the report of their activities and a revision of their workplan schematic to the Council along with their joint recommendations to the Council regarding the resourcing of Research Groups and their activities, coordination of capability building activities

across the Group, and the way the Research Groups interact with Flagships. The Co-Chairs team met the day before the Council meeting (Monday 28 August) to coordinate activities across the Groups.

21. The focus for the Research Groups has changed to increase capability building activities and support the development of the Flagships and this has been reflected in an updated diagram developed by the Co-Chairs. The diagram depicts how Research Groups and their networks interact with Flagships and capability building activities. These activities ensure that the work of the Research Groups is extended from research, technologies and practices, towards measurement, reporting and verification (MRV) and then to supporting countries to develop national actions. This graduation of actions is achieved through the identification of country needs, involvement of national research organisations and other experts as well as the development of joint programming activities.

Paddy Rice Research Group

22. The Co-Chairs of the Paddy Rice Research Group (PRRG), Dr Kazuyuki Yagi (NIAES, Japan) and Mr Gonzalo Zorrilla (INIA, Uruguay), provided an overview of the group and its activities. The Asia sub-Group will meet on Saturday 2 September, and include a session on the progress of the greenhouse gas mitigation in irrigated rice systems in Asia (MIRSA) project in Indonesia, Philippines, Thailand and Vietnam.

23. Key achievements from the past year:

- FLAR, a Latin America fund for rice research and the Sustainable Rice Platform (SRP) were identified as important new partners for the Group.
- Special issue in soil science and plant nutrition (SSPN) to be published early 2018.
- Development of the Rice Flagship, including expanding the scope of activities.

24. Future activities:

- Research collaboration, awaiting the outcome of funding from the regional Fontagro fund for a project in Latin America.
- Capability development, a proposal has been developed for an activity through APEC, to implement AWD practices in the region.
- Development of MRV guidelines to be published early next year, following on from the rice greenhouse gas measurement guidelines.

25. Mr Gonzalo Zorrilla informed the Council that he will step down from the role of PRRG Co-Chair next year. However, Uruguay is committed to leadership of the PRRG and Mr Alvaro Roel has agreed to return to the position of Co-Chair.

Croplands Research Group

26. Dr Jane Johnson (USDA-ARS) presented on the work completed by the Croplands Research Group (CRG) over the past 12 months. The Group has identified a third Co-Chair, Dr Rosa Mosquera-Losada from the University of Santiago de Compostela, Spain. The Brazilian and Spanish Co-Chairs were unable to attend the Council meeting this year, instead all three Co-Chairs will meet for the first time at the CRG meeting in the U.K. following this meeting.

27. Key Achievements:

- Annual meeting held in Phoenix AZ, USA which was used to build the newly formed networks and develop activities.
- Regular teleconferences set up between Co-Chairs to coordinate activities.

28. Future activities:

- Looking for members to enable and support networks, continuing to develop capacity building through multi-country activities and identifying contributions to Flagships.

Livestock Research Group

29. The Livestock Research Group (LRG) Co-Chairs Dr Harry Clark (NZAGRC, New Zealand) and Dr Martin Scholten (Wageningen UR, the Netherlands) presented on the activities of the LRG over the last year.

30. Key achievements have included:

- Completion of stage one for a joint project with the FAO and Climate and Clean Air Coalition (CCAC) 'Enteric methane for improved livelihoods and food security', involving 13 countries. Funding has now been approved for the second stage.
- Capability building activities in South East Asia on improved greenhouse gas inventory for livestock systems.
- The establishment of a regional network for sustainable livestock production in Latin America and Caribbean.
- A number of research publications.

31. The LRG noted the importance of working with Partner organisations to extend the activities of the group, especially capability building activities.

Integrative Research Group

32. Co-Chairs Dr Jean-Francois Soussana (INRA, France) and Dr Brian McConkey (Agriculture and Agri-Food Canada) presented on the activities of the Integrative Research Group (IRG). The Group held its first annual meeting January 2017 in Rome, Italy with each network developing a work plan of activities. The group is leading two Flagships – Soil Carbon Sequestration, which links with other global soil carbon activities including coordination of International Research Cooperation on Soil Carbon Sequestration in Agriculture (CIRCASA) and the Agricultural GHG Inventory Flagship.

33. Key achievements:

- A comparison of estimated nitrous oxide emissions and yields has been provided by the model inter-comparison project.
- Developing a global scale map that identifies the inputs of organic carbon to soils that would be required to meet international targets.

34. Future activities:

- Identify the management practices with the greatest potential to increase soil carbon.
- Develop a farm database to show greenhouse gas emissions and the soil carbon balance at the farm scale.
- Support upscaling activities for soil carbon and GHG inventories to support national action plans

Joint Recommendations

35. The key themes from the Co-Chairs meeting were presented to the Council as joint recommendations and linked to key agenda discussions:

- Support Co-Chairs through the **resourcing of Co-Chairs teams**, as increasingly more time is required to coordinate Research Groups, their Networks and the contribution to Flagships.

- Also a request from the PRRG and the LRG for Council Members to support a **third Co-Chair** for each of these groups. The IRG and CRG now have three Co-Chairs each, which spreads the resourcing requirements across three countries.
- The Council is requested to **facilitate the Research Group workplans** by identifying and supporting the participation of national research organisations and experts to lead Networks, and arranging and facilitating the development of regional hubs. **Fellowship programmes** could be used to help connect the Flagships with the Research Groups and Networks.
- The **Flagships** process has led to the development of many good projects and initiatives. Developing mechanisms to resource the identified projects is now critical. Members should continue to support collaborative research and suggest new projects. Members support for coordination mechanisms such as the GHG Nexus and CIRCASA is also critical.
- **Capability development** is a very important component of the Research Group activities and the Co-Chairs noted that a more focused and coordinated approach across the Alliance and its Research Groups is needed to get the most benefit from these activities. Members are asked to identify experts that can help to develop and deliver coordinated capability building activities. The Secretariat is asked to set up an inventory of capability building needs, with all members identifying capability building priorities and needs.
- **Partners** are critical for the success of the Research Groups, particularly for capability building activities. Private sector involvement is very important to transfer the research outcomes and knowledge for the Research Groups, particular examples include the PRRG working with the Sustainable Rice Platform (SRP) and the LRG collaboration with the SAI Platform.

Discussion

36. The Council noted that Alliance is not able to support capacity building activities on the same scale as large global organisations, and that these activities should be developed in collaboration with Partners. To have on the ground impact with farmers the Alliance also needs to work with the private sector.

37. Members and Partners agreed that the new framework diagram is very useful to show how the Research Groups have moved from technologies and practices, to measurement and now to consider how these activities support national actions.

38. The Council agreed to support three Co-Chairs for each Research Group, having three countries contributing means that the resourcing and leadership burden can be shared and that regional representation can be considered, as well as succession planning.

Decision

- The Council agreed to support the Research Group request that a third Co-Chair is sought for the Paddy Rice Research Group and the Livestock Research Group.
 - Information will be shared with members with regarding the requirements of this position, including expectations of resourcing from countries wishing to take on the responsibility.
- Request for a Member to support coordinators to lead Networks (e.g. the Animal Health Network).
- Develop an inventory of capability building needs.

- Conduct survey of possible fellowships from members and partners, e.g. post-doc opportunities to support implementation of Flagships.
- Develop a more integrated cross-group approach to capability building, in particular through regional activities.

ALLIANCE FLAGSHIPS

39. Hayden Montgomery, the Alliance Special Representative, presented an overview of the development of Flagships to date and the template which all taskforces had used to develop the Flagship objectives and projects. The Flagships have the potential to be transformative for the Alliance, changing the way we work across the Research Groups, how we coordinate support from Members and work collaboratively with Partners. Flagship project should demonstrate added value, be inclusive to all Alliance Members, and make the work of the Alliance more relevant to other international discussions such as climate change, development and food security.

40. Taskforces were established for each of the four Flagships last year, with all Members given the opportunity to nominate country experts that would develop the Flagship and associated projects. Taskforces were asked to outline the areas of work each Flagship would address and the importance of this work while also demonstrating the links to other activities. The projects developed should identify the resources required (e.g. additional funding, in-kind support, alignment of activities, fellowships etc.) as well as identify potential mechanisms that could deliver the required resources.

41. The detailed information on Flagships had been provided to the Council ahead of the meeting, therefore each of the taskforce leaders presented a brief overview of each project proposals. More detail on each of the proposals may be found in the meeting documents available on the website.

Enteric Fermentation

- a) Adaptation in ruminants for increased productivity and lowered environmental impact.
- b) Improved quantification of the effects of feed and nutrition on enteric methane emissions from cattle managed under a wide range of production conditions and environments.
- c) Relating ruminant diet, methane output and animal production to the rumen microbiome.
- d) Grazing livestock systems.

Reducing GHG Intensity of Rice Systems

- a) On farm assessment of multi-beneficial improved water management techniques, reducing costs, water use and gas emissions in America's rice systems.
- b) Multi-country on-farm assessment of multi-beneficial integrated management techniques in the rice sector of Asia.
- c) Identification of high yielding rice cultivars as related to low methane (CH₄) emissions.

Agricultural GHG Inventories

- a) 'Best practice' guidelines for incorporation of mitigation into national inventories.
- b) Guidance on Inventory Tiers.
 - i. Developing guidance for good implementation of higher Tier methods in national inventories.

- ii. Developing guidance for good implementation of Tier 3 models in national inventories.
- c) Database and Inventory Refinement for GHG Emissions associated with Manure and Nitrogen Management.
- d) Developing guidance for improving emissions from manure management in national inventories.
- e) Towards a national livestock methane database project.
- f) Identifying emissions and mitigation options by mapping analogous production systems.
- g) Establishment of GHG measurement, mitigation, adaptation and inventory Centre in West Africa.

Soil Carbon Sequestration

- a) Crop and pasture practices for soil carbon sequestration: potential and agronomic implications.
- b) MRV for strategies for soil carbon sequestration.
- c) Adoption of practices and socio-economic barriers.

Discussion

42. The Council appreciated the work that had been completed on the Flagships to date, especially the efforts of the Research Group Co-Chairs who had stepped up to lead taskforces. The development of specific projects that contribute to each Flagship have helped to identify what type of resourcing is required, where additional resourcing is required and identified a number of partners we can work alongside.

43. The Council agreed that where multi-partner collaborations already exists we can use the Flagships to extend these activities to other Alliance members. Opportunities such as fellowships should be used to support Flagship Projects.

44. The Council discussed the next steps for the Flagships and how to identify which projects have the leadership, support and resourcing to succeed. The list of projects outlined above is likely to be more than the Alliance can support all at once, Members and Partners will need to indicate their support for specific activities. Countries should also indicate their priority interests even if they have yet to identify the resources to contribute.

Decision

- Flagships – Confirm the four Flagships as presented, subject to below actions:
 - Secretariat to work with Flagship proponents to develop spreadsheet for implementation identifying leads where they exist, where they don't, and types of resources that exist and types of resources required (identify minimum threshold of resources required).
 - Council members to take the responsibility for consulting with other national actors and GRA partners to champion implementation of Flagship projects and promote the mobilisation of resources to support these.

Proposal on a Circular Food System Flagship

45. The Netherlands Representative, Mr Sjoerd Croque, Ministry of Economic Affairs, introduced a new Flagship proposal to the Group on the circular food system. This Flagship would address the limited resources available, including arable land, and ensure that all parts of the agricultural system

are used fully. Circular agriculture optimises the production of biomass and food by closing the loop, reduces the use of non-renewable resources, and improving the way by which we produce food. By applying the approach of the circular economy to agriculture, the residuals and waste of production system are used to produce high quality by-products, which are themselves used to contribute to the food supply. The proposed new Flagship on the circular food system would address the objectives of the Alliance and are linked to activities underway by CCAFS, International Maize and Wheat Improvement Centre (CIMMYT), International Centre for Tropical Agriculture (CIAT), International Livestock Research Institute (ILRI), FAO.

46. A number of members agreed that this was an important issue for consideration, and that it links with the approach now being taken by other organisations and countries. The question of scale was raised, and a suggestion that the concept needs to be border than agriculture as crop residues, livestock and manure are often already returned to the system. It was noted that these processes may already be captured in some existing activities. Meeting participants also asked how this topic was specifically linked to the Alliance and greenhouse gases, more detail was requested on what research topics the circular food system proposal would address.

Decision

- The Council agreed that the concept of a Flagship on the Circular Food System would be developed further. The Netherlands offered to lead the establishment of a taskforce that would identify tangible projects the Alliance expertise would be able to address.
- Members and Partners that indicated they would contribute to the taskforce and the development of Flagship proposals were: Uruguay, Spain, CATIE, Indonesia, Argentina and FAO.
- The Secretariat will facilitate the development of this taskforce, and all Members and Partners will be invited to nominate taskforce participants.

Nitrous Oxide

47. A further Flagship to address nitrous oxide had been proposed at the 2016 Council meeting, and although the clear topic of work to address had not been well developed, there was enough interest from the Council to ask that the Croplands Research Group continue to develop this proposal.

48. The Croplands Research Group has not identified an expert that would have the time to lead a Flagship and taskforce, although the group are still interested in supporting a Flagship. The Co-Chair of the Croplands Research Group asked if the Council still considers this a priority topic, and if so for nominations and resourcing to support the leadership of the taskforce.

49. A number of countries expressed an interest in a Flagship on Nitrous Oxide, and had related research activities and expertise that could contribute to the topic. The Croplands Research Group agreed to discuss this Flagship at the annual meeting (8 September 2017). The leadership is currently open for volunteers.

Decision

- Continue to progress development of a Nitrous Oxide Flagship. The Croplands Research Group will discuss at the next annual meeting (8 September 2017) and all Members and Partners are encouraged to support and contribute to the development of this Flagship.

JOINT PROGRAMMING

50. The Special Representative presented on the mechanisms identified for joint programming that would support Flagship projects, and other activities of the Research Groups and Networks. The

strategic plan includes an action for the Alliance to develop joint programming initiatives, and a working group was established to support this. The intention of joint programming is to have more deliberate and well planned coordination within the Alliance and between the Alliance and its Partners.

51. The Council was provided with the working group paper on joint programming earlier in the year, which some members had previously commented on and indicated which of these mechanisms they would be able to support. The five mechanisms identified were:

- Fellowship Fund (matching priority topics with research fellows);
- Bilateral funding arrangements (collaboration on topics aligned with Alliance priorities);
- Thematic Annual Programming (alignment of existing programmes and sharing data);
- Multi-partner research call (identifying common topics, coordinated timing, intra-national funding); and
- Fund for International consortia (Call on a common topic, coordinated timing, inter-national funding).

GHG Nexus

52. An example of a multi-partner research call that could be extend to support Alliance activities are the European Research Area Network (ERA-NET) co-funds. Two ERANETS related to the work of the Alliance, monitoring & mitigation of greenhouse gases from agri- and silvi-culture (ERAGAS) and Sustainable Animal Production (SusAn), have recently finalised funding decisions. Of the projects awarded funding, seven from ERAGAS and seven from SusAn relate very well to the objectives of the Alliance's Flagships. In fact several projects to receive funding from the ERAGAS co-fund were developed in part through the networks of the Alliance's LRG activities.

53. An opportunity exists for the Alliance to link to these projects and extend them through the inclusion of data from other regions or the expansion of the agricultural systems considered and the expansion of research focus. These additional activities and links to existing projects would form the 'GHG Nexus'. Additional activities would not be covered by the ERA-NET funding already agreed for these projects, and would need to be found before these additional activities could proceed. However, coordination of additional activities to support the existing would be covered by the existing fund. The process to participate in the GHG Nexus is outlined below.

1. Seek interest from Members in participating in GHG Nexus initiative.
2. Identification of interested Members' institutions and associated resource contributions of by late September 2017.
3. Design of additional activities to form part of GHG Nexus by December 2017, through:
 - a) Opportunity for discussions between ERA-GAS project coordinators and interested researchers/representatives from Alliance countries at the 1st ERA-GAS Research Programme Meeting (10th – 11th October, Wageningen, Netherlands).
 - b) Opportunities for discussions between SusAn project coordinators and interested researchers/representatives from Alliance countries at the 1st SusAn Research Programme Meeting (November. Bilbao, Spain).
 - c) Electronic communications.
4. Review and approval of additional activities.
5. Final decision by Members and their institutions on activities to be advanced as part of GHG Nexus – start of 2018.

Discussion

54. The Council noted a number of other existing mechanisms that could be used to support activities of the Alliance.

55. European Commission's Agriculture, Food Security and Climate Change Joint Programming Initiative (**FACCE-JPI**) already includes all European members, the opportunity to make these activities more widely available would be welcome. Suggest that regular workshops could be held to coordinate Alliance and FACCE-JPI activities.

56. The government of Japan is currently considering a new phase of funding for the **MIRSA project** in south-east Asia. If approved this project will involve Vietnam, the Philippines, Thailand and Indonesia and will contribute to the rice and soil carbon sequestration Flagships. An application for funding has been made to an **APEC** fund to support capability building activities in this region.

57. China mentioned a **climate change workshop** including adaptation and greenhouse gas emissions organised by the Chinese academy of agricultural research held in October. The workshop includes participants from the APEC region participants, supported to attend by China. A further workshop is planned for next year.

58. The **CCAC** has funded enteric methane from livestock, is developing a manure management project and has funded projects in rice. The CCAC trust fund is currently open for applications, two page concept notes are due 1st December, although as the activities are developed with the coalition member any additional topic ideas need to be circulated well ahead of December. The CCAC board will announce funding decisions in principle by April 2018, and successful projects will be requested to develop a full proposal.

59. **CCAFS** consider the Alliance as a strategic partner and a number of activities have been developed in partnership. The CCAFS scholarship programme has helped to develop expertise and experience for developing country scientists.

60. **Iberoamerican INIAs annual meeting** coordinates research across Latin American countries and Spain, identifying common strategies and projects, then implement activities through national and regional funding, including **FONTAGRO**. The Special Representative has been invited to participate and develop joint programming activities.

61. **CATIE** would be happy to host fellows of the CLIFF-GRADS programme. Suggest developing a list of funding opportunities available to developing country scientists such as the U.K.'s Global Challenges Research Fund (GCRF) and Germany's DFG.

Decision

- The Secretariat to send out an email to all Council members for those that are interested in contributing to the GHG Nexus.
- All members to consider use of existing mechanisms to support activities of the Alliance.

ON-FARM ADOPTION

62. To start the second day of the meeting the participants were divided into four groups to discuss a key issue from the Alliance Charter and strategic plan that has not previously received much attention. The Alliance Charter includes an aim to *'Improve knowledge sharing, access to and application by farmers of mitigation and carbon sequestration practices and technologies, which can also enhance productivity and resilience'*. The Alliance Strategic Plan also includes three priority actions that are relevant to this aim:

32. *Work with relevant stakeholders, farmers' organisations, GRA Partners, and development agencies that encourage and support the adoption of relevant practices and technologies, to communicate the benefits and impacts of GRA research results.*

34. *Promote the use of improved technologies and policies in pilot development projects and on demonstration farms to facilitate the diffusion and adoption of relevant technologies and practices by farmers.*

44. *Engage with development assistance organisations and programmes to explore the integration of GRA outputs into agricultural development cooperation, as appropriate.*

63. To address these action items the breakout groups were asked to consider the four questions below:

1. Does the GRA currently have the right partnerships to achieve its objectives regarding adoption of practices and technologies? With whom should we be working?
2. How can the GRA link to development assistance organisations and programmes (national, regional, multilateral) in order to facilitate the diffusion and adoption of technologies and practices? Whose role is this to make the link?
3. How can GRA link its outputs with demonstration farms in member countries and partner organisations in order to facilitate the diffusion and adoption of technologies and practices?
4. How can the GRA most effectively communicate the benefits and impacts of its research results to promote adoption of practices and technologies? Scientific publications? Policy Briefs? Fact sheets?

Discussion

64. Each of the four groups reported back the outcomes of their discussions, with a number of activities identified to improve communication. The Council noted that the discussions had identified two distinct roles for our communications. At the level of the Alliance as an organisation we should provide information to global level institutions (World Bank, etc.) and enhance and increase these partnerships to increase our influence. As Members we should develop and provide common messages and work with our stakeholders, and increase the reach of our members by increasing our membership.

Decision

- The Secretariat will circulate report of discussions and update the Strategic Plan with actions identified from the discussions.

WORKING WITH PARTNERS

65. Three organisations, proposed as partners were invited to present to the Council. The Asian Development Bank had previously been invited as a Partner, in 2011, but declined at that time. However, the Bank now has an increased focus on climate change. Also invited to present were the World Business Council on Sustainable Development (WBCSD) and Global Agri-Business Alliance (GAA), two platforms that work pre-competitively with producers and companies to improve sustainability and environmental practices.

Asian Development Bank

66. Ms Michiko Katagami, Principal Natural Resources & Agriculture Specialist at the Asian Development Bank introduced the aims and objective of the Bank and provided an overview of some activities underway. The Bank lends to developing member countries and the agricultural development portfolio aims to improve rural incomes for smallholder farmers. The renewed strategy

places a greater importance on linking activities to markets and ensuring that farmers are able to access markets.

67. New focus areas for the Bank include precision agriculture and the use of big data, and identifying opportunities for climate finance supporting adaptation and mitigation activities, which is in collaboration with the International Rice Research Institute (IRRI).

World Business Council on Sustainable Development and Global Agribusiness Alliance

68. Matthew Reddy, Director of the World Business Council on Sustainable Development (WBCSD) presented on both the WBCSD and the newly established Global Agribusiness Alliance.

69. The **World Business Council on Sustainable Development** is a CEO led initiative involving 200 businesses with a focus on sustainability issues. The WBCSD is organised by sector, such as Forestry and Agriculture, and develops sector guidelines considering sustainability issues including greenhouse gases.

70. Its Climate Smart Agriculture programme aims to close yield gaps, improve productivity and build resilience in agricultural systems while reducing greenhouse gas emissions. The programme was launched at COP21 with all members committed and contributing to the vision to reduce greenhouse gases by 50% and produce 50% more food.

71. Opportunities for collaboration:

- Scale and speed of uptake, WBCSD member organisations cover millions of farmers
- Identify opportunities for shared investment in adoption activities
- Market signal

72. The **Global Agribusiness Alliance** is made up of producer companies, mostly national level producer's based predominantly in Asia, Africa, and the Middle-East. There would be good opportunities for the Alliance to extend knowledge through demonstration farms. The Alliance is invited to collaborate with the GAA at a number of events, such as an upcoming Global Alliance on Climate Smart Agriculture (GACSA) event in Bangkok. This event will determine where the need is to invest in CSA practices for developing countries, inform the group about countries that have indicated agriculture priorities for their Nationally Determined Contributions (NDCs), and identify where other organisations are investing to develop partnerships and better understand climate change vulnerability. The Alliance would be a useful partner to identify target countries and activities and amplify existing programmes.

Potential Partners

73. The Special Representative presented to the Council a list of organisations that had been identified as potential new partners, to help the Alliance meet the objectives of its Charter and Strategic Plan as well as to help deliver the Flagships. Building effective partners is a key component of the strategic plan and a role of the Special Representative is to identify new partners for the Alliance, and attend meetings of these organisations to inform them about our activities. The nine partners identified meet a number of different criteria, the high level benefits are outlined below:

- Asian Development Bank (ADB) - Integration of Alliance knowledge into the agricultural development work of the ADB.
- International Fund for Agricultural Development (IFAD) - Integration of Alliance knowledge into the agricultural development work of IFAD to promote sustainable agricultural intensification and improved farming practices. IFAD are now evaluating the GHG impacts of the activities they fund.

- International Soil Reference and Information Centre (ISRIC) - linkages between soil, climate change mitigation and food security will be strengthened for all involved partners.
- Caribbean Agricultural Research & Development Institute (CARDI) – Alliance activities integrated into regional research programmes, including increasing performance of small ruminants and forage based feeding systems. Helps to address geographic coverage of the Alliance.
- Forum for Agricultural Research in Africa (FARA) – efficient integration with Africa’s national agricultural research organisations and possibility of delivering regional activities in Africa. Helps to address geographic coverage of the Alliance.
- Global Agri-business Alliance (GAA) - testing and scaling solutions through centres of excellence, field days, and extension roadshows. GAA will be seeking to invest in science and knowledge resources as its revenue grows.
- World Business Council on Sustainable Development (WBCSD) - WBCSD work on climate change and agriculture could provide an excellent vehicle for the Alliance to transfer knowledge and help us to implement our Strategic Plan.
- Sustainable Agriculture Initiative Platform (SAI Platform) - SAI Platform’s working groups on rice, arable crops, beef and dairy could provide an excellent vehicle for the Alliance to transfer knowledge and tools to farmers.
- International Fertiliser Development Centre (IFDC) - IFDC is involved in large scale on-the-ground implementation programs that could be even more effective with Alliance expertise. Opportunities for synergies in training developing countries.

Discussion

74. The Council agreed that the earlier discussion about implementing the work of the Alliance and transferring knowledge on-farm demonstrated the benefits in partnering with private sector and development assistance organisations.

75. The Alliance has matured in its activities, as described in the framework presented by the Research Groups, moving from sharing technical information to develop solutions and implementation. The three categories, development agencies, science based and private sector, of organisations proposed all help us to achieve these goals. Partners are invited not only for the sake of increasing the number of partners but to develop strong joint activities.

76. The Council agreed with the recommendations from the Secretariat to pursue partnerships with all organisations.

77. It was also suggested that the Alliance also consider partnering with the sub-regional African agricultural organisations to connect at the national level. FARA is an umbrella organisation that covers the whole continent.

Decision

- The Council agreed to re-issue invitations to the Asian Development Bank and International Fund for Agricultural Development to be partners of the Alliance.
- Accepted the request for partnership from the International Soil Reference and Information Centre (ISRIC).
- Agreed to pursue partnerships with the following organisations:
 - Global Agri-business Alliance (GAA);
 - World Business Council on Sustainable Development (WBCSD);

- Sustainable Agriculture Initiative Platform (SAI Platform);
- International Fertiliser Development Centre (IFDC);
- Caribbean Agricultural Research & Development Institute (CARDI); and
- Forum for Agricultural Research in Africa (FARA).

STRATEGIC PLAN

78. The operational plan of the Alliance Strategy has been developed as a living document - priority actions are to be reviewed and updated each year. The Secretariat provided a quick review of the 50 priority actions that were included on the strategic plan – noting those that had made good progress, limited progress or no progress. The agenda for this Council meeting had been developed in part to help address priority actions where little progress had been made.

79. It was noted that the strategic plan had a large number of activities – with repetition across some of the actions. A number of the actions are establishing processes, including for improving communication within the Alliance. The Secretariat offered to consolidate the operational plan, to reduce the number of priority actions and also to remove actions that have been completed. New actions identified during this meeting would be included as priority actions, including Flagships and capability development activities.

PROPOSAL FOR A CONFERENCE

80. Germany proposed holding an Alliance conference alongside the 2018 Council meeting in Germany. The conference would be a collaboration with FACCE-JPI members and the Alliance and the suggestion is that Research Group Co-Chairs and FACCE-JPI experts are involved in developing a concept note for the Council's decision. The Alliance Council meeting and conference would be held after the northern hemisphere summer, likely September or October 2018.

81. The Council raised the point that previous discussions of an Alliance conference had not been clear on the audience for the event or the expected outcomes. The concept note would need to be clear if the proposal was for a science conference or to showcase the Alliance to a number of different stakeholders, e.g. private sector, public policy, political, civil society.

82. As a Partner organisation, CCAFS noted that it would probably be interested in helping to organise and be involved in the conference.

Decision

- Agreed to consider Germany's request to hold a conference alongside the 2018 Council meeting. The Chair, Vice-Chair, Secretariat and Research Group Co-Chairs to develop a proposal for the Council's decision by the end of October 2017.

APPENDIX 1: PARTICIPANTS LIST

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<p><i>Unable to attend: Australia, Belgium, Bolivia, Brazil, Colombia, Cost Rica, Denmark, Dominican Republic, Ecuador, Finland, Honduras, Ireland, Nicaragua, Norway, Panama, Paraguay, Peru, Poland, Republic of Korea, Sweden, Tunisia</i></p>	