



Agri-Culture and Agri-Biodiversity in modern Greece



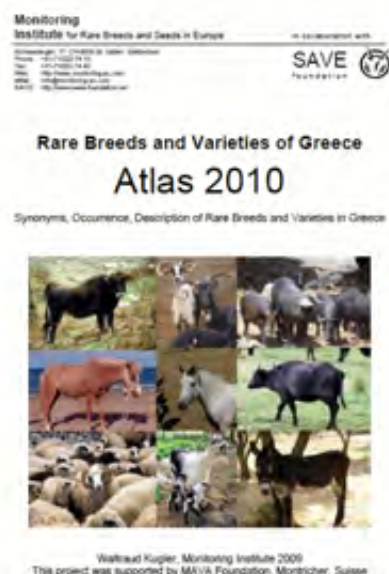
Last Sykia cattle in Chalchidiki

Greece is generally acknowledged as being the cradle of European agriculture and as a biodiversity hotspot. Thus, it is very surprising that the official Greece – world champions of conservation of the historical built environment – until recently have rather hindered than helped the conservation of the living cultural heritage, especially the autochthonous livestock breeds. Now however, there is a change in progress and the responsibilities that go together with the signing of the Convention on Biological Diversity (Rio, 1992) and the Interlaken Declaration (FAO, 2007) have been taken on, it seems seriously. The change in thought in the university sector is worthy of mention, the push for change comes

especially from the younger generation. However, the main bulk of the work is still carried by the NGOs: for the plant sector from Aegilops and the Peliti-Network; in the livestock sector from Amaltheia and their network partners (see links at the end).

Livestock

As in many other countries conservation work was started in Greece by veterinarians and horse breeders. Most well known are the activities for conserving the Skyros and Rodos horses. But also the feral populations as found on Axios have been examined and now enjoy a rudimentary protection. In a time consuming study, the stakeholders from Amaltheia and the Monitoring Institute for Rare Breeds and Seeds in St.Gallen have researched the diversity of the livestock sector in Greece and have documented it. The "Atlas of Rare Breeds and Varieties of Greece" has been published (=> www.agrobiodiversity.net/greece), which presents all of earlier and modern diversity of breeds and varieties. It will be a huge task – also politically – to decide what could and should be protected and supported.



Large ruminants: Greece has an amazing range of types of brachycerous cattle (small, shorthorns), which have quite large differences between them. Most of them are now extinct, however, from some there is still enough stock for conservation. As with the Steppe cattle, Katerini and Sykia, the brachycerous cattle should also be separated into breeds and further conservation should not mix them. The Katerini, the larger type of Steppe cattle, can be considered to be saved, thanks to the engagement on one breeder (D.Dimos) and one municipality. In conservation circles it is known, however, that the distribution over only two locations can be dangerous. An epidemic or other disaster could be the death of this breed. In the mid-term, the population should be decentralised. Of the smaller Steppe cattle, the Sykia, remnants have now been found and, currently, a breeding programme is being established. Remnant populations of other large ruminants have also been observed on individual islands and enquiries are being made about if and how these animals can be conserved. Amaltheia has been working for about four years on the conservation of the Rhodopi cattle. With new nucleus herds, it will be possible to pure-bred them in future.



Rare Oulokeros goats

Greece has always been considered as the stronghold of donkeys. Sadly, they have never been divided into types, only distinguished between two sizes. Now they are, apart from a few exceptions, gone. Amaltheia is working to build up nucleus groups.

Small ruminants: Amaltheia has been, for many years, building up nucleus herds of Oulokeros goats. These beautiful goats with the elegantly curved horns have become the flagship breed of the organisation – they can be used to demonstrate diversity to people, even those who may not have previously known that there is a difference between breeds. Alongside this flagship breed,

the engagement on the part of Amaltheia to rescue the Argos and Ikaria sheep should not stay unmentioned. These two sheep breeds have been purchased, at the last moment, so that new herds can be built up.

In June 2010 SAVE-Monitoring Institute and Amaltheia held a workshop in Central Greece, where representatives of all small ruminant breeds discussed the requirements for breeding in small populations. Special attention needs to be paid, in this context, to find enough, unrelated, sires in order to reduce in-breeding. The decentralisation of the population (for security reasons) and the keeping of a herdbook using special software to prevent inbreeding are recommended when building up a breeding programme with very few original animals.



Argos sheep at the Ark Farm in Orchomenos

Plants

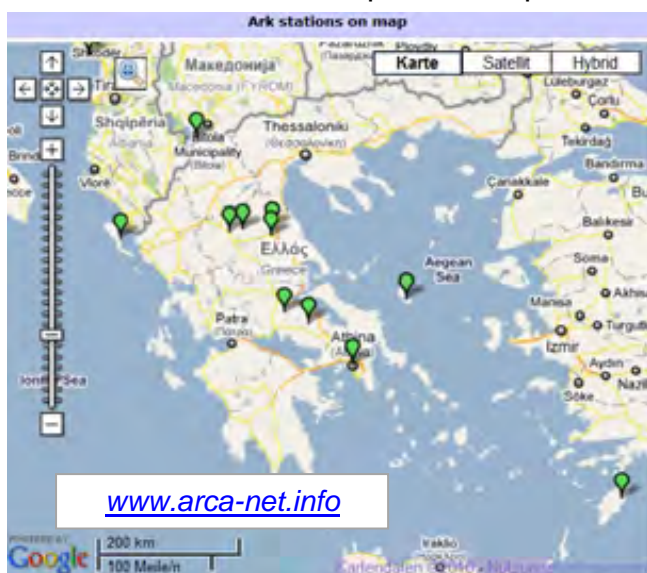
Greek plant varieties completely disappeared from the market place, no Greek seed company survived. The market is now dependant on seeds from Italy, France and Holland. This is why the work of Aegilops and the Peliti-Network is so important because they – partly in collaboration with the Greek gene bank – cultivate old varieties and distribute them between their members. Aegilops has specialised in conservation in small, local gardens whilst Peliti concentrates on sharing the seeds through the network members.



Cultivation of rare crops

Ark Centres

Ark Centres, which are open to the public, are becoming increasingly significant for raising public awareness in Greece about the importance of agricultural diversity.



At the moment there are about a dozen centres (6 Ark Farms, 3 Studs, 2 Agricultural College Farms and an Open Air Museum with plant collections). The Ark Farms of Amaltheia have two goals: the placement of new nucleus herds and also their use for publicity.

As the Aegilops Chairman Kostas Koutis announced at the 4th European Seminar on Agrobiodiversity (Crieven, 4.9.2010) Aegilops will also be establishing Ark Centres – gardens as openly accessible plant collections, which can show the public the range of Greek cultivated plants.

Slowly but surely, Greece is changing. Especially in a country with such a special topography and many marginal areas, the conservation of locally adapted breeds and varieties is essentially important. Without them, vast areas of land will no longer be manageable and will be lost to food production. Understanding and committed stakeholders are in place, now what is needed is a supportive framework from the State.

Links:

Aegilops: www.aegilops.gr / Amaltheia: www.amaltheia.org.gr / Peliti: www.peliti.gr

The project, run by SAVE-Monitoring Institute, „Conservation of Agrobiodiversity in Greece“ was made possible by the support of the Fondation MAVA, Gland, the Lotteriefonds Kt. St.Gallen and two private persons.

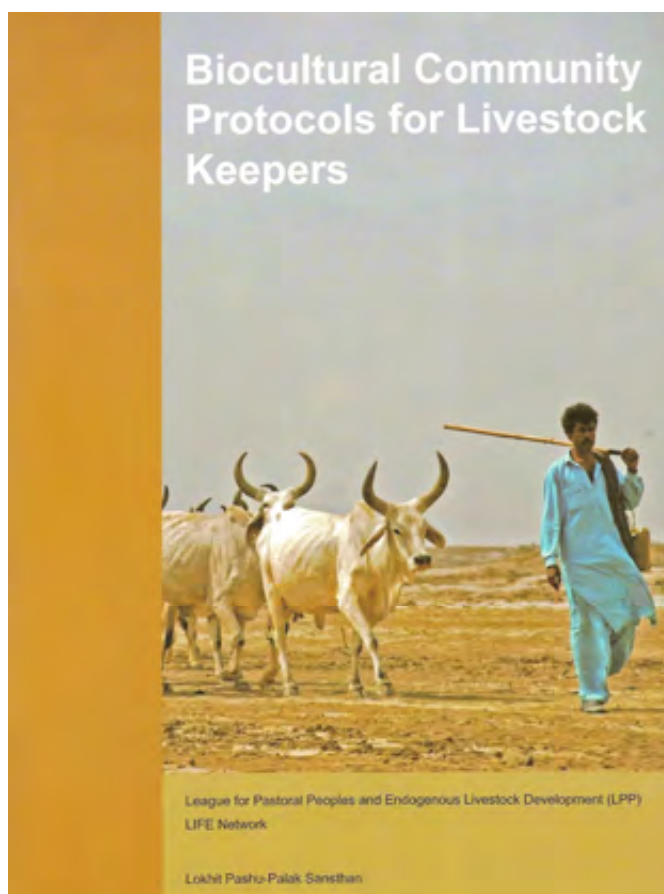
Exploring the Need for Specific Measures for Access and Benefit Sharing of Animal Genetic Resources for Food and Agriculture

International Technical Expert Workshop 8-10 December 2010, Wageningen

SAVE was invited to present a 'civil society perspective' at this international workshop. The other presentations ranged widely from other stakeholder perspectives – industry, government, research – to careful analysis of different aspects of conservation and exchange of animal genetic resources. The purpose of the workshop was to gain an expert view on the subject that can be presented to policy makers.

The participants were divided into work groups to discuss the issues raised in the many interesting presentations. Firstly, the characteristics distinguishing AnGRFA from the rest of biodiversity were discussed. These are: Individual animals embodying AnGRFA are private ownership and have a high value. Conservation, especially ex situ, is an expensive and complex operation. Animals often have long generation intervals or low regeneration rates. Selection is incremental and based on variation within and between breeds. There are few wild relatives existing. Global trade and exchange flows of AnGrFA are predominantly North-North, North-South and South-South. There is a high level of sanitary regulation and control that affects trade. Animal genetic resources are related to human biology and culture.

Recent, current and future exchanges of AnGR have the following characteristics: North-North and North-South exchange involves commercial breeds and transfer is open. Transfer to the South may result in replacement of local breeds. Most international exchange consists of commercial transactions based on basic research in the public domain and applied company research where knowledge is protected. There is poor information exchange and/or technology transfer and capacity building in North-South transfer. This means that farming systems may not be adequate to receive the transfers and can lead to potentially poor adaptation of transferred breeds. Any future exchange may be impacted by increase in intellectual property right protection and national implementation of Nagoya Protocol.



South-South exchange is of increasing importance but is partially poorly documented. Some limitations to exchange based on export regulations were reported. There is a lack of information on breed performance. North-South exchange often means a direct use of breeds in conditions for which these were not developed. There is a lack of information on adaptivity and on results of crossbreeding. There are perceived flaws in decision-making processes. There is a lack of breeding capacity at receiving end. Genetic improvement schemes are seen as being essential. Furthermore, Genetic Impact Assessments are rarely carried out and there is poor control of hybridization. Lack of affordability and sustainability of international breeds for small-scale farmers due to high external input costs is matched with a lack of resources and efforts to improve local breeds. Local and indigenous communities need their rights protected by formalized Livestock Keepers' Rights or measures such as Community Protocols.

The measures required to address these issues are complex. There is limited financial Benefit Sharing resulting from international exchange as lack of need for access means little funding for contribution to conservation through exchange and benefit sharing. Non-monetary benefits are often more rewarding than paying out a share in the (small) monetary benefits. It was felt that the Global Plan of Action for Animal Genetic Resources offers a better framework for conservation and breed development needs. A legally binding instrument not a first choice, rather voluntary instruments form appropriate alternatives along with guidelines for national governments in developing ABS measures applying to (An)GRFA and model material transfer agreements or model contract clauses/Biocultural Community Protocols.

There needs to be a proper analysis of Nagoya Protocol for the consequences for management of AnGRFA. Referral should be made to options for sectoral measures in Nagoya Protocol when developing measures at national and regional levels. It was generally agreed that an "animal treaty" would not be cost-effective and that any guidelines etc should be based on already existing agreements and measures.

It was suggested that the Commission for Genetic Resources for Food and Agriculture develop guidelines or a code of conduct arising from national responsibilities under the Nagoya Protocol. These guidelines should be technical and show how ABS can work in practice. Ideally, the guidelines should be recognised by the international regime ABS as being the instrument to regulate ABS for AnGR. If this is adopted by the Conference of the Parties, the guidelines would form implicit recommendations for implementation at national level. There will be a report of these recommendations published as a CGRFA Information Document that will be sent to the CGRFA and to CBD secretariat.



EU Consultations on Agricultural and Environment Policies

CAP Reform 2020

One key issue of the Common Agricultural Policy (CAP) is sustaining and restoring biodiversity. Included in the targets 2020 is halting the loss of biodiversity. Habitats for wildlife in Europe, especially those which are adapted to grasslands, depend on agriculture. Especially semi-natural grassland is going to be lost through intensification or abandonment. 93% of the grassland habitats are in a bad condition, as investigations showed. Farming is important for the EU's natural environment. Around half the EU's land is farmed. Farming and nature influence each other. The Common Agricultural Policy (CAP) has identified three priority areas for action to protect and enhance the EU's rural heritage:

- Biodiversity and the preservation and development of 'natural' farming and forestry systems, and traditional agricultural landscapes;
- water management and use;
- dealing with climate change.

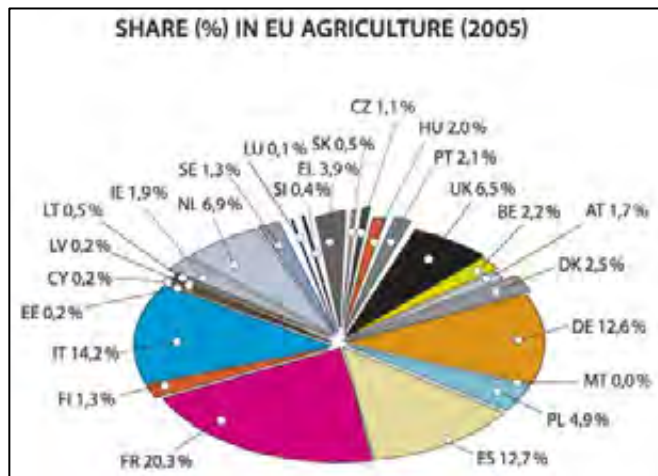
The Common Agricultural Policy is due to be reformed by 2013. After a wide-ranging public debate the Commission presented on 18 November 2010 a Communication on "The CAP towards 2020", which outlines options for the future CAP and launches the debate with the other institutions and with stakeholders. The presentation of legal proposals is foreseen for 2011.

Consultation for Impact Assessment

As part of the preparation of legislative proposals for the Common Agricultural Policy after 2013, scheduled for mid-2011, the Commission Services solicit input from interested parties to complete the diagnosis and exploration of options for reform outlined in the Communication "Meeting the food, natural resources and territorial challenges of the future" and in the consultation document for the impact assessment. The consultation for the Impact Assessment on the "Common Agricultural Policy towards 2020" started on 23 November 2010 and will run until 25 January 2011.

The consultation for the Impact Assessment of the Common Agricultural Policy 2020 aims at informing and allowing stakeholders to submit their views on the problem definition, reform objectives and scenarios proposed, gathering facts and analytical documents to help the impact assessment. For more information and participation in the consultation see: <http://ec.europa.eu/agriculture/cap-post-2013/consultation>

The CAP after 2013: <http://ec.europa.eu/agriculture/cap-post-2013>
and: <http://ec.europa.eu/agriculture/cap-post-2013/communication>



Newsflash

ANL Conference: Biodiversity and Land Use Systems in Europe

On November 21-24, the Bavarian Academy for Nature Conservation and Landscape (ANL) led an international conference on "Biodiversity and Land Use Systems". Four key issues set the framework for the conference:



Biodiversity and climate change, agricultural biodiversity and land use, Fundings for saving Biodiversity and How to implement of biodiversity into Land Use Systems. The subject "agricultural biodiversity and land use" has been covered by SAVE Foundation. With the focus on "Documentation and Use of Traditional Knowledge in the Alps" and "Continuous Monitoring in the Alps" current projects of SAVE were presented and discussed with the audience. Both in nature and in the conservation of agricultural biodiversity networking and know-how exchange plays an essential role. Therefore the discussions were very active and fruitful.

The interdependence between nature protection and (sustainable) agriculture has been particularly evident at the conference: the conservation of several habitats and their biodiversity is not possible in many regions of Europe without a sustainable agriculture – agriculture also cannot survive without functioning ecosystems. It was noted that this correlation must be given more weight in European politics - particularly the CAP reform (Common Agricultural Policy) -. Further a broad audience should be made aware of the increasing economic importance of biodiversity, for example by explaining the initiative "The Economics of Ecosystems and Biodiversity (TEEB)" of the UNEP (United Nations Environment Programme) in easy words to the public.



What will follow on from organic?

The "ISuN" Institute for Sustainable Food and Food Industry, University of Applied Sciences Münster, led a conference on September 16th 2010 on this subject. Participants were actors from the organic sector, producers and processors from Farmshops up to big meat processors in the region.

Innovation in the nutrition sector – who will be the pioneers of the future? For Paul Söbbeke the answer was clear "organic will be followed by organic". However, according to the director of the Molkerei Söbbeke, "we were the pioneers of organic. Then it unexpectedly became mainstream and is now found everywhere. Now we have to be pioneers again, in order to define a new organic". One solution is to make the organic label more transparent. Attributes such as "no factory farming" or „no use of artificial fertilisers" should not be blurred into a vague umbrella term. Jörg Bartel from the company Westfleisch eG

argues for a change in emphasis towards sustainability. It is his opinion that this is only possible when animal protection, environmental concerns and fair wages for employees also play a role.

Further discussions were also about sustainability as well as illnesses related to nutrition and the pressure to keep costs low. "A basis for the discussions was a survey of the food industry" explained Prof. Dr. Petra Teitscheid. "Then we discussed best-practice examples of innovative companies and developed visions of how to meet the challenges of the food market" according to the the head of the iSuN and Dean of the Faculty of Oecotrophology. Members agreed that consumers do not want to have just organic products, their expectations are growing: they want trustworthy, natural and regionally produced products that support sustainability and diversity.

Teitscheid was satisfied with the futures orientated workshop, it will surely be repeated. Because: "What the future of the food industry could look like remains a fascinating subject."

Consultation on Future EU co-financing of Natura 2000

In close connection to the above mentioned process of the CAP reform, another consultation is of importance concerning biodiversity and also biodiversity in agriculture: The future EU co-financing of Natura 2000. Citizens, organizations and public authorities are asked to give their statement in a questionnaire.



Natura 2000 is the largest network of protected areas in the world comprised of nearly 26,000 sites and covering almost 18% of the total EU terrestrial environment as well as substantial marine areas. It is the cornerstone of EU biodiversity policy and has a key role to play in achieving the 2020 and 2050 EU biodiversity target and vision, aimed at halting and reversing the loss of biodiversity and ecosystem services. Although Natura 2000 includes many nature reserves it is based on a much wider concept of conservation and sustainable use of biodiversity. A conservation status assessment under the Habitats Directive has shown that only 17% of species and habitats of EU concern are in good health. Therefore, in order to ensure a good conservation status and an adequate management of the network, a significant and measurable improvement is now required over the period up to 2020. The European Commission is working towards a new Communication, foreseen for mid-2011, aimed at identifying ways of enhancing the success of financing Natura 2000. The objective of this consultation is to gather the views of different stakeholders as an input to this process.

More information and the questionnaire is available under:

<http://ec.europa.eu/yourvoice/ipm/forms/dispatch?form=FinanceN2K>

Important dates 2011 (extract)

17-18 January: First meeting on the Implementation of the Plan of Action on Sub-National Governments, Cities and other local Authorities for Biodiversity 2011-2020, Montpellier, France. Web: <http://www.cbd.int/meetings>

21-30 January: International Green Week Berlin 2011, Berlin/Germany. Contact: igw@messe-berlin.de, Web: <http://www.gruenewoche.de>

8-9 February: International EU Globaldiv and ESF Genomic-Resources Workshop; Lausanne, Switzerland. Contact: elena@globaldiv.eu, Web: <http://lasigpc8.epfl.ch/globaldiv/>

11 February: 6th NATURE Fair 2011; NATURE Congress with SAVE/SKEK-Workshop and ProSpecieRara Exhibition. Basel, Switzerland. Contact: kongress@natur.ch, Web: <http://www.natur.ch>

14 February: Winter Meeting 2011 "Adjustment plans for the Common Agricultural Policy 2014-2020". Vienna, Austria. egartner@oekosozial.at, Web: <http://www.oekosozial.at>

16-19 February: BioFach 2011 – Organic Trade Fair, Nuremberg, Germany. Contact info@nuernbergmesse.de, Web: <http://www.biofach.de>

14-16 March: International Conference "Research and Management of the historical agricultural Landscape". Viničné (near Bratislava), Slovakia. <http://www.uke.sav.sk>

4-6 April: Conference "Current problems of preservation of bioresources, selection and reproduction of animals", Kyiv, Ukraine. krozgen@ukr.net, Web: <http://udau.edu.ua>

5-7 April: International Conference "To Serve and Conserve - genebanks exploring ways to improve service to PGR users and effectiveness of PGR conservation", at Wageningen/Netherlands. Web: <http://www.epgrc2011.nl>

27-29 April: Biennale of sustainable mountain development; Chambéry, France. <http://www.alpiro.com/salon-montagne.html>

16-18 May: IDF International Symposium on Sheep, Goat and other non-Cow Milk, Athens, Greece. Contact: ndcg@aua.gr, Web: <http://idsheepgoatmilk2011.aua.gr>

29 August - 1 September: 62nd EAAP Annual Meeting, Stavanger, Norway. Contact: eaap2011@umb.no, Web: <http://www.eaap2011.com/>

8-11 September: 23rd International Exhibition of Natural Products, Bologna, Italy. Contact: sana@bolognafiere.it, Web: <http://www.sana.it>

29 September: European AgroBiodiversity Day (EAD); PR event for AgroBiodiversity with various activities of all kind of stakeholders in their respective countries. Contact: info@monitoring.eu.com; Web: http://www.save-foundation.net/EAD/EAD_en.htm

=> Further dates see: <http://www.save-foundation.net/english/actual.htm>