

Study on environmental consequences of Sheep and Goat farming and of the Sheep and Goat premium system

Executive summary

Introduction

This study was undertaken for DG AGRI of the European Commission to examine the environmental effects of sheep and goat (hereafter S&G) farming and of the EU premium system for supporting S&G farming (Council Regulation 2529/2001). It focuses on the six main S&G producing countries of the EU (France, Greece, Ireland, Italy, Spain and the United Kingdom), from 1999 to 2005.

During this period the mid-term review of the CAP (Council Regulation 1782/2003) introduced the option of decoupling sheep and goat support payments, one objective of which was to promote more environmentally sustainable agriculture. This mechanism, along with other policy measures that affect S&G farming (such as Less Favoured Area and Agri-environmental payments) are also considered, resulting in an ex-ante analysis which tries to anticipate the consequences of the new set of interacting rules that will affect the S&G sector in the future.

The study also reviews the implementation of the S&G identification and registration system introduced in 2005 (Council Regulation 21/2004) and its implications for the environment, for example as a cross compliance measure that might replace the monitoring of sheep numbers where support is no longer paid on a headage basis (i.e. where it is fully decoupled).

Methodology

The study was built around a simple zoning of the study area, into Mediterranean, Continental and Atlantic zones, on the basis of very broadly characteristic environmental conditions and the resulting farming systems.

Expert knowledge was used to develop a typology of S&G farms in two parts, one for the Mediterranean region and one for the Atlantic and Continental regions. These reflected the ecological differences of the zones and the production systems. The typology uses the predominant animal feeding system as the defining characteristic (e.g. sedentary grazing on permanent grassland, pastoral grazing of semi-natural vegetation or arable stubble/fallow, indoor systems using purchased feeds, etc.). This approach reflects two of the most relevant aspects for the environment – the forage and fodder resources and the intensity of management, including stocking density and the need for supplementary concentrated feedstuffs.

The fact that many farms combine sheep with other production sectors (beef, dairy, arable) was a complicating factor, especially in the Atlantic and Continental regions (see Appendix 3), both for the typology and the environmental analysis.

The analysis drew on literature, EU-level data bases and expert interviews. It was intended by the project brief to take account in particular of reports made by Member States on the implementation of policies, as provided for under Article 3 of Council Regulation 1259/1999. However, most countries were found not to have produced such reports on the S&G premium system.

Existing literature sources were found to be extremely limited in some areas, especially on the environmental effects of S&G policies in the Mediterranean region. Even in the Atlantic region, where the over-grazing issue is well known, there was surprisingly little published information available.

The expert interviews (approximately 12-20 in each study country) were an invaluable source of information. For the Mediterranean they were particularly useful for information on farming systems and to some extent on their environmental effects, but much less so on the specific effects of policy measures. For the Atlantic (especially for Ireland) the interviews produced much information on the systems, the role of the S&G policy and also both the environmental effects and the environmental measures introduced in response to these.

The analysis of statistics on S&G numbers at the level of NUTS2 administrative regions allowed some conclusions to be drawn about broad geographical tendencies in different periods (e.g. considerable fluctuations in animal numbers, with some marked differences between regions). However, the environmental implications of such changes are not clear without a detailed analysis of distribution and farming trends at a more local level together with the local environmental impacts, a level of research that was not envisaged with the limited resources of this study and for which there is very limited data available.

Considerable analysis was undertaken of the data available through the FADN (Farm Accountancy Data Network). However, this data source was found to have considerable limitations for the purposes of the study, due to its particular categorisation of farm types and non-inclusion of farms below a certain economic threshold ("professional" or "commercial" farms). These minimum thresholds vary between Member States. The importance of this should not be underestimated. For example Scotland is often portrayed as a country of large commercial holding, yet as much as 30-40% of Scotland's hill land (i.e. semi-natural vegetation) is farmed by "non-commercial" holdings.

Summary of findings pre-CAP reform of 2003

Compared with other agricultural sectors, S&G farming is of relatively small economic importance for the EU as a whole and in most Member States, even those with a large part of EU S&G production, such as Spain and UK.

Yet S&G farming is a predominant land use over very large areas of land, especially in the more marginal regions of the Atlantic and Mediterranean zones, where it plays a fundamental role in issues such as landscape, biodiversity, soil, fire and human presence. The great territorial importance of S&G farming in Europe is in marked contrast to its small economic significance.

As with most farming sectors, S&G production has both negative and positive environmental effects. However, S&G stand out particularly for their potentially beneficial effects over these

large areas of territory, on land that is mostly composed of semi-natural vegetation and is environmentally fragile. The beneficial effects (although not always fulfilled), include:

- Maintenance of valued open and diverse landscapes at a scale that is important for Europe's open-ground flora and fauna..
- Maintenance of pasturelands composed of valued habitats, ranging from marshes, steppelands, coastal grasslands and heaths to moorlands and alpine grasslands; as well as managed farmland components including semi-natural grasslands, hay meadows and cultivated areas.
- Fire prevention and management, especially (but not exclusively) in Mediterranean regions, and thus the prevention of a cycle of fire and soil erosion that can lead to severe land degradation.
- Environmentally positive integration with low-intensity farm management such as the dry-land arable systems of Mediterranean regions (with associated dunging, stubble and fallow grazing) and small-scale mixed livestock farming in the more remote parts of the Atlantic region.

In addition to this “maintenance” role over extensive areas, the most widespread S&G systems make relatively little use of external inputs (agro-chemicals, manufactured fertilisers and feeds) and thus have a relatively small ecological footprint compared with many farming sectors in the EU.

On the other hand, S&G farming has had negative environmental effects, in particular taking the form of:

- Overgrazing of semi-natural vegetation, including grass, scrub and forest habitats, with negative impacts on the habitat itself, as well as on species of flora and fauna associated with the habitat, and in extreme cases on soil.
- Water pollution resulting from stock concentrations and sedimentation affecting water courses (uplands) and from intensified production systems (lowlands) and cheese making may occur locally, although for this issue S&G are a far lesser concern than other livestock sectors.

With the data available it is not possible to quantify these negative effects either at an EU level or at most local levels, only to quote examples that have been documented or reported from particular areas. Especially in the Atlantic zone, it is well documented that overstocking has affected certain areas with particular environmental sensitivity, such as blanket bog in the west of Ireland, and in the uplands of Wales and England.

In the case of Ireland, the overgrazing issue is considered by the nature conservation authorities to be the most serious cause of environmental damage there over the last 20 years (loss of habitat and species, damage to soil, knock-on effects to fish species and water quality). Some overgrazed areas in the west of Ireland remain in a degraded state despite the best efforts of the special measures introduced to rectify the situation (although see below on future risk of abandonment).

In the Mediterranean zone, there is not the same level of information on such environmental effects of S&G. This may be because cases of overstocking have not been so frequent or extreme, or it may reflect the fact that environmental NGOs are far less active on such issues in the Mediterranean countries compared with in the UK and Ireland. Also, attention is drawn

by other sectors and activities that are far more problematic than S&G in terms of their environmental impacts and that have been expanding at a far greater rate, such as irrigated cropping in steppelands, afforestation of grazing lands, or the impact on soils of arable and permanent crop systems.

Nevertheless, concern has been expressed since the 1990s in Spain about greatly increased stocking levels and size of flocks in some steppe areas, e.g. in Extremadura and Aragón, and about the impact of this development on bird species and soils. In Greece, cases of overgrazing are reported to occur especially on land near to villages and towns where pastoral flocks are based. In Italy, cases of over-grazing are reported from Sardinia, Puglia and Sicily. The main negative effects reported therefore are those resulting from excessive stocking levels and concentration of stock. Although not the only factor, the present study indicates that the CAP S&G regime has played a significant role in driving up stock numbers since the 1980s. There have been notable fluctuations in some regions, but overall it seems that certain areas have been particularly affected by the incentive effect of S&G premia, such as parts of England and Wales, Ireland, Extremadura in Spain and Sardinia in Italy.

In other words, while not laying the blame exclusively at the door of the CAP regime, it is clear that the negative environmental effects of S&G farming in recent years have taken place in a particular policy context that initially encouraged high stocking levels and subsequently acted as a buffer against any downward change that might have resulted from market signals. Without this distorting factor, environmental effects related to overstocking would certainly have been less of an issue.

At the same time, environmentally positive effects result from the fact that the premium system has been instrumental in maintaining S&G farming activity in the more marginal areas. Despite the negative effects produced in certain places where stocking levels were excessive, there have also been broad benefits through the perpetuation of open-habitats and the plants and animals associated with these, as well as providing an important contribution to fire control.

Without financial support, including the S&G premium, many meat-orientated S&G production systems would make little or no net income, so that in its absence many more farmers could be expected to have ceased production. Thus, in some of the more marginal areas of the Mediterranean uplands, the policy has slowed the process of decline. The premium has helped to maintain occasional, low-intensity grazing and browsing (by both sheep and goats) with definite benefits for biodiversity and fire control. Nevertheless, the decline has continued, if at a slower rate than would otherwise have occurred, and more remote areas of vegetation continue to be abandoned.

In Member States that allocated the S&G premium on a regional basis from 1992, this “ring-fencing” put a brake on the process of concentration of production into certain regions that was beginning to happen. Although this did not prevent the concentration of production within regions nor within farms.

At the same time, it is quite clear that S&G farming systems have not involved merely in response to the premium system. Rather, it could be said that the premium has helped to prop-up the viability of S&G farms and to keep them in existence; but apart from the stimulus to have more female animals and to keep them during a fixed retention period, the tendencies in farming systems probably have been influenced more by market, technological and socio-economic drivers than by policy.

Notable examples of such tendencies include the decline of shepherding (high labour costs, poor labour conditions, low social standing) and increase in fencing, the decline of transhumance in the Mediterranean zone (for similar socio-economic reasons) and the increased use of concentrates and other purchased feeds (increased availability, convenience, enables greater control of animal nutrition, e.g. for higher fat content of milk). Although data are not available on the precise environmental effects of these tendencies, taken together they clearly imply a decline of precisely those systems and practices that are associated with the environmental benefits of S&G farming, namely the seasonal, shepherded grazing of semi-natural vegetation and arable stubbles and fallows.

The decline of shepherded and transhumant systems is a particular environmental concern in the Mediterranean zone, because of the specific environmental consequences. Sheep and goats are kept increasingly in fenced fields and/or indoors and fed increasingly with purchased feeds, resulting in trampled and exhausted pastures in summer, and the abandonment of seasonal upland and mountain grazing, leading to greatly increased fire risk and loss of natural values.

A notable change has been the steady increase in average flock size. This has been particularly notable in the UK and Spain, where sheep have become increasingly concentrated in very large flocks (over 1,000 or even 2,000 head). These large flocks are themselves an environmental concern, due to the difficulties in shepherding them and their potential impact on vegetation.

While the S&G premium system cannot be said to have caused the processes described above, it is also true to say that no mechanisms have been introduced to provide a greater level of support to less intensive S&G farming systems (as occurred in the beef sector), to farmers keeping smaller flocks, or to support such widely beneficial practices as shepherding. Most Member States have chosen not to take up options existing under the regime, such as national envelopes.

Summary of findings post-CAP reform of 2003

Environmental considerations post-CAP reform are in many ways different from those of recent years, partly due to the dismantling of the previous S&G support system but also to the introduction of new mechanisms such as the new animal identification system and cross-compliance, and the potential penalties associated with these.

In the Atlantic region, some of the more extreme cases of overstocking have been, or are currently being, dealt with by policy mechanisms under the LFA and agri-environment schemes, and cross-compliance (e.g LFA supplements in Wales, Commonage framework plans in Ireland and the use of the sheep national envelope in parts of England). Less policy action has been taken in the Mediterranean region, but in areas with a problem of stocking densities above the ecological optimum, it is possible that the CAP reforms will result in some reduction in animal numbers with a potential reduction in pressure on the environment (habitats and soils).

However, farming systems driven solely by the market are unlikely to maintain sheep grazing on semi-natural pastures at appropriate levels. Such a policy environment seems more likely to encourage an intensive use of good land, further mechanisation and housing due to the high costs of labour (where this is even available) and a cessation of labour intensive practices.

So although the problems of overstocking as driven by the premium system seem likely to decline, this does not mean that intensification will cease. In fact, it is likely that only the more rationalised farms will survive in the decoupled environment. In Mediterranean areas this will mean an on-going decline of shepherded grazing systems, and a continued increase in the use of fencing and of sedentary stock using purchased feeds.

At the same time, the decoupling of CAP payments in other sectors may lead to wider shifts in land use, including the possible decline of arable cropping on more marginal land, with sheep production as a potential new use. While the environmental effects of such a change are difficult to predict and have not been analysed in the present study, one effect of such land becoming available for sheep production may be to accelerate the process of rationalisation and concentration of the sector, thus adding to the problems of competitiveness of the more traditional, marginal systems.

Indeed, the greatest environmental concern expressed during interviews in all regions was the future threat of large-scale abandonment of the production systems that are of most benefit in environmental terms, partly because of the characteristics of the systems themselves (e.g. labour intensive, poor infrastructure), partly because of their geographical location, and partly because of increased competition from more dynamic areas and systems.

The process of abandonment in more marginal areas and concentration and intensification in areas with a comparative advantage is well known in Europe for other farm sectors. In the case of S&G farming this process will become a major concern because of the large areas of environmentally sensitive land that currently are maintained by S&G farming systems. Identifying, achieving and maintaining an environmentally appropriate level of grazing is not simple. Clearly a decline of grazing pressure is not always detrimental for environmental values. In some areas of the Mediterranean uplands, where historically there were very high sheep and goat numbers, the decline that has taken place in the past 30 or 40 years probably has brought some environmental benefits, as semi-natural vegetation has recovered and become more diverse. Yet if grazing activity disappears altogether from these same areas, the environmental losses will start to outweigh the benefits as the landscape closes over.

In fact in some areas of the study countries, grazing has already declined to a point that raises important concerns. The study reveals under-grazing and abandonment to be a major current problem for nature conservation on the remaining areas of open-habitat vegetation in the lowlands of the UK, in areas where livestock farming has fallen below the critical mass needed for it to continue to have a beneficial effect. The same situation occurs at a local level in the other study countries, for example where arable and permanent crops have squeezed out traditional mixed farming.

Whilst there are many parts of the uplands of the UK and Ireland that will no doubt benefit from a period of grazing cessation, in the long term large areas will require grazing to maintain nature values. To achieve nature conservation objectives, this grazing would be ideally at levels below the economic optimum, but above the cross-compliance minimum. Left to the market, such systems will not survive. So it is clear that any future policy needs a mechanism to support S&G farming at a level between the extreme limits of tolerance that cross-compliance might impose.

A common feature of the systems that are most beneficial to the environment is management of stock by shepherds. The increasing difficulties in employing skilled shepherds appear to be common to many of the areas in question. Whilst the shepherding function is regarded as

essential by many environmental experts, the tendency for policy makers and agronomists is to regard shepherding as an historic curiosity whose disappearance is inevitable. This is a clear example of how the more traditional S&G production systems need to be re-evaluated by policy makers within the context of the broader objectives for agriculture that recent European Commission reforms have introduced.

If the process of rationalisation and concentration of production in intensified systems and abandonment of extensive S&G farming in marginal areas continues or accelerates, it can be expected to have several consequences for the environment:

- A decline in, or cessation of, grazing would lead to a loss of a range of habitats to scrub invasion or afforestation, especially in uplands and mountains and in poorer steppelands, probably contributing to a further decline of already endangered species.
- Declining maintenance of small areas of semi-natural vegetation (grasslands, heaths, marshes, moorlands) in primarily arable or ley grassland landscapes.
- Declining biodiversity value of semi-natural grasslands increasingly under more intensive management (divided into fenced lots, increased use of fertiliser).
- Loss of shepherded flocks on extensive arable steppes in Mediterranean areas and the loss of hefted flocks of sheep in the hills and mountains of the Atlantic region.
- Increased fire risk and increased intensity of fires, due to the accumulation of dry matter on scrub and forest land.
- Increased soil erosion following forest fires, and risk of desertification in the case of repeated fires on the same land.
- Increased use of purchased feeds, more housing of breeding sheep and more intensive, housed finishing of lambs (environmental costs of manufacture and transport and concentration of dung).
- Potential problems of waste disposal from increasingly larger-scale intensive milk systems.

The new policy situation post-CAP reform is not the only driver of the abandonment threat, perhaps not even the principle driver. Social and economic factors are of great significance. Especially in more marginal areas, fundamental issues include the advanced age of many farmers, the limited attractions of S&G farming for young people and the consequent lack of farm successors, the difficulty and expense of finding skilled labour. Partly these issues can be traced back to the farming conditions themselves (long hours of hard work, no holidays or weekends, poor on-farm and off-farm infrastructure, marginal incomes). Decoupling of CAP support adds a further level of disincentive. This socio-economic reality is a major challenge for policy makers, and one which needs to be addressed if environmental objectives are to be achieved.

The identification and registration scheme

The introduction of a new identification system does not have explicit environmental objectives. Rather it aims to be a mechanism to trace animals for veterinary purposes and provide a mechanism for monitoring the number of animals now that headage counting (for the purposes of premia) is no longer carried out in all Members States.

Animal numbers are needed to monitor compliance of minimum stocking requirements under cross-compliance and/or for LFA payments and in some cases (e.g. in the Scottish LFA scheme) to calculate the mix of livestock (i.e. mix of cattle and sheep). The report reviews the way Council Regulation 21/2004/EC has been implemented in the 6 study countries and outlines the various derogations granted.

From an environmental viewpoint the new scheme will now provide the main basis (in decoupled countries, the only basis) for making the link between the number of animals on a farm and the forage resources available to them. As pointed out above, this is essential knowledge in relation to what has been the biggest environmental issue associated with the sector. However, it is far from clear whether the new system will provide the information needed in order to monitor and control the effects of sheep and goat grazing (per se) because of the problem of mixed livestock systems and, importantly, the use of common grazings, especially in Mediterranean areas.

Many sheep farmers are elderly, and many sheep flocks are small (e.g. in 6 member states 32% of farms have less than 20 sheep) and for these small producers the new system is a management burden involving additional costs. Together with the signals associated with decoupling, the potential cross-compliance penalties associated with sheep tagging might be the bureaucratic “straw the breaks the camels back” leading farmers in the systems of most environmental value to stop production.

Overall, the new identification system should allow a more effective control of animal numbers and movements, with potential management benefits for the larger, modernised producer, especially once electronic identification is introduced.

Policy conclusions

Clear strategic objectives need to be established for S&G farming in Europe, not purely as an agronomic-economic sector, nor as a land use simply to be controlled by rules and regulations. Rather, an integrated territorial approach is required, in which a viable future for S&G farming is designed to help to address issues such as wild fires, maintenance of biodiversity and landscapes, soil conservation, and the social fabric and cultural heritage across very large areas of Europe

A set of EU-level strategic objectives should include the following:

- To maintain a regional distribution of S&G systems across Europe, avoiding excessive concentration, as this implies a decline and disappearance of systems from many areas where they are beneficial.
- To maintain S&G grazing systems on the most marginal land within regions (this requires the identification of the most sensitive areas and farms, and the identification of animals).
- To specifically support sheep farming with environmental benefits, such as appropriate stocking levels and grazing regimes (minimum and maximum densities, seasonal movements of stock where environmentally beneficial)
- To favour shepherding (an integral element of the most environmentally valuable farming systems, and one which is becoming economically unviable).

- To discourage the tendency to increasingly intensive feeding systems (housing and reliance on concentrates), especially in milk-orientated production but also in meat systems.

Policy mechanisms need to be designed and implemented across the S&G regions in order to pursue these aims. The main policy options to be considered in the present study are those available, or potentially available, under the CAP S&G regime. The reality is that these options are rather limited. Fully decoupled premium (as in UK, Ireland, Italy) has few opportunities options to influence the type and pattern of sheep and goat farming.

Cross-compliance should have a role in addressing problems of extreme overstocking, although such problems may well be reduced with decoupling of the headage premium. Minimum stocking levels may also be established, in order to fulfill the requirements on land maintenance (preventing scrub invasion). This mechanism may provide an incentive for some farmers to keep livestock and for land to continue under grazing, whereas in the absence of cross-compliance the economically rational response to decoupling would be land abandonment.

However, this is not a secure approach, and is almost impossible to implement on the vast areas of public and common grazing that are under S&G use at present, and where the individual farmer cannot be held responsible for the condition of vegetation owned, for example, by the Local Authority or the State. Neither is the obligatory approach a secure option for maintaining farming systems that are inherently unviable and unattractive in socio-economic terms, especially for young people.

Partially coupled premium (France, Spain, and to some extent Greece) may continue to provide an incentive for S&G farming (meat orientated), but without addressing the problem of competition between the more intensive systems on better land, and the marginal systems that are increasingly not viable. Hence the process of concentration and abandonment is not addressed.

A key conclusion of the study is that such general mechanisms alone are insufficient. Cross compliance can set the extremes of acceptable grazing pressure, but there is a clear need to provide *targeted* measures in order to promote the most appropriate grazing patterns within these limits:

- Incentives targeted on specific areas (much more tightly defined than existing LFAs, and with incentives for the most marginal areas or the most marginal farms that are set sufficiently high to maintain the economic viability of low-intensity farming in these areas or on these farms).
- Targeted on specific farming systems, especially those that exploit natural resources at a lower intensity (e.g. lower stocking densities than the average within the specific area).
- Targeted on specific farming practices, such as shepherding, local cultivation of fodder crops, transhumance.
- In addition to incentive payments, there is a need for investment aid in farming infrastructure. Again, this needs to be targeted on specific objectives (such as improving the viability of farms in the most marginal areas), otherwise investment aid tends to be exploited only by the more dynamic farms.

Currently the only mechanism potentially available for a targeted approach under the S&G regime is Article 69 envelopes. These could be used to provide a higher level of aid to certain farming systems and/or areas, for example, with stocking densities below certain thresholds, using shepherding, or grazing more remote and inaccessible pastures. However, it is not clear that Article 69 envelopes are intended for such specific environmental targeting.

Pillar 2 measures are more appropriate for a targeted approach. Although not a focus of the present study, it is apparent from the research undertaken that there is considerable work to be done in developing a more effective package of Pillar 2 measures on the ground in S&G areas.

In particular, there is a striking contrast between the relatively more developed policy situation in the Atlantic region (UK and Ireland), where LFA and agri-environment schemes are being used to influence the pattern of livestock farming in sensitive areas; and the situation in the Mediterranean region, where the LFA scheme is far less influential (in spite of the larger proportion of territory included in the designation) and where agri-environment schemes generally have paid less attention to extensive livestock systems.

S&G policy questions are not limited to support payments and control mechanisms. One policy concern that emerged from interviews were the difficulties faced by more marginal S&G farms in receiving grant aid for the improvement of basic farm infrastructure (e.g. sheds, livestock handling facilities). Such aid often depends on the preparation of a full modernisation plan, compliance with economic thresholds and the availability of capital, factors that act as serious barriers to many farms. Concern was also raised about the EU labelling system for “traditional” products and for “geographical origin” that do not distinguish between different farming systems (e.g. intensive and extensive).

Recommendations

Especially given that the negative impacts of intensive S&G systems are relatively less than for most other farming sectors, the environmental priority for S&G should be to ensure active and sufficient support for the farming systems that play a *positive* environmental and territorial role. Two primary aims can be condensed from the objectives proposed above:

- To maintain the *basic socio-economic viability* of the more environmentally-valuable sheep/goat farming systems in the areas where their presence is most environmentally positive.
- To encouraging the farming practices that are environmentally most beneficial (e.g. appropriate grazing regimes, shepherding, hay-making), and discouraging certain practices that are damaging.

Simple support schemes are needed to keep S&G farming in the remote regions where there are few if any agricultural alternatives. To have such a function, the support provided by the S&G premium system would need to be coupled in some way to the farming activity and targeted in order to provide a higher level of support to the least intensive systems. In the absence of sufficient mechanisms under Pillar 1, the LFA scheme may be the most appropriate for providing basic support, although with the same criteria as referred to above. Long-established S&G management techniques should be valued and supported through policy mechanisms. Certain aspects are fairly universal and environmentally beneficial and could be supported across the EU territory, especially shepherding, the use of sheep dogs and

annual grazing regimes within locally appropriate density bands. Bonuses could be paid through the LFA scheme for supporting such practices.

There is a limit to what blanket measures, whether Pillar 1 or Pillar 2 (e.g. LFA), can achieve. There is a need for a much clearer identification of aims at regional-local level, putting S&G farming in the context of territorial objectives (fire control, biodiversity, landscape, social fabric and cultural heritage) with targeted measures to achieve them. Agri-environment schemes are suitable for more detailed targeting (e.g. supporting particular seasonal grazing regimes).

The scope available through Pillar 2 has not been fully utilised. There needs to be a much more balanced policy approach between the Atlantic and Mediterranean regions, much more targeted LFA mechanisms recognising the value of S&G grazing in areas of High Nature Value, and wider development of agri-environment schemes that recognise the value of grazing animals at appropriate stock density over large areas of territory.

Basic mechanisms for income support and incentives for certain practices need to be complemented with simple mechanisms for targeted investment aid, in order to improve the farm infrastructure of holdings that tend to be by-passed by policies focused on competitiveness. The EU system of product labelling needs to be reformed so that the consumer can distinguish between products of intensive S&G farming systems and those using practices adapted to the local environment (appropriate grazing of local forage, use of locally grown fodder, etc.). This is more important than geographical location, from the point of view both of food quality and the territorial role of the farming system.

Data sources are inadequate at present. Databases such as FADN and FSS should be better adapted to environmental considerations. In particular, data are needed on the real stocking densities of individual livestock species, not only on the farm area, but also on public and common land. FADN could be extended to include economically smaller holdings.