

MED	Spain	<p>Piano di Sviluppo Rurale 2007-2013 Misura 214 Pagamenti agroambientali Azione 8 Conservazione di razze locali minacciate di abbandono, Legge 64/2006 Regione Toscana, Reg. CE 1974/06.</p> <p>RD 1366/2007, de 19 de octubre, por el que se establecen las bases reguladoras de las subvenciones destinadas al fomento de las razas autóctonas en peligro de extinción. ORDEN APA 3181/2007, de 30 de octubre, por la que se establecen las bases reguladoras de las subvenciones destinadas a las organizaciones y asociaciones de criadores para la conservación, mejora y de las razas puras de ganado de producción. RD 368/2005, de 8 de abril, por el que se regula el control oficial del rendimiento lechero para la evaluación genética en las especies bovina, ovina y caprina. National Plan for the management, conservation, improvement and sustainable utilization of animal genetic resources. PAC - Rural Development Plan 2007-2013 of the Spanish Government and the Autonomous Communities</p>
SEE	Albania	<p>“Law for the breeding of livestock” Nr. 9426 dt.06.10.2005 Amendet with the Law Nr. 9864 dt. 28.01.2008 CMD (Council Ministers Decisions) “For protection of local buffalo breed from extinction” Nr. 219 dt. 16.05.2002 CMD „for some changes in CMD Nr. 219“</p>
SEE	Bulgaria	<p>Rural Development Programme (2007-2013), Measure 214-Agroecological Payments. Animal husbandry Law. National Strategy Plan for Rural Development (2007-2013). Biological Diversity Law. Program "Rodopi"</p>
SEE	Croatia	<p>"Law on financial incentives and benefits to agriculture and fisheries, Official Gazette 29/99. Livestock Act, Act on State Support in Agriculture and Fishery. National Strategy and Action Plan for the Protection of Biological and Landscape Diversity – NSAP Livestock Act; Veterinary Act; Animal Welfare Act; Act on State Subsidies for Agriculture, Fisheries and Forestry; Seed Production Act; Act on Agriculture;</p>
SEE	Montenegro	<p>Agency for bank and reconstruction has done a number of projects to support sustainability. UNDP has also done some work that might positively reflect on autochthonous breeds. USAID as well.</p>
SEE	Republic of Macedonia	<p>Law for Animal Production, 2008 Law for Agriculture and Rural Development, 2007</p>
SEE	Romania	<p>Government Emergency Ordinance no. 194/2005 on financing from the state of measures for the conservation and use of animal genetic resources in critical condition, in danger of extinction and the vulnerable; nr.137/2006 Law Pent * National Animal Improvement Programs (1972, 1986, 2003) Legea zootehniei Nr 72/2002 Legea Nr.137/2006</p>
SEE	Serbia	<p>Serbian Government Program and Act on Conservation and Sustainable Use of Animal Genetic Resources. "Law on the Protection of the environment (Law on protection and welfare of animals is not yet approved)</p>

Potential Ark Centres, Rescue Stations or Quarantine Units

Participants were asked to suggest any potential Ark Centres, Rescue Stations or Quarantine units that could, perhaps be interesting for the ELBARN project. The full list is not replicated here in the interests of data protection; however, the current situation (end 2009) is as follows:

Ark Centres:

420 Ark Centres in 41 European countries are currently included in the database.

69 Ark Centres were suggested through the questionnaire, many other addresses have been given as “tips” at the ELBARN workshops, in correspondence and have also been discovered in the running of the project.

The database can now be searched using a map function as well as searching by country or type of animal. From this it is possible to see that e.g. Germany now has 156 “Ark Farms” listed. This reflects the work of the ELBARN partner GEH, which has been working on this network of ark farms for a long time. Examples such as the case of Germany show that the A&RC concept is an idea that can take off and that it needs NGO activity to get farmers “on the ground” to take part.

Rescue stations:

46 sites were suggested in the questionnaire. The ELBARN team are in the process of contacting them all to ask if they agree to take part in ELBARN. Verification tours have accumulated 16 agreements with rescue stations up to now:

3x Croatia
6x Serbia
2x Hungary
1x Romania
1x Ukraine
1x Germany
1x Kosovo
1x Italy

further tips that need verification (not in questionnaire results):

2x Bosnia
1x Serbia
1x South Tyrol, Italy

Quarantine Units:

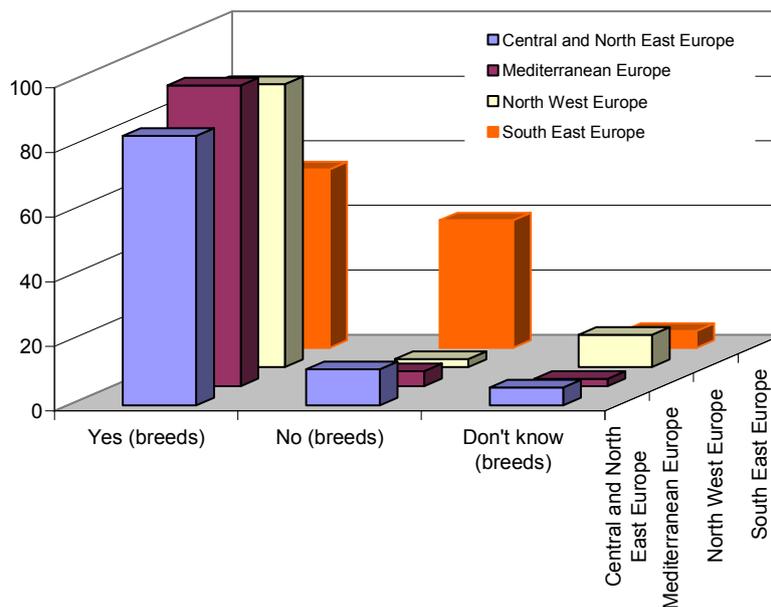
The questionnaire identified 16 potential quarantine units – these are all yet to be verified.



Recording Data

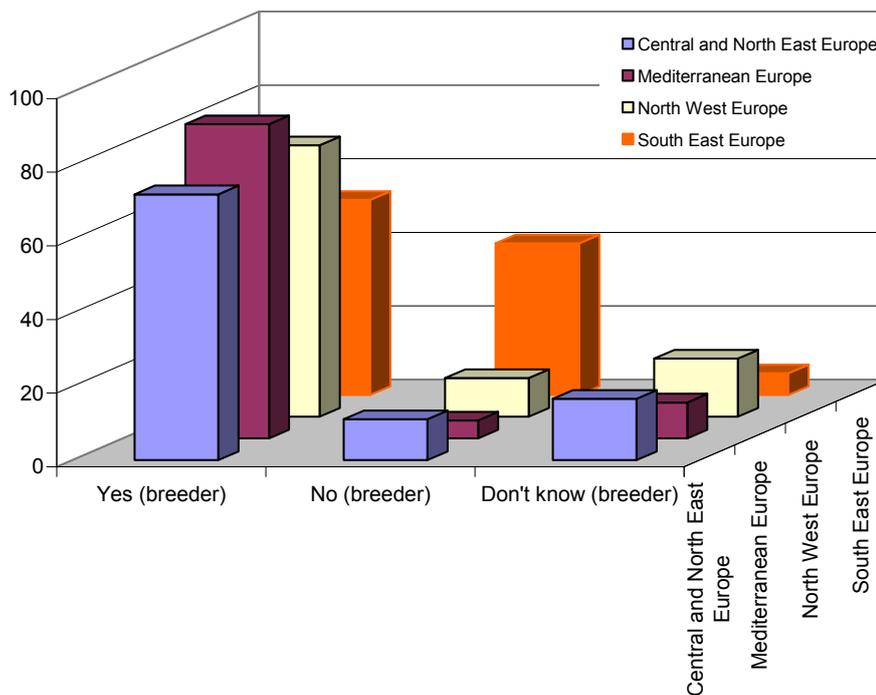
Participants were asked if there is a register for autochthonous breeds in their country. A register of breeds is a prerequisite of adequate long-term monitoring and is, as such, fundamental to all conservation attempts (see ELBARN Breeding Guidelines for further information). The results show that, in many cases, registers are in place. However, anecdotal evidence tends to show that not all breeds or animals are included in these registers and there is also some debate about how well these registers are maintained and how useful they, in this case, are to conservation.

Figure 3: Comparison between the Areas regarding a Register for autochthonous breeds



Participants were also asked if there is a register of breeders in their country. Again, as with the register of breeds, a register of breeders is a prerequisite of adequate long-term monitoring and it is also essential in preparing effective contingency plans for disease or natural disaster. The results show that, in many cases, registers are in place. However, anecdotal evidence again tends to show that not all holdings are included in these registers and there is also some debate about how well these registers are maintained and how useful they, in this case, are to emergency planning.

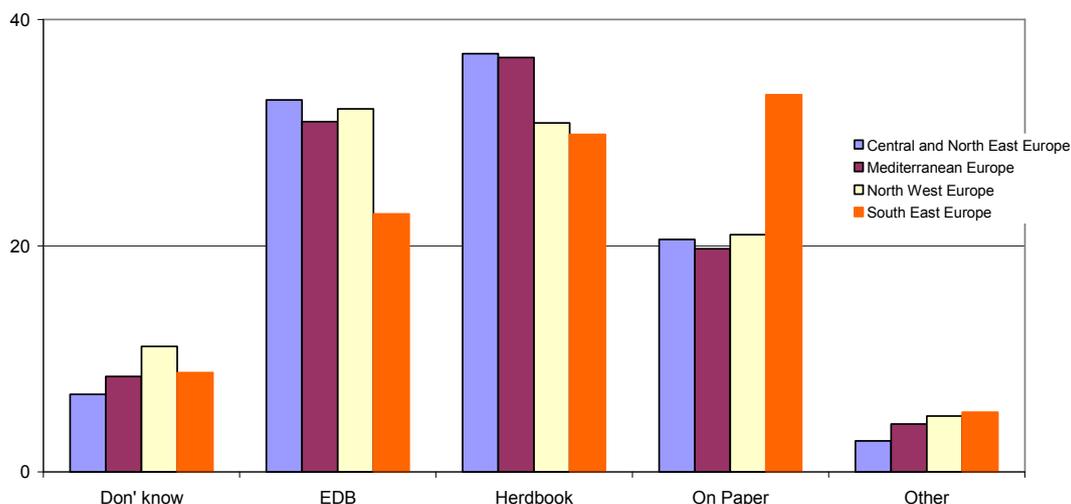
Figure 4: Comparison between the Areas regarding a Register for autochthonous breeders



Participants were asked how herdbooks were managed and who was charged with managing them. The options “electronic database” [EDB], “herdbook”, “on paper”, “other” and “don’t know” were given. The results show that there appears to be a move from records on paper to some form of EDB. In the more economically developed countries in the north and west of Europe, the trend seems to be stronger with more EDBs and less recording on paper. It is to be expected that the other areas will follow suit as this is, these days, the simplest form of information sharing. In all cases, most recording is undertaken by either a breed organisation or a governmental body.

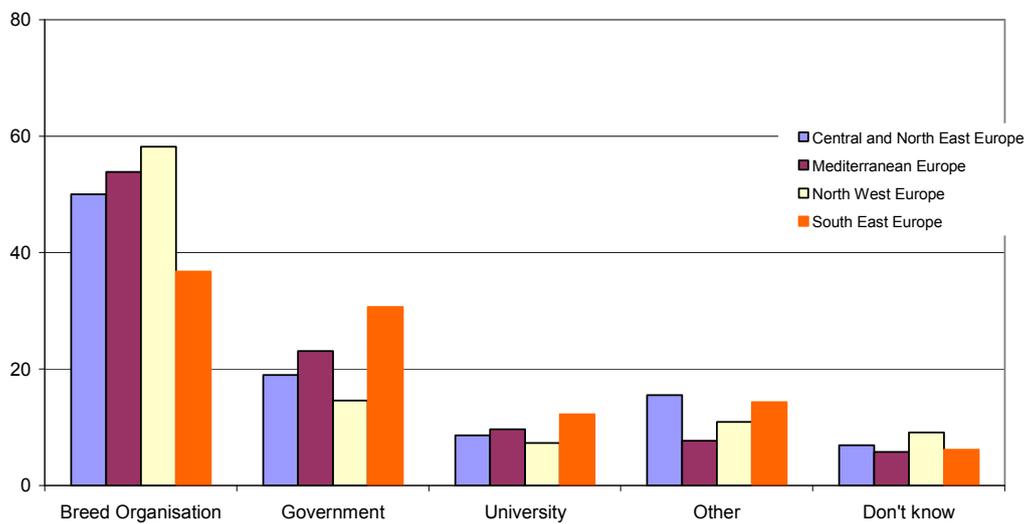
Anecdotal evidence suggests that breed organisations are often mandated by governments to keep these records. Figure 6 shows that breeding organisations usually keep the herdbooks, closely followed by governmental bodies. In some cases universities or private persons run the breeding programmes.

Figure 5: Comparison between the Areas regarding the recording of the breeding program data



A question that was raised at more than one of the workshops addresses the issue of the quality of the herdbooks kept. A further set of questions would be needed to address the concern that, as with the registers of breeds and breeders, the data recorded in herdbooks is not always of optimal quality.

Figure 6: Comparison between the Areas regarding which kind of institution records the breeding program data



Marketing

Adequate marketing and promotion of rare breeds and their products and services is very important in order to keep farmers interested in breeding these animals, or even for reviving interest in forgotten livestock breeds. Therefore, participants were asked what marketing schemes exist in their country that help promote autochthonous breeds. The results (below) show that there are many different schemes in place. The most popular schemes seem to be AOC or protected origin labels. It is also possible to see that Slow Food is active in this field. The “marketing work group” which produced guidelines for the ELBARN product suggested that a special label or trademark should be created for the purpose of marketing and promotion of rare breeds and their products and services. This suggestion is currently being put into action.

Figure 7: List of marketing programs cited in the survey

AREA	COUNTRY	Marketing programs
NWE	France	Appellation d’origine contrôlée IRQUA : Signe de qualité Poitou-Charantes pour le viande de race bovine Maraîchine " " " " " " " " fromage de Chèvre Poiterine Sur les petites races bovines : Pie Noire Bretonne – Abondance - Porcin – Cul noir gascon, cul noir du Limousin Porcs basques Porcs de Bayeux
NWE	Netherlands	Friese Roodbonte, There are some niche activities, eg. incl. i) Deep Red cattle (Brandrood meat), ii) Chaams hoen (Slow Food), iii) Drenthe heath sheep (Slow food), iv) Dutch Friesian Red and White (Fries Roodbont meat), Groningen Whiteheaded (marketing of regional product)
NWE	United Kingdom	Traditional Breeds Meat Marketing Scheme, BPA Pedigree Pork Scheme, see www.rbst.uk
CNE	Germany	Swabian Hallian pig
CNE	Hungary	- Hungarian grey cattle geographical origin protection program - Mangalitsa products - Hu-Ba idigenous poultry products
CNE	Switzerland	ProSpecieRara promotes endangered breeds through marketing activities. The key element here is the ProSpecieRara label. See www.prospecierara.ch
MED	Greece	Water buffalo products, Lake Kerkini in Serres, by butchers and stakeholders
MED	Italy	Association “Libera Associazione Pastori e Malghesi del Lagorai”, small-scale production of cheese, Lagorai (near Trento). Lamb sheep Sambucana. Cheese DOP Murazzano from sheep Delle Langhe, Robiola goat, Roccaverano, Cheese Montebore of cattle, Breeds and products from Slow Food.
SEE	Albania	Marketing program for dairy products to local race Dukati
SEE	Serbia	Fair old race, Dimitrovgrad, Agricultural Fair in Novi Sad,

Networks and Institutions

Participants were asked to list any networks and institutions that may be interested in hearing more about ELBARN or may have networks of Ark Farms that may be able to be used as A&RCs. The list below shows the data that was provided. This data will be verified and relevant institutions will be contacted.

Figure 8: List of networks and institution which could have interest to be included in the ELBARN database, recommended by the participants of the survey

AREA	COUNTRY	Networks, associations or organisations included in ELBARN database
NWE	Belgium	www.sle.be
NWE	France	Association pour le développement et la défense de la Chevre Poitevine (ADDCP)
NWE	Netherlands	SZH breed centres and cityfarms, it greane nest, Friesland Het Gelders Landschap Nederlandse Hoenderclub Werkgroep Professionele schaapskudden - Mr. Pastink, Overijssels Landschap National Historic Museum, Open Air Museum,
NWE	Norway	www.nordgen.no/nlm.umb.no
NWE	Sweden	http://www.alternativ.nu/lantrasforum/
NWE	United Kingdom	RBST
CNE	Austria	ÖNGENE www.oengene.at , Arche Austria
CNE	Czech Republic	Suedboehmische Universitaet Ceske Budejovice, Agrarfakultaet, Tschechische Agraruniversitaet Praha, Agrarfakultaet, Forschungsinstitut fuer Tierproduktion Praha, Club of Czech Red cattle breeders (8 smallholder farms plus University of South Bohemia herd, at present)
CNE	Germany	Fachbeirat Tiergenetische Ressourcen http://www.genres.de/tgr/beirat , GEH-Archehöfe and GEH-Arche parks
CNE	Hungary	National Parks (see article No. 4) Breeding Associations (see article No. 5)
CNE	Slovakia	It could be expected that this type of network will also be established within Slovak Rep. and could be included in the ELBARN DB in the near future.
CNE	Slovenia	BIOTECHNICAL FACULTY, DEPARTMENT OF ANIMAL SCIENCE http://www.bf.uni-lj.si/zootehnika STUD FARM LIPICA http://www.lipica.org/ BEEKEEPING ASSOCIATION OF SLOVENIA http://www.cebelarska-zveza-slo.si/
MED	Greece	Amaltheia, http://www.amaltheia.org.gr/
MED	Italy	Verband der Südtiroler Kleintierzüchter , www.alpinethgheep.com , Associazione RARE, http://www.associazionerare.it/ , Associazione Regionale Allevatori della Calabria (ARA), http://www.aracalabria.it/
MED	Spain	Centro de Recursos zoogeneticos de Galicia, Ecoagroturismo Foundation, Centro de razas Equinas de Galicia, La

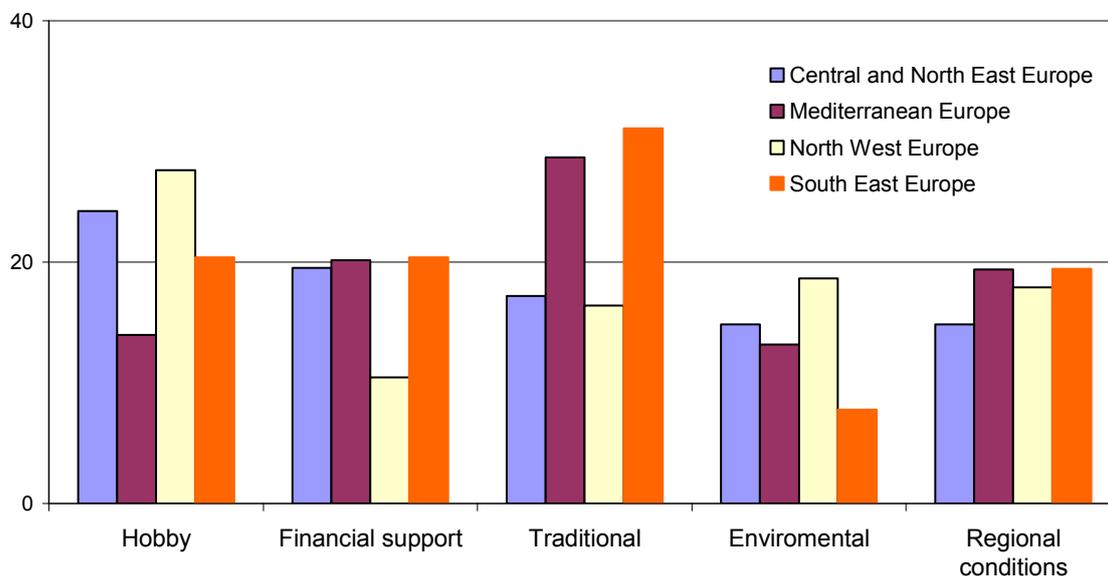
SEE	Bosnia and Herzegovina	Federación Española de Asociaciones de Ganado Selecto - FEAGAS, www.feagas.es Centre for Preservation of Domestic Animal Species at the Dept. of Animal Breeding at the Veterinary Fac. of Sarajevo University.
SEE	Bulgaria	Agricultural University of Plovdiv, Department of livestock Science, Association of rare indigenous breeds in Bulgaria
SEE	Croatia	Federation of Croatian Posavac horse breeders, http://www.hrvatskikonj.hr , Croatian Livestock Center, www.hssc.hr
SEE	Serbia	Natura balkanica, Dimitrovgrad

Why people keep autochthonous breeds

Lastly, participants were asked why people keep autochthonous breeds in their country. The results of this question are very interesting and show the diversity in Europe – in the south and south-east, many farmers are still engaged in more traditional farming. In the north and north-west, where the industrialisation of agriculture is advanced, many keepers of autochthonous breeds keep this livestock for hobby purposes.

This result indicates that an attempt to create a “one size fits all” policy for conservation of autochthonous breeds in Europe would be mistaken. Regional differences in economic situation and, also, motivation to take part in conservation activities should be taken into account in European policy. The successful conservation of autochthonous livestock breeds only takes place when all stakeholders are involved. Understanding what drives people to keep these breeds is essential for developing policy on this subject.

Figure 9: Comparison between the Areas which reasons are most important to keep autochthonous breeds



Comment Analysis

There were many comments given by respondents to the questionnaire. Often these were just to clarify complex points, add further details and, sometimes, to voice an opinion on a particular subject. These comments were analysed by the following process:

The complete comment sections of the questionnaire were copied into a separate file and thus anonymised. All comments that were purely factual – such as an address or the number of an EU regulation – were deleted. The full sets of comments to each question were then compiled. This was so that the comments could be read in context. Using a coding system, the themes that arose whilst reading through the comments were identified and then each comment was coded according to its content. Some comments received more than one code. In a next stage, the comments were then compiled according to codes and thus, an overview of the main focus of each theme was arrived at.

This process is, of course, purely interpretive and it is acknowledged here that a focus on the main themes of ELBARN has been used. However, an attempt has been made to reflect a balanced overview of the comments so that all stakeholder sectors are represented. Nevertheless, it became clear whilst reading through the comments that there is often a disparity between the views of the “governmental bodies” and the “non-governmental bodies”. It is suggested here that addressing this disparity is an urgent need and is a place towards which EU funding would be well directed.

The themes that will be dealt with in this section of the report are:

- The successes and failures of EU or national level schemes for protecting agrobiodiversity
- Collaboration and cooperation
- NGOs and Breed Associations
- Universities
- Management of breeding
- Promotion, Marketing and Education
- Sustainable use
- Cultural Heritage

The successes and failures of EU or national level schemes for protecting agrobiodiversity:

- All levels of policy and law were mentioned - the international, the European and the national. Also, in some countries, there are separate regional schemes.
- The main purpose of these schemes is to provide a legal framework for the conservation of agrobiodiversity and, also, to pay subsidies.
- These schemes are not of high priority in national politics.
- Where there is no adequate national legislation for the conservation of agrobiodiversity, there is a demand for it.

- There are also many privately funded initiatives (UNDP, GEF etc) for the conservation of agrobiodiversity.
- Most of the above is based on officially recognised breeds. Not all stakeholders are content with the breed recognition in their country. There is criticism for programmes that allow crossbreds and also reconstructed breeds.
- Sometimes it is the breeder or breed society that has to be officially recognised before subsidies are paid out. This is also contentious.
- Subsidies could be directed towards promoting the agricultural use of traditional livestock breeds. However, this is also contentious as respondents pointed out that:
 1. The administration involved requires a commitment to the idea of conservation, it is too much work for a commercial farmer
 2. Subsidies are essential for survival whilst niche markets and products are being developed
 3. Whilst such subsidies may cause an increase in stock numbers, they may, through selection and breeding towards high production, lead to the dilution of many of the valuable characteristics of the breeds.
 4. Modern breeds are bred for modern farming practices – traditional breeds will never be able to compete with this
 5. Motivation has to be found for farmers to keep breeds that are low-producers.
- There should be no competition between commercial and heritage farms. Therefore the legal structures and subsidies around them should be kept separate.

Collaboration and Cooperation:

This section could also be entitled “Lack of Collaboration and Cooperation”. There is, from a large proportion of the comments, an obvious level of anger and despair on this subject. It is clearly felt that collaboration and cooperation – on a national and international level – between all concerned stakeholders is desirable. However, it is also clear that, in many countries in Europe, this collaboration and cooperation does not function. Some of the problems:

1. “Top down” approach. Decisions are made by committees or work groups that do not include all stakeholders. Animal keepers and breeders do not agree with the strategies.
2. Private owners often have no interest in joining in national strategies. There is too little engagement. Private persons often don’t have the capacity for joining committees.
3. Some stakeholder levels are even accused of actually harming conservation work due to interests not entirely compatible to the protection of agrobiodiversity.
4. Therefore, action is not coordinated. This can lead to conflict, which prevents future collaboration.

On the positive side, there are functioning networks – some are NGO based and others are a combined effort. There are also networks being planned or that have just been established.

NGOs and Breed Associations

- Both NGOs and Breed Associations have important roles to play in the conservation of animal genetic resources. In many countries it is the breed associations that have lists of breeders, farms and animals. They are generally responsible for monitoring and registering activities. Very often this activity is sponsored by the state.
- NGOs are active in conservation policy, networking and promotion. These activities are seen as being important to conservation.

Universities

- Universities are involved in the conservation work, they collect, analyse and store herd data, manage breeding programmes, record performance data, coordinate activities, perform scientific testing.
- Many respondents commented that this involvement gives data reliability and quality – however, in some cases this reliability and quality was called into question.

Management of breeding

- Often, where breeding programmes are in place, there is an increase in stock numbers within a herd or breed.
- However, an increase in numbers is not the only goal and there are many concerns about the breed “improvements” or basis of selection. It is pointed out in many comments on the subject that care should be taken to conserve the unique properties of breeds and a wide genetic diversity.
- Many breeding programmes are financially supported by the state and scientifically supported by universities. This supported is seen as a basis for long-term success of a programme.
- Some breeding programmes are split into “traditional” strains of the breed and “improved” strains.
- Breeding programmes are most important in helping with mating plans and maintaining male lines within a breed.
- Breeding programmes should be well managed and use up to date methodology.

Promotion, Marketing and Education

This section pertains to the promotion of agrobiodiversity as a subject, to promotion of individual breeds and the products and services that they can provide.

- Successful attempts at product marketing lie in the various “protected origin” labels, Slow Food Presidia and other regional initiatives.
- Educational activities and working with schools is seen as being important.
- Use of breeds in establishing a regional identity for tourism is important.
- Some consumer confusion and distrust about the vast range of labels and special promotion activities. It was mentioned that a unified approach might be more valuable – i.e. one label or trademark.

Sustainable use

- Integration of the breeds into agricultural production is seen as desirable but there are barriers in place such as the price of land compared to the productivity of the breeds. This can sometimes be overcome by well-targeted subsidies.
- Breeds can be used on marginal land where profits would not be high anyway or where high-yield modern breeds would not do well.
- Animals can also be used in environmental schemes such as grazing projects in nature reserves.
- Making use of animals in this way contains the additional benefit of conserving the breeds in their original regions and, thus, preserving their unique characteristics.

Cultural Heritage

According to the comments cultural heritage is clearly an important factor in the underlying motivation to take part in conservation activities. There is an emotional attachment and a pride in traditions of a region.

- Conservation keeps heritage alive and creates a “living genebank” for the future.
- Conserving breeds and conserving local traditions and knowledge go hand in hand.
- Thus, a protection and promotion of local traditions is important to rural populations and can aid rural development.

Conclusion

There are still many questions left unanswered about the state of conservation of autochthonous breeds in Europe. There is still much data to be verified. However, the results of this questionnaire go some way to providing an overview of the European situation and the opinions of the participants and is of great use to the project and, perhaps, also to a wider group of stakeholders.

The state of conservation of autochthonous breeds in Europe is far from homogenous. Future European policy should reflect this. The 12th Regular Session of the Commission on Genetic Resources, which met in late 2009, acknowledged the important contributions of small-scale livestock keepers as custodians of much of the world's animal genetic resources and their full and effective incorporation and participation in conservation work was called for.

Financial support for rural areas in the southern and south-eastern Europe should help maintain traditional systems where they still exist and, also, encourage their renewal in places where they have been neglected and forgotten. These systems are often not only important for autochthonous breeds, they are also important for economic stability, rural development and nature conservation.

Much of the conservation work in the north and north-western parts of Europe is undertaken by small scale 'hobby' farmers. Agricultural policy that continuously protects industrial farming to the detriment of hobby farmers may discourage these small scale farmers from keeping autochthonous breeds and leave many breeds endangered.

The ELBARN team thanks all participants for taking part in this fact finding survey.