An overview of the 19th General Meeting of the European Grassland Federation - La Rochelle, 27 – 30 May 2002

ALLARD Guy
Professeur, Département de Phytologie, Université Laval, Québec, CANADA

This document is a summary of the presentation given by Guy Allard at the closing of the EGF 2002 meeting on May 30, 2002.

Slide 1

For most of us, this computer screen (or web page) has been our link to this meeting for the last months. It was a useful and convivial site and it was updated regularly. An example to follow for future meetings.

Slide 2

**Multi-functionality**

- A valid concept in 1992
- A research concept in 2000
- Grasslands covering 50% of the arable land in Europe ➔

Multi-functional grasslands in 2002

Christian Huyghe

As mentioned by Christian Huyghe in his opening remarks, multi-functionality was first accepted as a valid concept in 1992. In 2000, multi-functionality was accepted as a “research concept” in European agriculture. Since grasslands cover 50% of the arable land in Europe, it is of no surprises that multi-functionality and grasslands found themselves associated and that in 2002 we can enjoy a meeting on Multi-function grasslands. What is remarkable however is that a concept that was accepted for the first time only 10 years ago can become the focal point of a research meeting. This is an indication that research in
agriculture and furthermore in grasslands can respond rapidly to its surroundings and this is an improvement to what could be done only a few years ago.

Slide 3

My way of seeing multi-functionality of grasslands!

- Agriculture
  - from sustainability to industrialisation (Bourgeois)
- Environment (landscape, air and water quality...)
  - some signs of major problems in the late 80's:
    - the re-coming of organic agriculture
    - mad cow disease, water quality...
- Population raising questions
  - change in government policies
  - shift in the justification for subsidies
- And this is not going to stop!!!

Multi-functional grasslands is a wide concept and I need to simplify it to be able to give an overview of this meeting. First: Agriculture. During the first plenary session of the meeting, Bourgeois brushed up an overview of the evolution of 1900’s agriculture in Europe, and also worldwide, an agriculture that went from sustainability to industrialisation. That was an important setting to make us (or at least myself) understand why and where we are today in agriculture. Second: Environment. Environment for me includes landscape, air and water quality, biodiversity… In the late 80’s, there were some signs of major problems associated with agriculture. During those years we saw the re-coming of organic agriculture, the mad cow disease and questions about water quality. There were more signs but I chose those three because each of them were raised by different segments of the population that we interact with: farmers were the first to bring back organic agriculture, researchers were the first to raise questions about mad cow disease and the consumers were very concerned about water innocuousness.

With the occurrence of these events, the population raised questions and demanded answers. This in turn forced changes in government policies (government being elected by the population) and brought and still bring important shifts in the justification for subsidies in agriculture. And this is just the beginning!

Slide 4

Grasslands and multi-functionality or making an easy association...

- Because when you work with forages or grasslands,
  - you cannot only think of maximizing production
  - you have to think of:
    - the ruminants eating them
    - the climate since many species are perennial
    - biodiversity, because we use mixtures...
- So as grassland researchers, we have a head start, because we already think bi- or tri-functional or even for some multi-functional.
- But a head start does not make you the winner!
Grasslands and multi-functionality is from the start an easy association. Why? As a researcher working with forages or grasslands, we all have practice working with compromises. Contrary to other productions, we cannot only maximize production because we have to make a compromise between yield and quality since we have to think of the ruminants eating the forage. Many forage species being perennial, we cannot put aside the climate and since we often use forage mixtures we are confronted with biodiversity; many more examples could be given. Therefore as grassland researchers, most of the time we have to think of grassland as being involved in more than one function and some of us already have a multi-functional approach to grasslands. In fact the proportion of researchers having a multi-functional approach to agriculture is probably higher within the group of researchers working with grasslands than any other ones working in agricultural production. However, while as a group we have a head start in working with this multi-functionality concept, this does not assure us of keeping the lead in the upcoming competition for funds for research or other activities.

The first slides were used to situate the meeting in its context. The next slides want to recapitulate some elements of content.

For all of us, the meeting was somewhat comforting. First, to see all that has been done over the years of research on grasslands. Nösberger during the first plenary session gave us a very detailed and precise overview of the findings associated with grasslands while pointing to us areas that still need some works. Furthermore, each of the participants to the meeting could make its own slides and give its own examples of what he or she found that will fit under the headings: “similar experimentations – similar results” or “similar problematic – similar or complementary approaches”. I gave some examples that were significant for me as a researcher with my own interests and background. Each participant could also come up with its own “strange” heading like: “similar approach but… based on a...
different problematic”; for us as for another research team, we are trying to get more anions in forages, the methods to get there are similar but the reasons to do it differed…

Slide 7

For all of us, there was…

- Some great stuff:
  - new results, knowledge on on-going experiments
    - production, quality, intake, biodiversity…
  - new experiments
    - using NIRS on wet samples
  - new ways to look at results already published
    - forage and organoleptic properties of milk and meat (Coulon and Priolo)
  - new concepts
    - producing forages not only for animals…

We all learned something during this meeting. Depending on our background, our knowledge and our interests, these things were different but as researcher we like to learn new things and we did. Once again, every participant at the meeting could probably make many slides with these headings: “new results or knowledge on on-going experiments”, “new experiments or new approaches”, “new ways to look or re-study results from experiments that have been published” or even “new concepts”. I gave some of my examples.

Slide 8

But there are also…

- Some things that are disconcerting: (for me)
  - Where is the lucerne?
    - Many benefits, productivity and quality.
      - Maybe it should be renamed alfalfa!
  - If corn (maize) silage is a forage (Milne), where are the people working in corn silage?
  - Some problems with the environment
  - Work to improve digestibility
  - Good complement to high legume forages
    - Should we change grasslands for forages?

There were also some surprises, at least when I make comparisons with forage systems that are used in Canada and United States. Questions that need to be raised but that do not necessarily have easy answers. Dairy forage systems in North America are based on alfalfa, a forage that brings high yield and quality feed. For many reasons in many European countries it is not so. Maybe it is time to re-questioned those reasons. For other reasons, corn silage which is a forage but not part of grasslands is mostly absent from the meeting (exceptions being when used in animal production). As we are moving towards multi-functionality, it could be possible to find a place for corn silage especially when we know
that corn production is often associated with environmental problems and that a fair amount of work has been done on improving the digestibility of corn as a forage. Ironically, alfalfa and corn silage could make for an interesting forage system on a dairy farm!

Slide 9

And again…

- Multi-functionality promotes an interdisciplinary approach (Hervieu) which in turn will need multidisciplinary research.
- If as a researcher, I am expected to do multidisciplinary research, how do I do that?
  - Who is in charge?
  - What is the attainable overall goal?
  - Who is going to integrate the results for publication?
  - Is there anybody that is researching new ways to do research? (participatory research)

As mentioned by Hervieu during the first plenary session, multi-functionality promotes interdisciplinary approaches and as researchers some of us if not many of us will need to be involved in multidisciplinary research. As it is a fairly new concept in research or at least it is not apply on a regular basis in our research projects, many of us including myself will need some pointers. How can we make it work? How is it going to work? Some researchers, be it in agriculture or in sociology, may be working on new ways to make researchers work more efficiently together. I previously attended a speech on participatory research and I met someone at INRA who does that kind of work, so there are people who can bring us their knowledge. Since multi-functional grasslands is at its infancy maybe we should hear from these people in a future EGF meeting.

Slide 10

My 3 take-home messages!!!

Many messages can be drawn from this meeting but I would like to limit myself to three take-home messages. They may or may not be the reflect of what a survey among the participants would have given. It is my point of view, and a given privilege I must add, based on my background and reflections confronted to what was said and learned during the meeting. It is a privilege to say it loud and clear, participants always have the privilege to disagree!
At the end of the line, farmers will have to adopt, apply or make to work our recommendations. As we think more and more in terms of multi-functionality, farmers will need to be involved somewhere (but not everywhere) in the research. Of course as mentioned by Parris and by Miéville-Ott in the last plenary session, there are many types of farmers and many situations and having farmers involved will not assure us of their acceptation at the end but it could put more chances on our side.

We also need to not forget, as mentioned by Milne in a plenary session, that farmers first objective is economic, in fact they want (and need, who would not?) to make a living out of agriculture (their job). However as their revenues become sufficient to cover their basic economic needs, farmers may be willing to take in account other objectives more closely link to the environment.

As a final note on this topic, we need to not overestimate farmers. Social pressures on farmers is at a all time high. Farmers are leaving their profession at an alarming rate which cannot be explained by economical reasons alone. As researchers we help them increase their productivity without, most of the time, putting much emphasis on environment. It is now our role to help them introduce or reintroduce the environmental function in agricultural production. At the same time, we should not underestimate farmers; they are part of the socio-cultural grid of their surroundings. Every day they work with nature, they are sensitive to how the population perceive their association with the environment and like consumers they are not interested in living in a polluted environment or eat contaminated food. Therefore farmers could be more willing then we generally think to adapt their ways to better the agriculture environment association.

We will need to address:

- Farmer’s issues
  - need to be involved somewhere in the research because he is the one who is going to apply it
  - many farmer types and situations (Parris, Miéville-Ott)
  - do not loose from view that the farmer’s first objective his economic (Milne)
    - but as his revenue becomes sufficient other objectives maybe taken into account
  - Do not overestimate farmers and at the same time do not underestimate farmers, they are part of the socio-cultural grid on the regional level.
We need a public relation firm! That could seem out of our “jurisdiction” but as researchers in agriculture we do have a responsibility to inform the consumers. During these past months, agriculture has been on the scene, some farmers have had a bad press and so is some research in agriculture. Forages could skim through it because we do not have such a bad press but we also do

- some biotechnology
- some water pollution (use the right organic N but too much organic P)

Who should do it?
- not everybody
- many of us are from university, students, we have a responsibility to form them and to inform them
- agronomists should be talking about agriculture

Who should do the talking? Of course it should not be asked of all researchers to do public relation, we are not all good at it and different media are more appropriate to different personality. But at the same time we should not shy away from opportunities that we may encounter. As many of us work in universities or train graduate students, we do have a responsibility to form and to sensitize them about the importance of informing objectively the population about our work and agricultural production.

Concurrently, we often do not agree on how the news on agriculture are reported in
the media or to the consumers. It is probably time for some of us to make and write the news concerning agriculture and agricultural production. These are new training opportunities. As the number of farmers decreases and that sometimes we questioned if we do not produce too many specialists, new opportunities may open that we should exploit. This is also a part of a multi-function agriculture, which is obviously much larger than grasslands.

Slide 13

As researchers, to work with multi-functional grasslands we will need to develop multi-disciplinary research. This cannot be the happening of a selected few researchers but it will necessitate some team work, from the fundamental to the applied research (ties to farmers and consumers not to be forgotten). As we know, researchers have many different objectives but in a team working on a specific problem, objectives need to be complementary; research objectives maybe numerous but there should be one goal which in turn will make it that much easier to present to farmers or the population.

At the same time we will need to address some research opportunities. In a not so long future we may end up with agricultural prices based on the free market but at the same time, the population will want to maintain the environment and will be ready to pay or subsidize it. This is a probable objective but governments that are accountable to their electors will also need to know how to deliver the subsidies, which goals or objectives will need to be set and met. What will be these objectives, how will we be able to measure their attainment? Many questions and probably research opportunities that will need to be answered most likely very soon.

Slide 14

This congress raises…

- some expectations:
  - that are linked to the multi-functionality context
  - better money for forage research ahead
  - new or changing opportunities?
  - … better recognition of research on forages
  - (from other researchers??? the population?)
- and some challenges:
  - reaction time for research to propose new scenarios (Grignani) will be shorter and shorter.

Overall this meeting raised, for us grassland researchers, some expectations. These expectations are linked to the context of this meeting: multi-functional grassland. Because grasslands and multi-functionality can be easily associated and that future research money maybe linked to multi-functionality we could get more money for forage research. Since we have a head start working with multi-functionality we may enjoy a better situation to catch new or changing opportunities if we are ready to do so. For similar reasons we may get a better recognition for the research we do on forages and grasslands. Could we get it from
other researchers in agriculture? Maybe!!! Could we get better recognition from the population in general? It is possible!

At the same time, the congress raised some challenges. It took us only 10 years to integrate a new concept into our research but as mentioned by Grignani in a plenary session the time that will be allowed to us to suggest new ideas, new ways of thinking or new scenarios will be shorter and shorter. This does not mean that we will need to have the answer right away, we still need to do the research, but this means that we will need to design the research to address the problems head on and we will need to let the population know.

Slide 15

Overall, many thanks to…
- Speakers plenary sessions
- Speakers of parallel sessions
- Chairman of all sessions
  - All your professionalism
- Civility of all participants (their patience with the English language)

As far as the meeting went, many thanks are due to the participants and especially to the speakers of the plenary sessions, the speakers of parallel sessions as well as all the chairpersons of the different sessions. Everybody showed proof of their professionalism. Another aspect worth noting was the civility of all participants concerning the English language. For most it was their second or even their third language, efforts and patience from the speakers and the audience are worth many compliments.

Special thanks to Doris Pellerin, my colleague professor of dairy science (that is where multi-disciplinary research begins!) for his comments and ideas concerning this presentation.

Many persons were thanked during the banquet on Wednesday night, I would like to also give my thanks first to four persons that were greatly involved and gave their time profusely to organize this successful meeting: Christian Huyghe, Jean-Claude Emile, Jean-Louis Durand and Gilles Lemaire from INRA, Lusignan. Thanks also go to the Association Française pour la Production Fourragère, to other organisations and persons listed in the proceedings and also to the manuscript reviewers.

Slide 17
Overall, it was an excellent meeting. Thanks to all of you! Merci!

Guy Allard
June 14, 2002