

Photo courtesy of INRA.

WELCOME...

to the first Newsletter of the Livestock Research Group of the Global Research Alliance.

The idea of a newsletter arose out of our recent meeting in France when the need to have a vehicle for communicating the activities being carried out by members of the Livestock Research Group to the wider science/industry/policy community was identified.

This first issue is very much an introduction to the Livestock Research Group and an update on the decisions made at our meetings in Canada and France. Future issues will report progress on the activities in the Group work plan, discuss issues of common interest, and provide an opportunity to highlight activities carried out in individual countries that

support the goals of the Livestock Research Group. We are therefore seeking your input to make the newsletter valuable and would like you to send us details of relevant projects, collaborations or funding initiatives that you wish to share across the Livestock Research Group.

The next meeting of the Livestock Research Group will be 4-5 November 2011, in Amsterdam at the end of the 6th International Symposium on non-CO₂ Greenhouse Gases. More details will follow.

Martin & Harry

Stock-take on Agricultural Greenhouse Gas Research

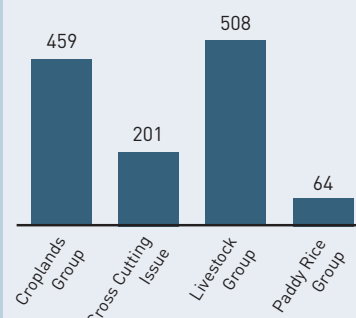
The stock-take data of current research projects is a valuable "living resource" that indicates the level of activity and effort on livestock emissions research underway worldwide.

We will use this space to illustrate some of the more interesting results over the coming months.

Interesting facts:

- There are currently in excess of 1200 projects listed in the stock-take across the 29 Alliance member countries (and 3 non member countries) that responded to the stock-take.
- 41% of projects in the stocktake are listed as relevant to the Livestock Group.
- Using the start and end dates of the (294) livestock research projects that listed information, it can be roughly calculated that '946' years of research has been/is being devoted to livestock research.
- Funding is for an average of 3.2 years per project in the Livestock Research Group (based on the 294 projects where this information was provided).
- 56% of livestock research projects are funded for between 2 to 5 years.

Distribution of projects across research groups



Update from the Livestock Research Group Meeting

France 1-2 March 2011

The Livestock Research Group met to discuss the results from the updated stocktake of current research activities and to agree a work plan for near-term activities and longer term goals and aspirations.

Key outcomes on the stocktake discussion were:

- An acknowledgement of the limitations of the stocktake with a confirmation of its value as a “living resource” that indicates the level of activity and effort on livestock emissions underway worldwide.
- Confirmation that countries will be asked to update their stocktake data on an annual basis. The next annual update exercise would take place in late 2011, with a deadline of January 2012.
- Agreement that some amendments to the stocktake template are likely for the next update to include an extra column that allows for more data on a project to be captured, e.g. its name, a link to any progress reports or publications.
- Agreement that it would be helpful if the stocktake could capture more information on the research needs and priorities of individual countries.

Key outcomes on the work plan discussion were:

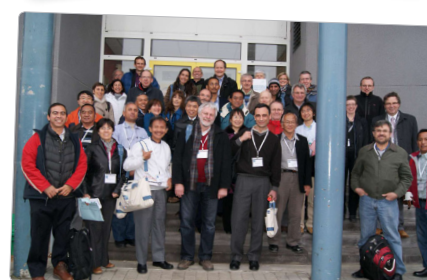
- Agreement to structure the Group’s activities, according to two key areas of effort:
 1. **Developing a common understanding between Group members:** for example through stocktake analysis, information and technology transfer activities e.g. best practice guidance, and capability development e.g. fellowship awards.
 2. **Concerted research efforts:** for example establishing expert networks and data sharing arrangements, collaborative research projects, and work to support policy development, e.g. synthesis reports.
- Agreement to develop and issue a questionnaire survey to identify training and development needs, capability building opportunities and opportunities for international collaboration.
- The collection of ideas for short and longer-term projects.

Field trip to the INRA field stations

During the week, Livestock Research Group members also had the opportunity to directly observe and discuss research projects during a field trip to the INRA research stations near Clermont-Ferrand. In a lively mix of presentations, laboratory and field visits in the snow, French scientists presented their work on animal- and paddock-scale measurements of methane and nitrous oxide emissions, soil carbon fluxes, and also linkages between the potential impacts of climate change and mitigation options at the farm scale.

Soil Carbon & Nitrogen Cycling Scientific Workshop, 4 March

The Alliance meetings concluded with a oneday workshop, led by France, on soil carbon and nitrogen cycling measurements and modelling, that combined the interests of all three of the Alliance’s Research Groups. Discussions between the Groups had clearly identified carbon and nitrogen cycling was an issue of relevance to cropping, livestock and paddy rice and one that would benefit from greater cross-group collaboration. The initial workshop concentrated on the sharing of models and existing data and the potential for testing of models against common datasets to enhance predictive capabilities.



Photos courtesy of INRA.



Photos courtesy of Alliance - RMG Network.

International Research Collaboration

Rumen Microbial Genomics Workshop:

A group of international experts from Australia, Canada, Argentina, France, Japan, USA and Wales gathered recently in New Zealand at a two-day workshop to initiate an international scientific effort to mitigate methane using a rumen microbial genomics approach.

The New Zealand Ministry of Agriculture and Forestry as part of its support for the Global Research Alliance on Agricultural Greenhouse Gases funded the workshop to establish a global collaborative network of researchers with a common set of principles and policies to underpin the development of worldwide methane mitigation and rumen adaptation technologies.

There was agreement from the participants for a Global Research Alliance-Rumen Microbial Genomics (Alliance -RMG) Network and agreement and enthusiasm from all the participants that the Alliance-RMG Network should be led and co-ordinated by AgResearch, New Zealand.

SF₆ Tracer Technique Practitioners Workshop:

The SF₆ tracer technique was developed in ca 1994 at Washington State University at Pullman, and has since been widely applied to estimate methane emissions by individual ruminant animals. It is the only practical, well validated, technique available for determining emissions from individual grazing animals.

The New Zealand Ministry of Agriculture and Forestry as part of its support for the Global Research Alliance on Agricultural Greenhouse Gases funded 12 international experts to attend a 3-day workshop to discuss and plan the writing of a best practice technical guidance manual. The manual will include a range of successfully applied protocols established and reported by key national and international researchers for deploying the SF₆ tracer technique under both grazing and controlled-feeding conditions.



Capability Building Opportunities



Global Research Alliance Senior Scientist (GRASS) Award Supporting research in Agricultural Greenhouse Gases

The New Zealand Government has announced funding for senior scientists to participate in an exchange programme to enhance collaboration and the building of mutually beneficial research partnerships between New Zealand and other Global Research Alliance countries.

Focus areas

- Methane emissions from livestock and livestock wastes
- Nitrous oxide emissions from livestock wastes
- Enhancement of pastoral soil carbon sinks
- Integrated whole farming systems impacts at all scales as they relate to livestock emissions.
- National inventory development as it relates to livestock emissions

Eligibility

To be eligible, you must:

- Have a PhD or be a scientist with at least 5 years experience participating in/leading major projects that align to the priorities of LEARN, the Alliance or other relevant national strategies.
- Demonstrate impact and leadership in your professional field.
- Be able to contribute to scientific research and its application in your home region and the larger Alliance network, based on your networking record.
- Work in collaboration with a New Zealand research organisation.
- Be resident and normally employed on a permanent contract by a research organisation in an Alliance member country.
- Be fluent in English.

Funding

The exchange must be between 6 weeks and 6 months duration.

- Up to \$30,000 for 6 months (pro rata for less than 6 months) will be provided to recipients to cover actual and reasonable living expenses.
- Up to \$5,000 will be provided for economy airfares and travel/medical insurance.
- Up to \$5,000 will be awarded for associated research costs.

For more details refer to the LEARN Website: www.livestockemissions.net or email the New Zealand Agricultural Greenhouse Gas Research Centre: enquiry@nzagrc.org.nz

USDA Borlaug Fellowship Program

The Norman E. Borlaug International Agricultural Science and Technology Fellowship Program aims to promote food security and economic growth by increasing scientific knowledge and collaborative research to improve agricultural productivity. It accomplishes this by:

- Providing training opportunities for early and mid-career researchers and policymakers from developing and middle-income countries;
- Fostering collaborative research to improve agricultural productivity;
- Facilitating the transfer of new science and agricultural technologies to strengthen agricultural practices
- Addressing obstacles to the adoption of technology, such as ineffectual policies and regulations.

The program is administered by USDA's Foreign Agricultural Service.

Priority Research Areas

Areas of training and research can be in any agriculture-related field including plant pathology, entomology, veterinary sciences, microbiology, agricultural economics, food safety, sanitary and phytosanitary topics, natural resources management, agricultural biotechnology, global climate change, and agricultural policy. Allowable training topics vary by country and year and can be found in the country-specific application announcements posted on the website. In 2010, USDA supported the participation of developing countries in the Global Research Alliance on Agricultural Greenhouse Gases through fellowships focused on reduction of agricultural greenhouse gas emissions.

Eligibility for the Borlaug Fellowship Program:

- Citizens of country in which the Borlaug Fellowship Program is offered
- Early to middle stage of their professional career
- Good working knowledge of the English language
- Minimum of a Master's degree
- Two or more years of practical work experience and currently employed in an university, government, non-profit, or private agricultural research entity in the recipient country.
- Demonstrate intention to continue working in the home country after completing their Borlaug fellowship in the US

For more details refer to the Borlaug Website: <http://ffas.usda.gov/icd/borlaug/Borlaug.asp> or email: Susan.Sadocha@fas.usda.gov



Update from the Alliance Secretariat

The Alliance continues to make excellent progress. Thirty three countries are now members – we were delighted to welcome South Africa and Italy to our midst in recent months.

Meetings in France

The Alliance met 'as a whole' in Versailles, France from 28 February-4 March this year. This was the second meeting of this kind; the first took place in Wellington, New Zealand in April 2010. This weeklong series of events in France took in meetings of the three Research Groups (Livestock, Paddy Rice and Croplands) as well as governance meetings, field trips and a scientific workshop on soil carbon and nitrogen cycling issues. We are extremely grateful to the French Ministry of Agriculture and INRA – the National Institute for Agricultural Research – for their generous hosting.

Ministerial Summit

We are looking forward to the Alliance Ministerial Summit in Rome in late June. This inaugural event will see Ministers from Alliance countries come together to sign the Charter – the document underpinning our membership. Ministers will also receive an update on Research Group activities and work plans. Martin Scholten has kindly

agreed to do this on behalf of the Livestock Research Group.

Website

In other news, there will be a new look Alliance website from May 2011. This will include a refreshed look and feel, a more user-friendly news service, and the ability to subscribe to receive updates from the site. We will also be making some changes to improve the usability of the Members area of the website. We would welcome your suggestions for news items and links we can make from the Alliance site to others. Keep an eye on www.globalresearchalliance.org as we roll out the new changes and please let us know what you think!

About the Secretariat

The Secretariat provides administrative support to the Alliance, helping organise its meetings, assisting the Research Groups, maintaining the website, facilitating new memberships and contact between existing members, and linking with other international initiatives relevant to the Alliance's work. We are here to help – if you have any questions or suggestions or would like additional information please contact us: secretariat@globalresearchalliance.org



Photos courtesy of INRA.

contact us

We are seeking contributions for future Newsletters from members of the Livestock Research Group.

Please send us information about relevant Group activities underway in your country for inclusion in the Newsletter to enquiry@nzagrc.org.nz



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