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► To cite this version:

A. van del Pol-van Dasselaar, Piotr Golinski, Deirdre Hennessy, Christian C. Huyghe, Jean-Louis J.-L. Peyraud, et al.. Appreciation of current and future functions of grassland by international stakeholders in Europe. 17th Symposium of the European Grassland Federation (EGF), Jun 2013, Akureyri, Iceland. European Grassland Federation, Grassland Science in Europe, 18, 2013, The Role of Grasslands in a Green Future Threats and Perspectives in Less Favoured Areas. hal-02747037

HAL Id: hal-02747037

<https://hal.inrae.fr/hal-02747037>

Submitted on 3 Jun 2020

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Appreciation of current and future functions of grassland by international stakeholders in Europe

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Abstract

Grasslands are the main focus of the EU-project MultiSward. Identifying stakeholder requirements and expectations with respect to multi-functionality of grasslands within Europe is part of MultiSward. A questionnaire among different stakeholders and different regions in Europe provided insight into the appreciation of the current and future functions of grasslands in Europe. The 2011 and 2012 results showed that the different functions of grasslands are highly recognized and appreciated. The large European grassland area is essential for economy, environment and people. The results of the questionnaire provided insight in the value of the different ecosystem services that grasslands provide and of different components of these services for different stakeholders in different regions. Generally, the provisioning services were considered especially valuable, followed by the regulating and supporting services, and finally the cultural services, although rankings did vary somewhat between countries and regions. We conclude that grasslands are considered by all stakeholders to be a valuable resource in Europe. Maintaining or increasing the importance of the different functions and services of grassland in Europe is a challenge for the coming years.

Keywords: functions, grassland, multi-functionality, stakeholder

Introduction

Sustainability (profit, planet, people) is high on the societal, political and economic agendas. The EU-project MultiSward aims to increase reliance on grasslands and on multi-species swards for ruminant production contributing to increased sustainability and competitiveness of livestock production systems, increased food security and enhanced environmental goods while securing optimal European grassland acreage. In order to achieve this, MultiSward wants the active participation of stakeholders. An international team of representatives of countries throughout Europe has therefore been established, representing the different regions in Europe. The countries are Ireland, the Netherlands, France, Italy and Poland representing Atlantic, mountainous, Mediterranean and Continental regions. This study aimed to identify the appreciation of the current and future functions of grasslands by international stakeholders in Europe.

Materials and methods

A questionnaire on multi-functionality of grasslands was developed in 2011 in five languages: Polish, Dutch, Italian, French and English. The questionnaire was available in a paper version in a few countries and on-line (www.multisward.eu), and it has questions on sustainability and ecosystem services. Sustainability covers economic, environmental and social issues (profit, planet, people). Respondents to the questionnaire were asked to allocate 10 points across these three aspects of sustainability, giving most points to the one they considered the most important aspect (e.g. 4, 3, 3 if they consider that ecological and social aspects are of equal interest and that economy is slightly more important). Ecosystem services can be divided into four groups: provisioning services (e.g. production of food, water), regulating services (e.g. control of climate and disease), supporting services (e.g. nutrient cycles, crop pollination) and cultural services (e.g. spiritual, recreational). Respondents to the questionnaire were again asked to allocate 10 points over the four groups of ecosystem services.

Responses on the questionnaire were analysed in spring 2012. At that time there were 160 valid responses. Five regional groups were identified based on the number of responses available and on similarities between regions: Poland (31%), France (37%), The Netherlands + Belgium (11%), Ireland + UK (14%) and Italy (7%). A stakeholder analysis within MultiSward (Pinxterhuis, 2011; van den Pol-van Dasselaar *et al.*, 2012) revealed that the traditional foursome of primary producer, policy maker, research and advisory are the most important stakeholders with respect to the multifunctionality of grasslands in Europe, followed by NGOs (nature, environment), education and industry. All these seven stakeholder groups responded to the questionnaire: advisory (38%), research (24%), primary producers (14%), education (9%), industry (8%), NGO's (4%) and policy makers (4%).

Results and discussion

At the start of the MultiSward project, an international stakeholder consultation (Pinxterhuis, 2011; van den Pol-van Dasselaar *et al.*, 2012) showed that economic functions of grasslands, mainly feed for herbivores, were considered the most important. Stakeholders expected this to remain unchanged in future. Environmental functions of grasslands were placed second: water quality and quantity, adaptation to climate change, mitigation and biodiversity. Finally, social services were mentioned.

In this study, further information was obtained for different stakeholders and for different regions (Figure 1). In general, profit was considered to be the most important aspect, followed by planet and then followed by people. Some observations:

- Primary producers, and to a lesser extent industry parties, gave a higher value to profit than the other stakeholders and a lower value to the other components, especially people.
- Both France and Italy valued people aspects relatively higher and profit aspects relatively lower.

Grasslands can provide several services, the so-called ecosystem services. Figure 2 shows that provisioning services were considered to be the most important services. However, there were clear differences between stakeholders and between regions. The differences between regions reflect the differences in the farming structure throughout Europe.

There were almost no differences in stakeholders' appreciation of today and future functions of grasslands (not shown). The only remark from the stakeholders was that they expect increasing importance of both feed protein supply at farm level and environmentally friendly systems. Reasons for the lack of large differences between appreciation of today and future

functions may be that there is no difference or that stakeholders cannot yet imagine differences in appreciation between today and the future. The accuracy of results will increase with increasing number of responses. In the years 2012 and 2013 a simplified version of the questionnaire will be developed with the aim of obtaining further information.

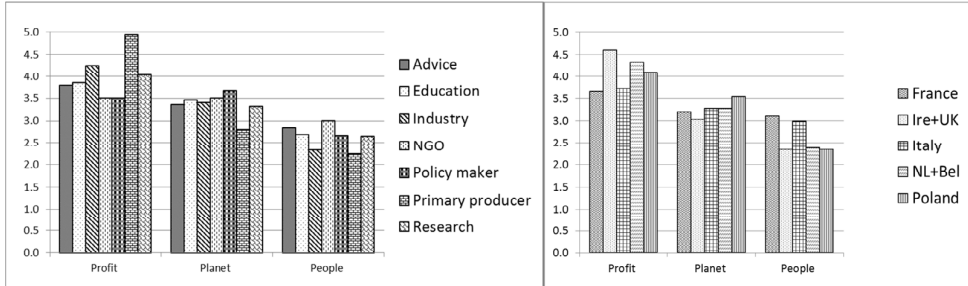


Figure 1. Importance of aspects of sustainability for different stakeholders and different regions (total of people, planet and profit equals 10 for each stakeholder group or region).

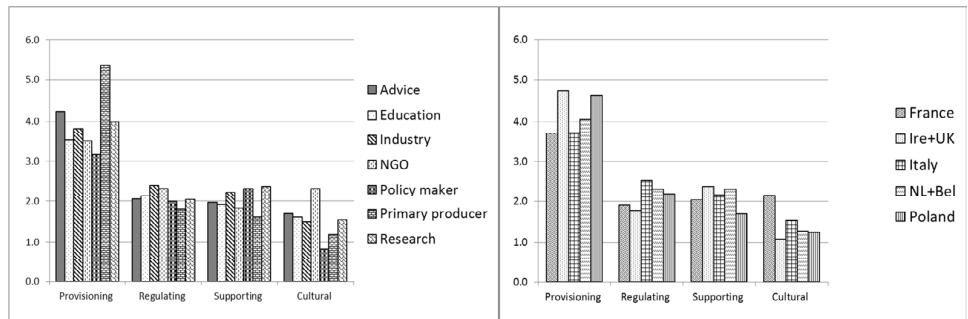


Figure 2. Importance of ecosystem services for different stakeholders and for different regions (total equals 10 for each stakeholder group or region).

Conclusion

We conclude that all stakeholders consider grasslands to be a valuable resource in Europe. Maintaining or increasing the importance of the different functions and services of grasslands in Europe is a challenge for the coming years.

Acknowledgements

The research leading to these results has received funding from the European Community's Seventh Framework Programme (FP7/ 2007-2013) under the grant agreement n° FP7-244983 (MULTISWARD).

References

- Pinxterhuis J.B. (2011) *Report on appreciation of the current and future functions of grasslands in Europe and identification of implementation gaps between today and future multi-functionalities, as seen by international stakeholders*. Report MultiSward, Wageningen UR Livestock Research, Lelystad, the Netherlands
- Van den Pol-van Dasselaar A., Goliński P., Hennessy D., Huyghe C., Parente G., Peyraud J.L. and Pinxterhuis J.B. (2012) Stakeholder's requirements and expectations with respect to multi-functionality of grasslands in Europe. *Grassland Science in Europe* 17, 762-764.