



GenRes Sandpit 2013

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Scientific report

Social science meets animal science: how to favour scientific integration and capacity building for sustainable conservation of farm animal genetic resources (FAnGR)?

Organisers

Université catholique de Louvain
BOKU, Vienna
Scotland's Rural College (SRUC)

Facilitators:

Scientific facilitator: Dr Anne Bruce, University of Edinburgh
Process facilitator: Mr Alexandre (Rico) de Faria, GOAL

Local convenors:

Prof. Philippe Baret, Université de Louvain
Prof. Nadine Buys, KULeuven

1 Summary

Animal breeders and social scientists are both working in a rapidly changing environment as new technologies -often linked to massive amounts of data- emerge, consumer demands change and global topics (climate change, global trade of animals and their products) arise.

Both researcher communities are confronted with complex adaptive systems, but each group has a different focus on these systems. While animal breeders tend to concentrate on technical solutions, social scientists put human beings and their attitudes, actions and behaviour in the centre of their research.

A three day meeting was organized from 9 to 11th of September in Louvain-la-Neuve (Belgium). Animation was achieved by a duo made of a professional facilitator and a scientific facilitator. This animation and original activities helped to meet the three objectives: (1) a better mutual knowledge between social scientists and animal geneticists, (2) exchange on successful case studies, (3) identification of good rules of interaction.

The audience was made of 12 social scientists and 16 animal scientists. This balance of competences was one of the key elements of success of the meeting. During the meeting both sides got a better understanding about concepts, approaches and methods of the different disciplines. It was confirmed that each group of scientists in itself is very heterogeneous. Events such as the speed dating were essential to bridge the gap on Day 1. Activities such as beer tasting and farm visit were reinforcing the process.

Based on common understanding participants can develop in a very free setting new ideas for the identification of key stakeholders and issues during the second day.

The third day was dedicated to further discussion of the modes of convergence between fields, a second session of speed dating and a dynamic and reflexive evaluation of the meeting.

Based on these findings, there is good perspective for the emergence of new research ideas and new project proposals.

2 Description of the scientific content of and discussion at the event

2.1 Day 1

The workshop started with an introduction to the concept of “complex adaptive systems” by the facilitator. The different elements and their linkages were highlighted and some practical examples from the field of animal breeding were given. The idea was to find a common understanding between different research disciplines and identify areas of a common research agenda.

Four participants gave a short presentation on their current research projects. This activity opened discussions on different research approaches and methodologies :

- Emerging markets, emerging strategies under the genomic era by Julie Labatut, INRA, France
- Why do we like cattle? by J.A. Lenstra, molecular geneticist, Faculty of Veterinary Medicine, Utrecht University
- Economics and genetic resources by Dominic Moran
- Opportunities provided by GE technology by Bruce Whitelaw, Roslin Institute

A speed dating session was held, where participants got five minutes to talk to another person. The task given to the participants was to make the other person interested in their research and to identify possible common interest. This exercise was highly appreciated by all participants as it allows familiarizing oneself within a short period of time with a number of different people. Therefore the organizers agreed with the participants to repeat this exercise during the workshop once more.

The next step was to look at perception of different research groups and what they think of each other. Animal scientists were asked to list characteristics of the work of social scientists. They also had to list what social scientists would think about animal science. The group of social scientists did the same group work in parallel. Outputs of this exercise are available on the meeting website: http://www.genresandpit.eu/wpsp/?page_id=49

At the end the results from both groups were presented to the plenary.

The purpose of this exercise was to stimulate thinking about research cultures of different disciplines. Perceptions and prejudices can be discovered by this technique. This helps to appreciate that there are different ways of doing research. This is seen as a first step that allows in the long run developing joint research proposals.

The aim of day 1 was also to “break the ice”. Therefore some social activities as a joint dinner and a beer tasting session were organized.

Day 1 concluded with an interesting keynote presentation “Sustainability Science for Strong Sustainability was held by Tom Dedeurwaerede (Université de Louvain). He clearly indicated that real world problems are often of high complexity and therefore inter-and transdisciplinary research is needed to address these questions. He also raised the point that this approach asks for a shift in the structure and administration of universities and research organisations.

2.2 Day 2

On day 2 the whole team moved to Louvain University. The morning session was dedicated to identify research areas. This was first done in smaller groups, and then presented to the audience. In a joint effort the ideas were grouped in broad themes. Finally, each participant could choose his/her topic of interest. Based on common interests smaller groups were formed and a discussion about possible research topics and projects were discussed.

After the exercise a visit to the genomic laboratory was organized. This was planned to make it more explicit how laboratory work is done. People got the opportunity to interact with staff members and get an inside in the routine of a lab.

After lunch a visit to a commercial farm was organized. A goat farmer, who is processing all milk into cheese and sells it on the nearby market of Brussels was visited. This again gave participants the opportunity to interact in a very informal way and discuss different points of views.

2.3 Day 3

On the last day, further discussions were organized about the modes of convergence between fields. A second session of speed dating took place on a voluntary basis and the last hour was the occasion of a dynamic and reflexive evaluation of the meeting.

Video footages were filmed in order to be put on the website : www.genresandpit.eu.

3 Assessment of the results and impact of the event on the future direction of the field

3.1 Overall assessment

The program allowed certain flexibility in adjusting to the needs and interests of the participants.

The wide range of diverse disciplines opened the way for lively discussions and gave insights in the research culture of other disciplines.

All participants were open-minded and interested to learn from colleagues and this positive and enabling environment facilitated the learning process.

Participants learned what other approaches are currently used and where possible collaborations might be established.

3.2 Evaluation

Quantitative evaluation (based on 17 surveys)

General organisation : Very fine (10) to Fine (7)

Content : Very fine (3), Fine (12), Fair (2)

Animation : Very fine (8), Fine (7), Fair (1), no answer (1)

Qualitative evaluation

Q 1 : What did you learn ?

That there is a good community of scientists interested in collaboration across disciplines
How to improve exchanges with colleagues (interdisciplinary exchanges), improve communication
The are similarities and differences between NS & SS on how they do research, goals, communication, methodology, etc.

Much about social-scientific approach to agriculture and diversity.

That SS have same overall goal but approach is reflective and more inclusive than NS.

Diversity within groups as large as between groups - adds value to the discussion - becomes broadened

Organisational model are changing ; Animal scientist can benefit of SS to generate hypothesis in a evolving social context ; We need to work together.

Meeting the geneticists that I knew by name ; exchange of news in my old field; sociologists working with genetic/natural resources.; holistic approach on development of sustainability.

NS and SS have a good understanding of themselves and each other.

I have to take the first step to work with social science ; importance of communication process ; Confirmation of some 'ideas'. I already need cooperation with other fields.

That NS and SS know more about each other than i anticipated - which is good.

I have learn about complexity of livestock conservation as well as capability of social scientists to properly communicate with society

Yes we can find new way of working ; new ways to create positive interactions among disciplines. Communication needs time & attitude to be able to listen

Combining natural and social scientists in the same project is a real challenge. I learn that communication can be favored by a good animation.
Importance of collaboration between NS and SS to make the importance of topic FaAnGr known among the policymakers and citizens.

Q 2 : Points to improve in case of another Sandpit event

More challenging exercise to develop research proposal.
It was almost perfect !
A balance number of two groups
Have reward = identified funding opportunity / POT
Making sure having more balanced groups of SS (we need more) and NS
Organisation of speed dating where only social and natural science have to be put together ; More time for researcher questions.
Less workload for workshop leader ('we are tired'); avoiding obvious areas (content of project proposal) ; trips longer than 1/2 hour ; No computers in conference room.
I would like a little more stringent schedule
Great to have man focused on "getting to know people better" - But having an additional focus on anim. To put information to funders would have been helpful
With its current goals, i was very satisfied ; in a case of going further I would suggest targeted building case study approach.
In the different activities, force more the encounter between NS and SS. Narrow the focus.
Clarifying the aims : increase communication / mutual understanding between NS and SS or/and base for future projects Or/and building network...
Stronger theoretical contextualization in the beginning of the meeting.

3.3 Perspectives

Circulation of information on interdisciplinary proposals that have been successful, information about funding sources and how they deal with interdisciplinary proposals, putting in proposal ideas to DG Research for future calls.

Writing up of a manifesto to strengthen the research community.

Use of the web site to place useful documents, recommended lectures e.g. why genetic resources are important. Recommendations from the group will be better than finding papers by chance.

4 Final programme of the meeting

4.1 Sunday, September 08, 2013

4:00 pm - 8:00 pm	Arrival and Registration
	Ibis Styles Hotel, Louvain-la-Neuve, Belgium

4.2 Monday, September 09, 2013

9:00 am - 5:00 pm	Day 1 – Enthusing and unpacking (in Hotel)	
9:00 am - 9:30 am	Morning	<ul style="list-style-type: none"> ▪ Programme overview ▪ “What are complex adaptive systems (CAS)? How does learning and change take place in CAS? How are human beings important?”
9:30 am - 9:45 am		<ul style="list-style-type: none"> ▪ Round of presentation by participants of their expectations (30secs each)
9:45 am - 10:45 am		<ul style="list-style-type: none"> ▪ Research content: Four short presentations on scientific projects and on social science projects to address issues of animal genetic resources. (60 min)
10:45 am - 11:00 am		Coffee and Tea Break
11:00 am - 12:45 pm		Brainstorming on selected issues related to animal genetic resources: <ul style="list-style-type: none"> ▪ Group work: 6 groups of 6 (3NS and 3SS) (30 min). ▪ Plenary: Group spokesmen read out each flipchart and asks if everyone understands its meaning (max. 60 min) ▪ Plenary: Conclusion on selected animal genetic resources issues from 2 perspectives (NS and SS)
12:45 pm - 1:45 pm	Lunch Break	
2:00 pm - 3:00 pm	Afternoon	<ul style="list-style-type: none"> ▪ Speed dating
3:00 pm - 3:30 pm		Coffee and Tea Break
3:30 pm - 5:00 pm		Research Culture. <ul style="list-style-type: none"> • Group work: 2 groups in parallel (one SS and one NS) each led by one facilitator • Plenary: How each group’s perception of the other might have changed.
	End of work day 1	

4.3

4.4 Evening

4.5 5:00 pm – 6:00 pm: **Beer tasting event**

4.6 7:00 pm – 8:00 pm: **Dinner**

4.7 8:00 pm – 8:30 pm: **Keynote conference Science for sustainable development by Tom Dedeurwaerdere (UCL)**

4.8 Tuesday, September 10, 2013

8:30 am - 9:30 am	Travel from Hotel to Louvain	
9:00 am - 6:00 pm	Day 2 – System analysis and link to AnGR (in Louvain University; lab and farm visit)	
9:00 am - 9:45 am	Morning	<ul style="list-style-type: none"> ▪ Plenary: The typical complex adaptive system (CAS) of social scientists and of geneticists: Two presentations by a geneticist and by a social scientist
9:45 am - 10:30 am		<ul style="list-style-type: none"> ▪ Plenary: Focus on the sub-systems that include both SS/Geneticist stakeholders; focus on best and worst practices in this sub-system.
10:30 am - 11:00 am		Coffee and Tea Break
11:00 am - 11:45 am		<ul style="list-style-type: none"> ▪ Plenary: Identification a long list of research questions (RQ)
11:45 am - 12:00 pm		<ul style="list-style-type: none"> ▪ Group work: 6 groups of 6; each group identifies 4 priority RQs
12:00 pm - 1:00 pm		<ul style="list-style-type: none"> ▪ Plenary: Clarification and meaning of each of 24 RQs
1:00 pm - 2:00 pm	Lunch Break	
2:00 pm - 2:45 pm	Afternoon	<ul style="list-style-type: none"> ▪ Plenary: Discussion of preliminary list of RQs from 2 perspectives (NS and SS)
2:45 pm - 3:00 pm		<ul style="list-style-type: none"> ▪ Plenary: Ranking (priority) assigned by participants to RQ
3:00 pm - 6:00 pm	Travel to visit a genomic lab and a commercial farm	

4.9

4.10 Evening

4.11 6:30 pm – 7:30 pm: Dinner

4.12

4.13 Wednesday, September 11, 2013

9:00 am - 12:30 pm	Day 3 – Bringing it together (in Hotel)	
9:00 am - 10:30 am	Morning	<ul style="list-style-type: none"> ▪ Parallel sessions / Open sessions: Q&A and debate (plenary)
10:30 am - 11:00 am		Coffee and Tea Break
11:00 am - 11:45 am		Informal group discussions: <ul style="list-style-type: none"> ▪ Initial list of Best and Worst practices of co-operation between NS and SS ▪ Documenting possible future research topics ▪ Planning future joint research projects
11:45 am - 12:30 pm		<ul style="list-style-type: none"> ▪ Plenary: Putting it all together; future pacing – future networking
12:30 am - 1:30 pm	Lunch Break	
2:00 pm -	End of the Sandpit meeting and Depart	

5 List of participants

Alexandre di Faria	Animator	GOAL	Austria
Ann Bruce	Behaviour	Innogen	UK
Anne Lauvie	Geneticist	INRA	France
Anne-Marie Neeteson	Stakeholder	Aviagen	Norway
Antoine Doré	Sociologist	Univ Grenoble	France
Asko Mäki-Tanila	Genetics	MTT	Finland
Bouda Vosough Ahmadi	Economist	SRUC	UK
Bruce Whitelaw	Biotechnology	Roslin	UK
Christian Leclerc	Anthropologist	CIRAD	France
Chrysa Lamprinopoulou	Innovations	SRUC	UK
Claire Heffernan	Behaviour	Univ. of Reading	UK
Clara Diaz Martin	Genetics	INIA	Spain
Davy McCracken	Ecologist	SRUC	UK
Dominic Moran	Economics	SRUC	UK
Gustavo Gandini	Genetics	Univ. Milano	Italy
Ino Curik	Genetics	University of Zagreb	Croatia
Jan Philipsson	Genetics	SLU Uppsala	Sweden
Johannes A. Lenstra	Veterinary	University of Utrecht	Netherlands
Juha Kantanen	Biotechnology	MTT	Finland
Julie Labatut	Economist	INRA	France
Katriina Soini	Human Geog.	MTT	Finland
Maria Wursinger	Animal science	BOKU	Austria
Muriel Tichit	Animal Science	INRA	France
Nadine Buys	Genetics	KU Leuven	Belgium
Philippe Baret	Genetics	UCL	Belgium
Sipke-Joost Hiemstra	Genetics	Wagening University	Netherlands
Steven Janssens	Geneticist	Kuleuven	Belgium
Tormod Adnoy	Geneticist	UMB Aas	Norway