European Regional Focal Point for Animal Genetic Resources

RFP EUROPE

OVERVIEW AND ASSESSMENT OF SUPPORT MEASURES FOR ENDANGERED LIVESTOCK BREEDS

SUBSIBREED

Final Project Report

Edited by

Drago Kompan, Marija Klopčič, Elzbieta Martyniuk

European Regional Focal Point for Animal Genetic Resources

OVERVIEW AND ASSESSMENT OF SUPPORT MEASURES FOR ENDANGERED LIVESTOCK BREEDS

SUBSIBREED

Final Project Report

Edited by

Drago KOMPAN
Marija KLOPČIČ
Elżbieta MARTYNIUK

Authors:

Oya Akin, Turkey	Kristaq Kume, Albania
Louisa Bagshaw, United Kingdom	Christina Ligda, Greece
Beate Berger, Austria	Catherine Marguerat, Switzerland
Giovanni Bitante, Italy	Božidarka Marković, Montenegro
Didier Bouchel, France	Elżbieta Martyniuk, Poland
Muhamed Brka, Bosnia and Herzegovina	Vera Matlova, Czech Republic
John D. Carty, Ireland	Salko Muratović, Bosnia and Herzegovina
Ólafur R. Dýrmundsson, Iceland	Vasil Nikolov, Bulgaria
Vladimir Dzabirski, FYR Macedonia	Helle Palmø, Denmark
Fakhrat Eminov, Azerbaijan	Bernhard Polten, Germany
Luis Telo da Gama, Portugal	Kocho Porchu, FYR Macedonia
Andreas Georgoudis, Greece	Alma Rustempasic, Bosnia and Herzegovina
Igor Guziev †, Ukraine	Nina Sæther, Norway
Georgia Hadjipavlou, Cyprus	Isabel García Sanz, Spain
Sipke Joost Hiemstra, The Netherlands	Eva-Marie Stålhammar, Sweden
Mervi Honkatukia, Finland	Srdjan Stojanović, Serbia
Rita Hoving, The Netherlands	Tamás Szobolevszki, Hungary
Ante Ivanković, Croatia	Ruta Šveistienė Lithuania
Gita Jansone, Latvia	Asko Maki-Tanila, Finland
Marija Klopčič, Slovenia	Jan Tomka, Slovakia
Drago Kompan, Slovenia	Haldja Viinalass, Estonia
Mark Maguire, Ireland	

2014

Published by

European Regional Focal Point for Animal Genetic Resources (ERFP)
c/o Federal Office for Agriculture and Food (BLE)

321 Information and Coordination Centre for Biological Diversity (IBV)

Deichmanns Aue 29

DE-53179 Bonn

Germany

Layout

Marija KLOPČIČ

Print

Electronic publication only

http://www.rfp-europe.org/

ISBN

Recommended Citation

ERFP. [2014] SUBSIBREED - Overview and assessment of support measures for endangered livestock breeds

Eds: Drago KOMPAN, Marija KLOPČIČ & Elżbieta MARTYNIUK

ERFP European Regional Focal Point for Animal Genetic Resources

CONTENT OF THE REPORT:

1. FOREWORD

This report has been developed on the basis of many contributions from the network of the European National Coordinators on Animal Genetic Resources and their colleagues and co-workers as a part of activities undertaken within a framework of the European Regional Focal Point on Animal Genetic Resources.

The SUBSIBREED project was initiated because of a common feeling that the current state of conservation programmes and support systems that are established within European countries should be documented and analysed, and lessons learnt shared among countries.

In most European countries, farmers keeping in situ endangered local breed are supported directly by the state, or in the case of most of the 28 EU Member States, by agri-environmental programmes within National Rural Development Programmes. The level and scope of the support, the measures applied and the practical arrangement of their implementation differs substantailly among countries. The impacts of the subsidies provided for in situ conservation on population size and structure of breeds covered by these measures also differs and needed to be examined.

The project also aimed to analyse the basis for estimation of the level of support provided in each country, if the current measures were sufficient, and most of all, what the consequences might be if support systems were abolished in the future.

In many countries, support provided for in-situ conservation has a relatively short history. Therefore, it was important to find out if breeds included in-situ conservation programmes were able to strengthen and further develop and what is needed to facilitate their sustainability in the longer term.

Examination of the state and scope of the legal basis for in-situ conservation of animal genetic resources was also important in this analysis to enable reflection on the impacts of the existence and advancement of legal frameworks in supporting conservation measures.

The native breeds, in addition to being a source of genetic diversity for livestock production, constitute a part of the national heritage and provide for local community identity. The long-term survival of native breeds is not only a matter of insurance for the future needs of agriculture development; there conservation is a matter of protecting and cherishing cultures and traditions and helping to sustain local communities.

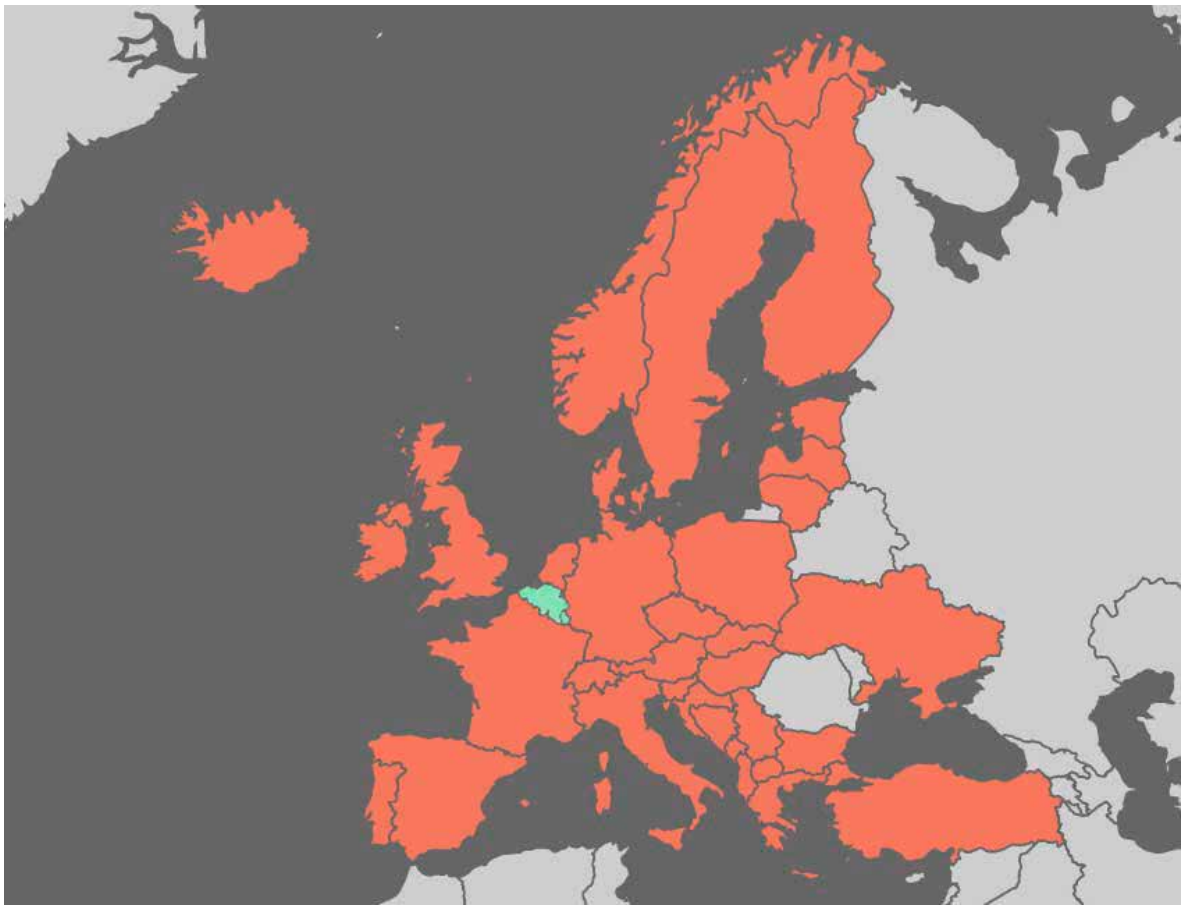
Native breeds should be considered as public goods and their long term conservation an obligation of the state. The SUBSIBREED project aimed to answer the question how we are doing in fulfiling our obligations in European countries, and what might be done to be more succesful and efficient in this respect in the future.

Elżbieta Martyniuk

2. INTRODUCTION

Livestock production has contributed to food security and economic development for thousands of years. Adaptation to wide range of environmental conditions and artificial selection has led to the development of numerous indigenous breeds that are part of the wealth of diversity in agriculture. They are producing a wide range of products for local and domestic consumption as well as for international trade. Livestock are for many local communities, invaluable sources of food and other products and essential sources of income.

Maintaining the diversity of breeds in various species of domestic animals enables farmers and breeders to respond to ever changing consumer demands as well as changing production conditions, especially in light of climate change. No one can predict future demands and production conditions, and thus, maintaining the greatest diversity of animal genetic resources provides an insurance policy to enable necessary adaptation. Lack of appreciation for the need to maintain genetic diversity or inadequate farmer and breeder support programmes has resulted in the rapid global erosion of local breeds. Greater effort is required to stem this erosion.



3. OBJECTIVES OF THE PROJECT

The project SUBSIBREED was proposed by prof. Drago Kompan, the national coordinator for Animal Genetic Resources (AnGR) of Slovenia within the Call for Action of the European Regional Focal Point for AnGR (ERFP) in 2008. The project was accepted for implementation and obtained financing from the ERFP.

The objectives of the project were:

- to review the legal framework for AnGR conservation
- to review the national programmes and action plans for AnGR in the member countries
- to identify national systems for defining breeds and assessing the endangerment level of autochthonous breeds
- to provide an overview of subsidies and other support measures to enhance AnGR conservation provided at the national level
- to analyze the impact of subsidies for in situ conservation on trends in population size of endangered breeds
- to identify monitoring systems to evaluate the status and trends of AnGR
- to analyse various approaches for implementation of subsidy systems
- to better understand methodologies applied for calculation of subsidy level
- to reflect on the current subsidy level for in situ conservation and consequences of its abolishment

Initially the project included 14 countries with Slovenia as coordinator. After presentation of objectives and the work programme, the interest to contribute to the project was expressed by additional 21 countries. Therefore a decision was taken by the General Assembly of the ERFP to extend the project partners and the timeframe for its implementation. The project generated contributions from 35 countries of the European region. The list of initial partner countries and countries that later joined the project as well as all colleagues that provided data and inputs is included in chapter 5, PROJECT PARTNERS.

DESCRIPTION OF WORK

The first step was to develop a questionnaire that should cover all information necessary to evaluate the impact of subsidies for in situ conservation on the status and trends in endangered breeds. The first draft of the questionnaire was presented to initial project partners and other National Coordinators for AnGR at project meetings on the margins of the General Assembly of the ERFP in year 2010.

The questionnaire was further developed and improved in lights of comments received and sent out to project partners. It was considered very important to ensure a broad participation of the European countries in this survey. Therefore the questionnaire was sent a number of times and contributions were followed individually. The questionnaire used in this project is included in Annex 1.

The progress in project implementation was reported during the meeting of project partners that took place in Tekirdag (Turkey) in October 2011. Based on output received, a draft compilation of materials was prepared for comments for the General Assembly of the NCs in Bratislava in 2012. Over the next year the draft publication has been amended according to comments and additional information / clarifications provided by partners. The final meeting of the project took place in Bled, Slovenia in November 2013. The participants provided final comments to the fourth draft of the publication and developed overall recommendations based on the findings of the project.

4. PROJECT PARTNERS

INITIAL PROJECT PARTNERS:

AUSTRIA Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft, Institut für biologische Landwirtschaft und Biodiversität **Beate Berger**	**CZECH REPUBLIC** Research Institute of Animal Production **Vera Matlova**
ESTONIA Estonian University of Life Sciences, Institute of Veterinary Medicine and Animal Sciences **Haldja Viinalass**	**FINLAND** MTT Agrifood Research, Animal Breeding Section **Asko Maki-Tanila**
GREECE University of Thessaloniki, Faculty of Agriculture, Department of Animal Production **Andreas Georgoudis**	**HUNGARY** Ministry of Rural Development, Dept. of Agriculture **Tamás Szobolevszki**
MONTENEGRO University of Montenegro, Biotechnical Faculty – Dept. of Livestock Science **Božidarka Marković**	**NORWAY** Farm Animal Genetic Resources Norwegian Genetic Resource Centre **Nina Sæther**
POLAND National Research Institute of Animal Production **Elżbieta Martyniuk**	**PORTUGAL** Estaçao Zootecnica Nacional **Luis Telo da Gama**
SERBIA Ministry of Agriculture, Forestry and Water Management, Department for Rural Development **Srdjan Stojanović**	**SLOVENIA (Project coordinator)** University of Ljubljana, Biotechnical Faculty, Department of Animal Science **Drago Kompan**
The NETHERLANDS Wageningen University and Research Centre, Centre for Genetic Resources **Sipke Joost Hiemstra and Rita Hoving**	**TURKEY** Ministry of Food, Agriculture and Livestock, General Directorate of Agricultural Research and Policy **Oya Akin**

OTHER PROJECT PARTNERS:

ALBANIA Ministry of Agriculture, Food and Consumer`s Protection (MoAFCP) **Kristaq Kume**	**AZERBAIJAN** Ministry of Agriculture **Fakhrat Eminov**
BOSNIA and HERZEGOVINA University of Sarajevo, Faculty for Agriculture and Food Sciences **Muhamed Brka**	**BULGARIA** Executive Agency for selection and reproduction in Animal Breeding **Vasil Nikolov**

CROATIA University of Zagreb, Faculty of Agriculture **Ante Ivanković**	**CYPRUS** Agricultural Research Institute **Georgia Hadjipavlou**
DENMARK Ministry of Food, Agriculture and Fisheries **Helle PALMØ**	**FRANCE** Ministry of Agriculture, Agrifood and Forestry (MAAF) **Didier BOUCHEL**
GERMANY Federal Ministry for Food, Agriculture and Consumer Protection **Bernhard Polten**	**ICELAND** The Farmers Association of Iceland Ólafur R. Dýrmundsson
IRELAND Ministry of Agriculture, Food & the Marine Department of Agriculture **Mark Maguire**	**ITALY** DAFNAE: Department of Agronomy, Food, Natural resources, Animals and Environment – University of Padova **Giovanni Bittante**
LATVIA The Ministry of Agriculture of Latvia **Gita Jansone**	**LITHUANIA** Lithuanian Center for Farm Animal Genetic Resources Conservation of Institute of Animal Science of Lithuanian University of Health Sciences **Ruta Sveistiene**
FYR MACEDONIA University Ss. Cyril and Methodius-Skopje Faculty of Agricultural Sciences and Food Republic of FYR Macedonia **Vladimir Dzabirski**	**SLOVAK REPUBLIC** Animal Production Research Centre Nitra **Jan Tomka**
SPAIN Ministerio de Agricultura, Alimentación y Medio Ambiente - Department for Agriculture, Food and Environment **Isabel García Sanz**	**SWEDEN** Swedish Board of Agriculture (SBA) **Eva-Marie Stålhammar**
SWITZERLAND Federal Office for Agriculture (FOAG), Switzerland - Animal genetic resources **Catherine Marguerat**	**UK** Department for Environment, Food and Rural Affairs (Defra) **Louisa Bagshaw**
UKRAINE Insitute of Animal Breeding and Genetics of the Ukrainian Academy of Agrarian Sciences (IABG UAAS) **Igor Guziev †**	

CONTACT DATA OF RESPONDENTS TO THE QUESTIONNAIRE

Country	Location (Name of institution) where is located National Coordinator (NC)	Name of the National Coordinator (NC) and/or Data Provider
Albania	Ministry of Agriculture, Food and Consumer`s Protection (MoAFCP) Rr."Abdyl Frasheri" Pall. 3/3 Ap. 6, Tirana Phone: ++ 355 68 21 40 737 Website: *www.moaf.gov.al*	**Kristaq Kume** kkume@icc-al.org
Austria	Institute of Organic Farming and Biodiversity of Farm Animals Austrasse 10 A – 4606 Thalheim Phone: +43 7242 4701 122	**Berger Beate** Beate.berger@raumberg-gumpenstein.at
Azerbaijan	Ministry of Agriculture 40, U. Hajibeyov str. Government House 370016 Baku Phone: +99450 3778584	**Fakhrat Eminov** fakhrat@box.az
Bosnia and Herzegovina	University of Sarajevo, Faculty for Agriculture and Food Sciences, Zmaja od Bosne 8, 71000 Sarajevo, Phone: 00387 33 225 727 Website: *www.ppf.unsa.ba*	**Salko Muratović** s.muratovic@ppf.unsa.ba **Muhamed Brka** m.brka@ppf.unsa.ba **Alma Rustempašić** a.rustempasic@ppf.unsa.ba
Bulgaria	Executive Agency for selection and reproduction in Animal Breeding 26 Bistrishko Shosse Str., 1756 Sofia Phone: + 359 2 961 13 29; Fax: + 359 2 961 33 86 Website: *www.iasrj.eu*	**Vasil Nikolov** iasrj_nikolov@abv.bg
Croatia	University of Zagreb, Faculty of Agriculture Svetošimunska cesta 25, 10000 Zagreb Phone: 00 385 1 239 3991 Website: *www.agr.hr*	**Ante Ivanković** aivankovic@agr.hr
Cyprus	Agricultural Research Insitute P.O. Box 22016, 1516 Lefkosia Phone: +35 722 403 133 Fax: +35 722 316 770 Wesite: *www.agri.gov.cy*	**Georgia Hadjipavlou** georgia.hadjipavlou@ari.gov.cy
Czech Republic	Institute of Animal Science Praha - Uhrineves (VUZV) VUZV Uhrineves, Pratelstvi 815, 104 00 Praha 10 Phone: +420 724 038 032	**Vera Matlova** matlova.vera@vuzv.cz

Denmark	Ministry of Food, Agriculture and Fisheries Skovbrynet 20 DK 2800 Kgs. Lyngby Denmark Phone: +45 45 263888	**Helle PALMØ** hpa@pdir.dk
Estonia	Estonian University of Life Sciences, Institute of Veterinary Medicine and Animal Sciences Kreutzwaldi 1, EE51014 Tartu Phone: +372 742 2344 Website: *http://www.emu.ee*	**Haldja Viinalass** haldja.viinalass@emu.ee
Finland	MTT Agrifood Research Finland MTT, 31600 Jokioinen Phone: +358 29 531 7536 Website: *www.mtt.fi*	**Asko Mäki-Tanila** Asko.Maki-Tanila@mtt.fi **Mervi Honkatukia** Mervi.Honkatukia@mtt.fi
France	Ministry of Agriculture, Agrifood and Forestry (MAAF), Directorate general for agricultural, agri-food and local policy (DGPAAT), office of milk, dairy products and animal selection (BLSA) MAAF – 3, rue Barbet de Jouy – 75349 Paris 07 SP - France Phone: +33 1 49 55 46 03 Website: *www.agriculture.gouv.fr*	**Didier BOUCHEL (alternate coordinator is Eléonore CHARVOLIN)** didier.bouchel@agriculture.gouv.fr
Germany	Federal Ministry for Food, Agriculture and Consumer Protection 514 - Animal Breeding and Production, Technique and Construction Rochusstraße 1, D-53123 Bonn, Germany Phone: +49 (0)228 99 529 3480	**Bernhard Polten** 514@bmelv.bund.de
Greece	Aristoteles University of Thesaloniki, Faculty of Agriculture, Department of Animal Production 541 24 Thessaloniki	**Andreas Georgoudis** E:mail: andgeorg@agro.auth.gr
Hungary	Ministry of Rural Development 1055 Budapest, Kossuth tér 11., Hungary Phone: +36-1-795-3920 Website: *www.kormany.hu./hu/videkfejlesztesi-miniszterium*	**Tamás Szobolevszki** Tamas.Szobolevszki@vm.gov.hu
Iceland	The Farmers Association of Iceland B□ndahöllin, Hagatorg, 107 Reykjavík, Iceland Phone: +354 563 0300, +354 563 0317 *www.bondi.is*	**Ólafur R. Dýrmundsson** ord@bondi.is
Ireland	Department of Agriculture, Food and the Marine Pavilion A, Grattan Business Park, Portlaoise, Co. Laois, Ireland Phone: +353578694455	**Mark Maguire** Mark.Maguire@agriculture.gov.ie

Italy	DAFNAE: Department of Agronomy, Food, Natural resources, Animals and Environment – University of Padova, Italy DAFNAE, viale dell'Università – AGRIPOLIS, 35020, Legnaro, Italy Phone: +39 49 827 2664 Fax: +39 49 827 2633 Website: *www.dafnae.unipd.it*	**Giovanni Bittante** bittante@unipd.it
Latvia	The Ministry of Agriculture of Latvia Republikas laukums 2, Rīga, LV-1981 Phone: +371 670 270 011 Fax: +371 670 275 12 Website: *www.zm.gov.lv*	**Gita Jansone** Gita.Jansone@zm.gov.lv **Dainis Rungulus**
Lithuania	Baltic Charity Foundation S. Konarskio g. 49, LT-03123 Vilnius. Įmonės kodas 300111256 Phone: +370 612 67191 Lithuanian Center for Farm Animal Genetic Resources Conservation of Lithuanian University of Health Science (Institute of Animal Science) R.Žebenkos g. 12, LT-82317 Baisogala, Radviliškio distr. Phone: +370 422 65383 Website: *www//lgi.lt/gencentras*	**Arunas Svitojus** arunas_svitojus@yahoo.com **Ruta Sveistiene** ruta@lgi.lt
FYR **Macedonia**	University Ss. Cyril and Methodius-Skopje Faculty of Agricultural Sciences and Food Republic of FYR Macedonia Department of Livestock Production Phone: +389 311 52 77	**Vladimir Dzabirski** vdzabirski@yahoo.com
Montenegro	University of Montenegro, Biotechnical Faculty (Department for Animal Science), Mihaila Lalica 1, 81000 Podgorica, Montenegro Phone: +382 20 268 441, Website: *www.btf.ac.me*	**Bozidarka Marković** bmarkovic@t-com.me
Norway	Norwegian Genetic Resource Centre PO Box 115 N-1431 Ås, Norway Phone: +47 64 94 90 55	**Nina S□ther** nhs@skogoglandskap.no
Poland	National Research Institute of Animal Production ul Wspólna 30, 00 930 Warszawa, Poland Phone/Fax: +48 22 623 10 56; Phone: +48 22 623 17 14 Website: *http://www.bioroznorodnosc.izoo.krakow.pl/*	**Elżbieta Martyniuk** elzbieta_martyniuk@sggw.pl Elzbieta.Martyniuk@minrol.gov.pl

Portugal	Ministry of Agriculture, Fisheries, Environment and Territorial Planning Phone: +351-213652836 Fax: +351-213652810 Website: *www.fmv.utl.pt*	**Luis T. Gama** ltgama@fmv.utl.pt
Serbia	Ministry of Agriculture, Forestry and Water Management Nemanjina 22-26 11000 Belgrade, Serbia Phone: +381 11 3348 042 Website: *www.mpt.gov.rs*	**Srdjan Stojanović** srdjan.stojanovic@minpolj.gov.rs
Slovakia	Animal Production Research Centre Nitra Hlohovecka 2, 95141 Luzianky, Slovakia Phone: +421 37 6546 361 Website: *www.cvzv.sk*	**Jan Tomka** tomka@cvzv.sk
Slovenia	University of Ljubljana, Biotechnical Faculty, Department of Animal Science Groblje 3, SI-1230 Domžale Phone: +386 1 320 38 65 Website: *http://www.genska-banka.si/*	**Drago Kompan** Drago.Kompan@bf.uni-lj.si **Danijela Bojkovski** Danijela.Bojkovski@bf.uni-lj.si **Marija Klopčič** Marija.Klopcic@bf.uni-lj-si
Spain	Ministerio de Agricultura, Alimentación y Medio Ambiente Department for Agriculture, Food and Environment C/Almagro 33; Edificio Eduardo Dato- 4a planta -28071 Madrid Phone: 34 913476612-13 Website: *http://www.magrama.es/*	**Isabel García Sanz** sgmpg@magrama.es **Arnaldo Cabello Navarro** sgmpg@magrama.es **Monserrat Castellanos Moncho** sgmpg@magrama.es **Piedad Santos Fernández** sgmpg@magrama.es **Daniel F. Yebra** sgmpg@magrama.es
Sweden	Swedish Board of Agriculture (SBA) Swedish Board of Agriculture SE-551 82 Jönköping, SWEDEN Phone: +46 36 15 58 22 Website: *www.jordbruksverket.se*	**Eva-Marie Stålhammar** eva-marie.stalhammar @jordbruksverket.se
Switzerland	Federal Office for Agriculture (FOAG), Switzerland Animal genetic resources, Mattenhofstrasse 5, CH 3003 Bern, Switzerland Phone: 0041 31 322 38 14	**Catherine Marguerat** Catherine.marguerat@blw.admin.ch
The Netherlands	Centre for Genetic Resources, The Netherlands (CGN), Wageningen University and Research Centre P.O. Box 65, 8200 AB Lelystad The Netherlands Phone: + 31 320 238009 Website: *www.cgn.wur.nl*	**Sipke Joost Hiemstra** Sipkejoost.hiemstra@wur.nl **Rita Hoving** Rita.Hoving@wur.nl

Turkey	General Directorate of Agricultural Research and Policy, Ministry of Food Agriculture and Livestock 06171 Yenimahalle, Ankara, Turkey Phone: +90 312 315 76 23 Website: *www.tagem.gov.tr*	**Oya Akin** oakin@tagem.gov.tr
UK	Department for Environment, Food and Rural Affairs (Defra) 5A, 9 Millbank c/o Nobel House, 17 Smith Square, London SW1P 3JR Phone: 0207 238 1837 Website: *http://www.defra.gov.uk/*	**Louisa Bagshaw** louisa.bagshaw@defra.gsi.gov.uk
Ukraine	Institute of Animal Breeding and Genetics of the Ukrainian Academy of Agrarian Sciences (IABG UAAS) Ap. 325, h. 1, Pogrebnjaka str, v. Chiubinske, Borispol district, Kyiv region, 08321, Ukraine Phone: + 380 44 44 953 03 78; 507 23 12 +380 50 382 12 63 (mobile) Fax: + 380 44 95 303 78	**Igor Guziev †** guzev@cdmaua.com; apitrans@cdmaua.com

5. LEGAL ARRANGEMENTS RELEVANT TO ANIMAL GENETIC RESOURCES (AnGR)

Questions:

1. Is there any legal arrangement relevant to AnGR in your country?
2. If YES, which regulation, law or any other legal instrument for the management of the farm Animal Genetic Resources at the national level
3. Where are the regulation(s), law or other legal instrument accessible or published?

Country	Is there any legal arrangement relevant to AnGR?	Regulation, law or any other legal instrument for management of AnGR	The regulation(s), law or other legal instrument are accessible on or published in:
Albania	YES	Law No. 9876 amended by Law No. 9426 "On Livestock Breeding" Decision of the Council of Ministers (DCM) No. 219 amended by Decision of the Council of Ministers No. 299 "For the protection of the buffalos indigenous breed from extinction" Order of Minister of Agriculture No. 403 of 10.09.2002 "On the establishment of the Commission for the Buffalos Physical Assessment " Decision of the Council of Ministers No. 1708 "For implementation of the In-situ conservation program for local small ruminat breeds"	Official Magazine
Austria	YES	Austrian Program for Sustainable Agriculture (ÖPUL) Animal breeding laws of the federal counties	*http://land.lebensministerium.at/article/articleview/60503/1/21434* *http://www.ris.bka.gv.at*
Azerbaijan	YES	Law on pedigree, Law on beekeping, Law on horse breeding	By the Parliament of Azerbaijan
Bosnia and Herzegovina	YES (not yet fully implement-ted)	Animal breeding Act- Federation of Bosnia and Herzegovina Ministry of Agriculture, Water Management and Forestry Animal breeding Act- Republic of Srpska, Ministry of Agriculture, Forestry and Water Management	*http://www.fmpvs.gov.ba* „Službene novine Federacije BiH», Act No. 67/13 /30.8.2013./) *http://www.vladars.net* Sl.gl.RS », Act No. 34/06
Bulgaria	YES	Animal Breeding Act	Official Gazette, Ministry of Agriculture and Food, Executive Agency for selection and reproduction in Animal Breeding

Croatia	YES	''National Programme for the Protection of autochthonous - native and protected breeds of domestic animals'', Livestock Act, Agriculture Act, Act on Ratification of the Convention on Biological Diversity; Nature Protection Act Strategy and Action Plan for the Protection of Biological and Landscape Diversity, Act on State Support in Agriculture and Rural Development, Agricultural Land Act, Ordinance on Recognition Procedure of New Breeds, Strains and Hybrids	Government Gazette
Cyprus	YES	Rural Development programme for Cyprus 2007-2013	Government Gazette
Czech Republic	YES	The breeding Act No. 154/2000 amended as No.344/2006, Regulation of the Ministry of Agriculture No. 447/2006	Collection of Laws *http://portal.gov.cz/app/zakony/zakonPar.jsp?page=0&idBiblio=49385&fulltext=&nr=154~2F2000&part=&name=&rpp=15#local-content* *http://www.sbcr.cz/cgi-bin/khm.cgi?typ=1&page=khm:SSBCA6/SBCA6145.HTM;ca447_2006_00*
Denmark	YES	Bekendtgørelse nr. 1177 af 8. december 2005: tilskud til bevaring af husdyrgenetiske ressourcer [National legislation concerning financial support to conserve farm animal genetic ressources]	*https://www.retsinformation.dk/Forms/R0710.aspx?id=8237* (legislation) *http://pdir.fvm.dk/Skema_-_vejledning.aspx?ID=11055* (guidance to the breeders - how to apply, rules etc.)
Estonia	YES	Farm animals breeding act, Estonian Rural Development Plan (2007-2013)	RT I 2002, 96, 566, *https://www.riigiteataja.ee/akt/750669?leiaKehtiv , RTL 2005, 120, 1876 , https://www.riigiteataja.ee/akt/13123979* *http://www.agri.ee/public/juurkataloog/MAK/RDP_2007-2013.pdf*
Finland	YES	Act on Animal Breeding, Act onAnimal welfare	*http://www.finlex.fi/fi/*
France	YES	Rural Code legislative part, chapter III reproduction and genetic improvement of livestock articles from L. 653-1 to L. 653-16 and regulatory part, chapter III reproduction and genetic improvement of livestock a articles from D. 653-1 to D. 653-115 especially D. 653-9 and D. 653-11, Ministerial order of 26 July 2007 establishing the list of recognized breeds of cattle, sheep, goats and pigs and specifying animal genetic resources of interest for conservation of genetic heritage and spatial planning National rural development programme PDRH in accordance with Council Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)	Journal officiel de la République Française on *www.legifrance.fr*

Germany	YES	Animal Breeding Act, amended 2006	Federal Law Gazette, year 2006, part I, no. 64, published in Bonn, 27th Dec 2006, further background information on the homepage of the Ministry: (http://www.bmelv.de/cln_163/sid_1E8E98E95D20FC42494BCD4C8E4BC4B7/SharedDocs/Standardartikel/Landwirtschaft/Tier/Tierhaltung/NovellierungTierzuchtrecht.html#doc377382bodyText10 - in German only)
Greece	YES	Rural Development Programme for Greece 2007-2013	Official Journal of the Government
Hungary	YES	1. Law on animal breeding (1993/CXIV) 2. Joint decree on determine the protected autochthonous agricultural animals and the endangered agricultural animals; 3. Decree on the rules of the genetic maintenance of the protected autochthonous animal breeds; 4. Decree on the detailed conditions of the subsidies from the European Agricultural Fund for Rural Development for the protection of the genetic stock of the protected and endangered indigenous farm animals in breeding. 5. Decree on the detailed conditions of the agri-environment supports based on the National Rural Development Plan, based on the co-financing of the Guarantee Part of the European Agricultural Guidance and Guarantee Fund and the central budget	1. *http://njt.hu/cgi_bin/njt_doc.cgi?docid=19614.2438482)* 2. *http://njt.hu/cgi_bin/njt_doc.cgi?docid=108748.245313* 3. *http://njt.hu/cgi_bin/njt_doc.cgi?docid=118643.245315* 4. *http://njt.hu/cgi_bin/njt_doc.cgi?docid=131484.242739* 5. *http://njt.hu/cgi_bin/njt_doc.cgi?docid=86059.246347*
Iceland	YES	Agricultural Law No. 70/1998 Regulation on the Conservation and Utilization of Genetic Resources in Agriculture No. 151/2005	Parliament Registry
Ireland	**NO**	n.a.	n.a.
Italy	YES	Italian national plan for agricultural biodiversity; Several laws of the 21 Regions and Autonomous Provinces of Italy	Gazzetta Ufficiale della Repubblica Italiana *http://www.gazzettaufficiale.it*
Latvia	YES	Animal breeding law Provisions No.567 (12.07.2011) on approval of farm animal breeding organizations. Provisions No.295 (23.03.2010) on support allocation for improvement of environment and rural landscape.	*www.likumi.lv*

Lithuania	YES	The Law for animal breeding 08-02-1994 - Nr.I-384, The Law: "The National Inheritance" – certification of Native Farm Animals. 12-07-2007, Nr. 77-3043 Programme for the preservation of the native farm animal genetic resources adopted by the Ministry of Agriculture of the Republic of Lithuania in 1996 and renewal in 06-02-2008 No. 3D-58.	http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=301365&p_query=&p_tr2=2 http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=106589&p_query=&p_tr2=2 *http://www.zum.lt/lt/teisine-informacija/isakymai/3873/*
FYR Macedonia	YES	Livestock law Programme for protection livestock biodiversity 2011-2017	Gazette of the R. Macedonia No. 7 from 15.01.2008 amendments 2010/2013 www.pravo.gov.mk
Montenegro	YES	Law on Livestock - - Official Gazette of Montenegro 72/10 and its Article No. 33. National program and Action plan of conservation and sustainable use of genetic resources for food and agriculture	Web site of Ministry of Agriculture and Rural Development: *www.minpolj.gov.me*
Norway	YES	Act of 12 April 1992 No 130, Act on Animal Breeding	*http://www.lovdata.no/all/nl-19921204-130.html* No English version
Poland	YES	In 2004, amendments introduced to Animal Breeding Law of 1997 included a dedicated article setting out provisions for the conservation of breeds, varieties and lines of farm animals threatened with extinction due to small or decreasing population size. Article 28 of the new Animal Breeding Law of 29th June 2007 (with consecutive amendments in 2008, 2010 and 2011) lays out provision for conservation of animal genetic resources	Dz.U.07.133.921 Ustawa z dnia 29 czerwca 2007 r. o organizacji hodowli i rozrodzie zwierząt gospodarskich (available in Polish at *http://faolex.fao.org/docs/pdf/pol87292.pdf*). *http://isap.sejm.gov.pl/Download?id=WDU20071330921&type=3*
Portugal	YES	Protection of Domestic Biodiversity	*http://www.proder.pt/ResourcesUser/Legislação/Proteccao_Biodiversidade_Domestica/Portarianº229-B-2008.pdf* *http://www.proder.pt/conteudo.aspx?menuid=494* Published in Official Journal as Law no. 229-B/2008 (published March 6, 2008) and 814/2010 (published August 27, 2010)
Serbia	YES	Law on Animal Husbandry („Official Gazette of the Republic of Serbia", No. 41/09 and 93/12) Rules of the list of genetic reserve of domestic animals, ways of preservation of genetic reserve of domestic animals, and a list of indigenous breeds of domestic animals and endangered of autochthonous breeds („Official Gazette of the Republic of Serbia", No. 38/10) Rules on the conditions of breeding and trade of indigenous breeds of domestic animals, as content and method of management register of the indigenous breeds of domestic animals („Official Gazette of the Republic of Serbia", No. 56/10)	Official Gazette Republic of Serbia; *www.mpt.gov.rs;* *www.ekoplan.gov.rs*

		Law on Agriculture and Rural Development („Official Gazette of the Republic of Serbia“, No. 41/09) National Program of Rural Development 2011.-2013. („Official Gazette of the Republic of Serbia“, No. 15/11) National Program of Agriculture 2010.-2013. („Official Gazette of the Republic of Serbia“, No. 83/10) Biodiversity Strategy of the Republic of Serbia for the period 2011.-2018. („Official Gazette of the Republic of Serbia“, No. 13/11) National Strategy for Sustainable Development („Official Gazette of the Republic of Serbia“, No. 57/08) Action Plan for Implementation of National Strategy for Sustainable Development („Official Gazette of the Republic of Serbia“, No. 31/10) Strategy of Agriculture Development of Serbia („Official Gazette of the Republic of Serbia“, No. 78/05) Law on Nature Protection (“Official Gazette of the Republic of Serbia”, No. 135/04 and 36/09)	
Slovakia	YES	Working document is being prepared and supposed to be approved in 2014 (In fact, no other legislation regarding the AnGR)	
Slovenia	YES	Law on agriculture, Livestock Law, Regulation on Conservation of Farm Animal Genetic Resources Regulation on conservation of farm animal genetic resources	Official Journals: Agriculture act Livestock-Breeding Act Rules on preserving biodiversity in livestock breeding *http://www.uradni-list.si/1/content?id=21499* *http://www.pisrs.si/Pis.web/pregledPredpisa?id=PRAV3961*
Spain	YES	Royal Decree 2129/2008, 26th of December, establishing the national Programme for the conservation, improvement and promotion of livestock breeds	Gazette published on January 27, 2009 and Website: *https://aplicaciones.magrama.es/arca-webapp*
Sweden	YES	Law and Ordinance about control of Animal, Rural Development Programme for the period 2007-2013	*www.jordbruksverket.se*
Switzerland	YES	Verordnung über die Tierzucht SR 916.310	google with indicated number and name or homepage FOAG

The Netherlands	YES	EU Zootechnic legislation implemented in national breeding regulation by Product Board Livestock, Meat and Eggs on behalf of the Ministry of Economic Affairs. This responsibility will be transferred to the Ministry of Economic Affairs by 1st of January 2014. Agreement between Ministry of Economic Affairs and the Centre for Genetic Resources, the Netherlands (CGN, Wageningen University and Research Centre) to carry out so called Statutory Research Tasks on Genetic Resources for Food and Agriculture	*www.pve.nl* *www.cgn.wur.nl*
Turkey	YES	Animal Genetic Resources Conservation Regulation	Official Gazette of Turkish Republic
UK	YES	Zootechnical Standards Regulations 1992 Subsidies are paid under EU agri-environment legislation: Council Regulation 1968/2005, Article 39.5 Commission Regulation 1974/2006, Article 27.4	*http://www.legislation.gov.uk/uksi/1992/2370/contents/made* *http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:277:0001:0040:EN:PDF* *http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:368:0015:0073:EN:PDF*
Ukraine	YES	Law about the breeding business in animal-breeding", "Directions for use of money, which are designed in national budget for execution of program of selection in animal-breeding and poultry-breeding at the enterprises of agro-industrial complex", "Program of conservation of main farm animals in Ukraine for the period till 2015"	In the open press!

Questions:

4. Which service/institution is responsible for the overall management of farm Animal Genetic Resources (public service, Ministry, Non-governmental organization, etc)?

5. Which institution/services are responsible for policy setting?

6. Which institution/services are responsible for implementation of AnGR policies?

Country	Service/Institution responsible for the overall management of farm AnGR	Institution/services which are responsible for policy setting	Institution/services which are responsible for implementation of AnGR policies
Albania	Ministry of Agriculture, Food and Consumer`s Protection (MoAFCP) and Center for Agricultural Technology Transfert – Fushe Kruja and Korca; Non governmental organization-ALBAGENE Association	Ministry of Agriculture, Food and Consumer`s Protection	Regional Directorate of MoFACP- Albanian Network for conservation and use of FAnGR
Austria	Breeding organisations of the Federal Countries and NGO (breeders organisations).	Policies are set by the working groups of the breeding organisations (e.g. "Zentrale Arbeitsgemeinschaft Rind" for cattle) together with the representatives of the Federal Countries. In case of endangered breeds policies are recommended by the ÖNGENE and set by the Ministry of Agriculture, Forestry, Environment and Water Management.	Responsible for the implementation are the breeders organisations in case of endangered breeds the Agrar Marketing Austria (AMA) and the OCs.
Azerbaijan	Animal Breeding department of Ministry of Agriculture of Azerbaijan, Scientific -Research Animal Breeding İnstitute, Genetic Resources İnstitute of the Azerbaijan National Academy of Sciences	Ministry of Agriculture of Azerbaijan	Animal Breeding department of Ministry of Agriculture of Azerbaijan, Scientific -Research Animal Breeding İnstitute, Genetic Resources İnstitute of the Azerbaijan National Academy of Sciences
Bosnia and Herzegovina	Federation of Bosnia and Herzegovina, Ministry of Agriculture, Water Management and Forestry and Republic of Srpska, Ministry of Agriculture, Forestry and Water Management	Ministry of Agriculture of both entity of Bosnia and Herzegovina	Ministry of Agriculture of both entity of Bosnia and Herzegovina
Bulgaria	Ministry of Agriculture and Food (MAF), Ministry of Environment and Water, Executive Agency for selection and reproduction in Animal Breeding (EASRAB), breeding organizations	MAF, EASRAB	EASRAB

Croatia	Ministry of Agriculture, Fisheries and Rural Development Responsible institutions: Croatian Agricultural Agency Croatian Centre for Horse Breeding - State Stud Lipik	Ministry of Agriculture, Fisheries and Rural Development	Croatian Agricultural Agency Croatian Centre for Horse Breeding - State Stud Lipik
Cyprus	Ministry of Agriculture, Natural Resources and Environment	Ministry of Agriculture, Natural Resources and Environment	Ministry of Agriculture, Natural Resources and Environment
Czech Republic	Breeders' organizations under the coordination of the National Coordinating centre (Institute of Animal Science as a public institution)	Ministry of Agriculture	Ministry of Agriculture, breeders' organizations
Denmark	Committee for the Management of Farm Animal Genetic Resources – which is appointed by the Minister for Food, Agriculture and Fisheries		
Estonia	Veterinary and Food Board	Ministry of Agriculture in collaboration with Veterinary and Food Board	Veterinary and Food Board
Finland	MTT Agrifood Research Finland	Ministry of Agriculture and Forestry	MTT Agrifood Research Finland
France	MAAF - French National Institut for Agricultural Research (INRA), French horse and riding institute (IFCE), French Livestock Institute, French national Cryobank, IFIP - French institute for pig and pork industry, French union of poultry and aquaculture breeders (SYSAAF), French foundation for research on biodiversity (FRB), CIRAD, Races de France (French federation of breed societies and breeder associations in charge of herd books)	MAAF (CNAG being the advisory board)	**French National Institut** for Agricultural Research (INRA) French horse and riding institut (IFCE), **French Livestock Institute** (Idele), French national Cryobank, **IFIP** - French institute for pig and pork industry, **French union of poultry** and aquaculture breeders (SYSAAF), **French foundation** for research on biodiversity (FRB), **CIRAD**, Races de France (French federation of breed societies and breeder associations in charge of herd books)
Germany	non-governmental organisations such as appproved animal breeders' associations or the Society for the Conservation of Old and Endangered Livestock Breeds (GEH); in the context of precautionary matters the Federal and Laender Governments	n/a	n/a

Greece	Ministry of Rural Development and Food	Ministry of Rural Development and Food	Ministry of Rural Development and Food Centres for Animal Genetic Improvement
Hungary	Ministry of Rural Development, National Food Chain Safety Office (NFCSO) Directorate of Animal Breeding (as breeding authority), Breeding organizations	Parliament (laws), Minister of rural development (decrees)	Ministry of Rural Development, National Food Chain Safety Office (NFCSO) Directorate of Animal Breeding (as breeding authority), Breeding organizations
Iceland	Formally: Ministry of Fisheries and Agriculture Operationally: The Farmers Association of Iceland & Agricultural Genetic Resources Committee	Ministry of Fisheries and Agriculture	The Farmers Association of Iceland & Agricultural Genetic Resources Committee
Ireland	Ministry of Agriculture, Food & the Marine		
Italy	21 Regional and Provincial governments	Ministry of agriculture, food and forestry politics 21 Regional and Provincial governments	21 Regional and Provincial governments
Latvia	The Ministry of Agriculture of Latvia; Farm animal breeding organisations	The Ministry of Agriculture of Latvia	Farm animal breeding organisations
Lithuania	Ministry of Agriculture, Agri information and rural business centre Lithuanian Center for Farm Animal Genetic Resources Conservation of LUHS (IAS), Animal Breeder's associations	Ministry of Agriculture National Board of AnGR	Ministry of Agriculture Farm animal breeding organisations, Lithuanian Center for Farm Animal Genetic Resources Conservation of IAS of LUHS
FYR Macedonia	Ministry of Agriculture, Foresty and Water Management , Livestock Department	Ministry of Agriculture, Foresty and Water Management	University Ss. Cyril and Methodius in Skopje: Faculty of Agricultural Sciences and Food Livestock Institute Faculty of Veterinary Medicine
Montenegro	Ministry of Agriculture and Rural Development & Biotechnical Faculty, Department of Livestock science	Ministry of Agriculture and Rural Development	Biotechnical Faculty, Department of Livestock science

Norway	The breeding associations are responsible for the breeding and management of FAnGR. For those native breeds that do not have a breeding association, the Norwegian Genetic Resource Centre (NGRC) is responsible for the breeding program. Norwegian Genetic Resource Centre is a governing body under the Ministry of Agriculture and Food. The breeds without breeding associations have breeding societies and these work in close cooperation with the NGRC in the breeding planning and breeding work.	Ministry of Agriculture and Food	Ministry of Agriculture and Food, Norwegian Agricultural Authority, Norwegian Genetic Resource Centre
Poland	Ministry of Agriculture and Rural Development National Research Institute of Animal Production National Animal Breeding Centre	Department of Food Safety and Veterinary, Ministry of Agriculture and Rural Development	Relevant breeders' societies that were given by the Minister of Agriculture responsibility to carry on: herdbook keeping, performance recording and breeding value estimation National Research Institute of Animal Production is responsible for coordination of AnGR conservation activities
Portugal	Ministry of Agriculture and Breed Associations	Ministry of Agriculture	Ministry of Agriculture and Breed Associations
Serbia	Ministry of Agriculture, Forestry and Water Management (MAFWM)	Ministry of Agriculture, Forestry and Water Management	MAFWM Agriculture Faculty of Novi Sad-Department of Livestock Institute for Animal Husbandry-Zemun Agriculture Faculty of Zemun
Slovakia	Animal Production Research Centre Nitra (APRC Nitra) Ministry of Agriculture and Rural Development of SR (MAaRD SR)	MAaRD SR, APRC Nitra	MAaRD SR, APRC Nitra
Slovenia	Public service for Farm Animal Genetic Resources Conservation at the Department of Animal Science , Biotechnical Faculty at University of Ljubljana	Ministry of Agriculture and Environment National Board of AnGR	Ministry of Agriculture and Environment
Spain	Ministry of Agriculture, Food and Environment	Ministry of Agriculture, Food and Environment, Autonomous Communities within their respective areas of competence	Autonomous Communities and Breeding Organizations

Sweden	The Swedish Board of Agriculture (SBA) a competent authority to the Ministry of Rural has the overall responsibility. The Swedish Biodiversity Center has a coordinating function at a national level.	Swedish Board of Agriculture (SBA) and universities	The Swedish Board of Agriculture and the stakeholders.
Switzerland	Ministry , but NGO's collaborate a lot	FOAG and Parliament of Switzerland	FOAG together with breeding organisations
The Netherlands	Many organisations and stakeholders involved. Main responsibility for individual breeders, breeds societies, herd books, breeding industry and – regarding endangered breeds – an important role for Dutch Rare Breeds Society (SZH) and CGN (National Programme for AnGR). List of genetic resources held in the Netherlands (domesticated species): *http://www.wageningenur.nl/en/Expertise-Services/Legal-research-tasks/Centre-for-Genetic-Resources-the-Netherlands-1/Centre-for-Genetic-Resources-the-Netherlands-1/ABS-Focal-Point.htm*	Ministry of Economic Affairs	CGN, SZH, breed societies, recognized herd books, breeding industry, etc.
Turkey	Ministry of Food Agriculture and Livestock General Directorates of Agricultural Research and Policy	Ministry of Food Agriculture and Livestock General Directorates of Agricultural Research and Policy	Ministry of Food Agriculture and Livestock General Directorates of Agricultural Research and Policy
UK	Ministry/Government Departments and public service delivery bodies. The Rare Breeds Survival Trust (RBST) is the leading NGO.	Ministry/Government Departments	Ministry/Government Departments, public service delivery bodies, breed societies/organisations/associa-tions, industry stakeholders, etc.
Ukraine	Ministry of Agrarian Policy and Food of Ukraine and National Academy of Agrarian Sciences with a net of subordinated institutes. Each institute is responsible for certain breed or species at certain area.	Institute of Animal Breeding and Genetics develops different regulations under the order of Ministry of Agrarian Policy and Food. In many cases Institute proposes any regulation to improve any aspect of animal breeding and Ministry agrees or not to finance fulfilling of it.	Ministry of Agrarian Policy and Food of Ukraine

7. Provide the list of Stakeholders involved in the management of AnGR and describe their roles and responsibilities

Country	List of Stakeholders in AnGR and their roles and responsibilities
Albania	ALBAGENE Association – in close collaboration with farmers, group and/or local associations of farmers implement the programs for *in-situ* conservation. Farmers, groups of farmers and local farmer associations
Austria	**The Ministry of Agriculture, Forestry, Environment and Water Management** develops the Austrian Agri-Environmental Programme (ÖPUL) containing the measure "Rare Breeds" and is funding the Austrian Gene Bank for AnGR. **The ÖNGENE** sets the framework for the conservation programmes, monitors the progress and acts as counselling body for the Ministry of Agriculture, Forestry, Environment and Water Management. **Research institutions** (universities, research institutes) develop breeding programmes for small populations, population management tools, are active in the characterization of traditional breeds, the scientific analysis of traditional production environments and methods. **The Austrian Gene Bank for FAnGR** supports the breeding programs with semen and builds and keeps backup collections of Austrian FAnGR. **The AMA** is responsible for the distribution of subsidies for endangered breeds and for general marketing and promotion activities. **Breeding organisations** implement the conservation programme, monitor the development of the population, keep records, confirm eligibility of breeding animals for subsidies and decide which animals are to be included in the Austrian Gene Bank for FAnGR. **NGOs** develop marketing opportunities for endangered breeds and are active in raising awareness. **Breeders** follow the conservation programme, raise and keep breeding animals and develop and market products. **Consumers** ask for and buy special products of traditional breeds creating additional income for breeders.
Azerbaijan	n.a.

Bosnia and Herzegovina	In the preparation phase.
	Faculty for Agricultural and Food Sciences, University of Saraejvo, suggested organizing National coordinating body (NCB). The tasks of this coordinating body would be:
	• Preservation of endangered breeds of cattle
	• Preservation of endangered horse breeds
	• Preservation of endangered breeds of sheep and goats
	• Preservation of endangered breeds of poultry
	• Preservation of endangered aquaculture species
	• Preservation of endangered breeds of dogs
	  • Step I - determining the population size, production and phenotypic characteristics
	  • Step II - making sustainable breeding or melioration plan
	  • Step III - planning breeding programs according to breeding plan
	  • Step IV - execution and control of breeding programs
	In order to make the functioning of the National Coordination Body (NCB) financially acceptable and effective throughout the FB&H (B&H) it is necessary to establish two organisations parts:
	• An expert advisory board for animal genetic resources - as advisory and cooridnation body for conservation of endangered breeds. The board would be composed of experts in the field of breeding domestic animals (Science), representatives of the breeding companies and representatives of ministries of agriculture (federal and cantonal).
	• IT sector - a place for collecting and processing data (database). The work would be done under the guidance of the expert advice advisory board for animal resources. IT sector would conducte technical monitoring of the implementation of the live and cryoconservation of animal genetic resources.

Bulgaria	MAF EASRAB Breeding organizations Farmers
Croatia	**Breeding organisations** (associations, unions) actively partake in the implementation of this Programme by representing breeders' interests. They take part in the making and implementing breeding programmes and action plans, cooperate with the bodies of public administration and public institutions, suggest research programmes, promote breeds, develop programme for the economic utilization and cooperate with similar breeding organisations on a national and international level. Breeding organisation appoint professional bodies, a head of a breeding programme, commissions for regular evaluation and revision of breeding, selection and evaluation of heads on exhibitions and manifestations. When they fulfil the prerequisites, breeding organisations keep breed books and assist with regular updates of the central data base managed by the Croatia Agricultural Agency. **The private sector - companies** (centres for artificial insemination, stations for transfer of eggs and embryos, etc.) are involved in the implementation of this Programme through an active part in collecting and distributing genetic materials, semen and embryos in particular. They are involved in the tasks of maintaining a gene bank, in accordance with capacities and interests. They take part in the implementation of a breeding strategy for breeds, in accordance with the breeding programme or the mating plan and in the exchange of information with the central database at the Croatian Agricultural Agency. **Scientific and educational institutions** perform scientific and research tasks, complete cognitions on characteristics of the appearance, productivity and genetic structure of breeds, partake in tasks of population monitoring, perform scientific and professional analyses of programme implementation results, take part in the adjustment of the existent and the formation of new breeding programmes and principles necessary for their efficient implementation. Should the occasion warrant it, they will take part in commissions for breeding reviews, regular breeding checks, evaluation of heads on exhibitions and manifestations? Scientific and educational institutions direct suggestions to the bodies of state administration, public institutions, breeding organisations and breeders who partake in the implementation of breeding programmes regarding issues that require a competent position. On the basis of observations, they take part in bringing individual competent decisions during the implementation of breeding programmes. Scientific and educational institutions are included in educating breeders and broader public on particular parts of the Programme.
Cyprus	• Ministry of Agriculture, Natural Resources and Environment • Department of Agriculture • Agricultural research Institute • Department of Veterinary Services • Breeder Associations and individual breeders
Czech Republic	**Breeders' organisations** recognized by the Ministry are sovereign in setting up and implementing breeding programmes which, however, are subject to an approval by the Ministry. They appoint professionals to execute performance testing, selection and evaluation of breeding animals, they keep stud books and report regularly results of breeding programs and provide the required data and information to designated state institution. These activities are supported by national subsidies (State aid). **The private sector - companies** (breeding companies - most of them however are subsidiary of foreign companies , ID collecting stations, centres for ET, genetic laboratories etc.) are involved in the process on a commersial basis. **Scientific and research institutions** perform research tasks, mainly as grants funded by the National Agency for Agricultural research and/or on order of the National program for conservation and utilization of genetic resources. **Educational bodies** (mostly Centres of ecological education) are providing public awareness and special programs for schools and public. Th issue of genetic resources is is still lacking in regular school programs.

<table>
<tr><td>Denmark</td><td>n.a.</td></tr>
<tr><td>Estonia</td><td>Breeding, breed and conservation organizations.
<table>
<tr><th>Organization</th><th>Role and responsibility</th><th>Additional information</th></tr>
<tr><td>Estonian Animal Breeders' Association*</td><td>Keeping of Estonian Holstein, Estonian Red and beef cattle breeds herd book; carrying out performance recording and genetic evaluation of beef cattle; acknowledgement of bulls for breeding and arrangement of AI; collection, treatment, preservation and marketing of semen.</td><td>http://www.etky.ee</td></tr>
<tr><td>Estonian Native Cattle Breed Society*</td><td>Herd book keeping, conservation of Estonian Native Cattle</td><td>http://www.maakari.eu</td></tr>
<tr><td>Estonian Pig Breeding Association</td><td>Keeping of herd book of Estonian Large White, Estonian Landrace, Pietrain and Hampshire breeds and keeping the register of crossbreds; carrying out performance recording and genetic evaluation; collection, preservation, treatment and marketing of boars' semen.</td><td>http://www.estpig.ee</td></tr>
<tr><td>Estonian Sheep Breeders Association*</td><td>Flock book keeping of Estonian Blackhead and Estonian Whitehead breeds, carrying out performance recording and genetic evaluation.</td><td>http://www.lammas.ee</td></tr>
<tr><td>Estonian Horse Breeders Society*</td><td>Keeping of stud books of Arabian, Trakehner, Tori horse universal type and Tori horse breeding type, Estonian Heavy Draught and Estonian Native horse breeds. Performance recording of Trakehner, Tori universal type horse and Tori breeding type horse, Estonian Heavy Draught and Estonian Native horse breeds; conservation of Tori universal type horse, Estonian Heavy Draught and Estonian Native as endangered horse breeds.</td><td>http://www.ehs.ee</td></tr>
<tr><td>Estonian Poultry Society*</td><td>Conservation of Estonian Quail as endangered breed; carrying out performance recording of Estonian Quail</td><td>matti.piirsalu@agri.ee</td></tr>
<tr><td>Estonian Sport Horse Breeders' Society</td><td>Stud book keeping of Estonian Sport Horse; carrying out performance recording of Estonian Sport Horse, stud book keeping of Riding Pony and small ponies; carrying out performance recording of Riding Pony and small ponies</td><td>http://www.estsport-horse.ee</td></tr>
<tr><td>Estonian Trotting Association</td><td>Trotters stud book keeping and performance recording</td><td>http://www.hipodroom.ee</td></tr>
<tr><td>Akhal-Teke Estonian Association</td><td>Keeping of Akhal-Teke stud book and carrying out performance recording</td><td>http://www.akhalteke.ee</td></tr>
<tr><td>Estonian Native Horse Conservation Society</td><td>Conservation of Estonian Native Horse</td><td>http://www.esthorse.ee</td></tr>
<tr><td colspan="3">*Form Estonian Animal Breedering Association</td></tr>
</table>
The Estonian University of Life Sciences is active in characterisation of local breeds, consulting the development of breeding and conservation programmes.</td></tr>
<tr><td>Finland</td><td>Breeding organisations: maintenance of animal registers and running breeding programmes</td></tr>
</table>

France	Institut national de la recherche agronomique INRA (French National Institut for Agricultural Research), Institut français du cheval et de l'équitation IFCE (French horse and riding institut), Institut de l'élevage IDELE (French Livestock Institute), Cryobanque nationale (French national Cryobank), IFIP (French institut for pig and pork industry), SYSAAF (French union of poultry and aquaculture breeders), Fondation pour la recherche sur la biodiversité FRB (French foundation for research on biodiversity), Centre de coopération internationale en recherche agronomique pour le développement CIRAD, Races de France (French federation of breed societies and breeder associations in charge of herd books) breeding organizations (http://agriculture.gouv.fr/liste-des-etablissements-agrees,11009), conservatories of regional genetic resources,
Germany	n.a.
Greece	Ministry of Rural Development and Food Centres for Animal Genetic Improvement National Agricultural Research Foundation Breeders Associations Farmers Associations
Hungary	Ministry of Rural Development (legislation) National Food Chain Safety Office (NFCSO) Directorate of Animal Breeding as breeding authority (control, keeping the registrations) Breeding organizations (implementation of the breeding program)
Iceland	The Farmers Association of Iceland Agricultural Genetic Resources Committee Collection and processing of livestock data for all breeds. Monitoring of endangered populations, promotion of conservation measures
Ireland	n.a.

Italy	• AIA-Associazione Italiana Allevatori (Italian Breeders Association) responsible for Registers of endangered breeds, responsible for milk and meat recording systems of all animal breeds. • The National Breeders Associations (ANA) responsibles for breeding evaluations and selection of the species and breeds with official Italian Herd Book. • The Regional and Provincial Breeders Associations and Federations, responsibles for management of milk and beef recording, extention services, etc. • The AI organizations, responsibles for semen production and commercialization. • The Consortia of PDO-protected designation of origin and PGI-protected geographic indication products, responsibles for typical food products, sometime linked to local breeds. • The non profit organizations involved in biodiversity management and valorization. • The local governments involved in local typical productions often linked to local breeds. • The agencies for controlling of organic food production.
Latvia	The Ministry of Agriculure of Latvia develop policy for farm animal breeding; establish rules for granting subsidies for farm animal genetic resources. Agricultural data centre maintain register of farm animals, recognize farm animal breeding organizations. Farm animal breeding organizations develope breeding programmes, inter alia breedein programmes for native breeds, and evaluate breeding animals. Farm animal breeders carry out animal recording and follow the breeding pragramme of respective species.
Lithuania	Farm animal breeding organizations develope breeding programmes for native breeds, and evaluate breeding animals. Farm animal breeders carry out animal recording and follow the breeding programme of respective species. Farm animal breeders associations: • Lithuanian Horse Breeders Association (1993) – Arabian stud book (till 2007), Lithuanian Riding horse stud book, Large-type Žemaitukai stud book (till 2003), Lithuanian Heavy draught stood book (till 2003) • Žemaitukai Horse Breeders 'Association (1997) - Žemaitukai stud book • Lithuanian Draft Horse Breeders 'Association (2003) - Large-type Žemaitukai stud book, Lithuanian Heavy draught stood book • Lithuanian Trakehner 'Association (1993, 2000) – Trakehner stud book (2001) • Baltic Hanover hores Breeders Association – Baltic hanovers stud book • National Trotters sport Association (2006) – Orlov and French trotters stud book • Republic Racing Horse League (1999) – sport organisation / trotters stud book (2002) • National Racing horse club – sport organisation / thoroughbred stud book (2007) • Arab Breeders Association (2007) - Arab stud book • Lithuanian Equestrian Association – sport organisation • Lithuanian Black – and – White cattle breeders association • Lithuanian Endangered Farm Animal Breeders Association – Vištinės geese stud book (2010); Lithuanian Ash-Grey and White – Backed cattle stud books (2011) • Lithuanian Red Cattle Improvement Association • Lithuanian Cattle Breeders Association • Lithuanian Association Of Beef Cattle Breeders And Improvers Association • Lithuanian Pig Breeders Association • Lithuanian Sheep Breeders Association • Lithuanian Goat Breeders Association • Lithuanian Fur and Rabbits Breeders Association • Rabbit Meat Breeders Association

<table>
<tr><td>FYR Macedonia</td><td>Breeding organisations – trough developing and implenting specific breeding programmes at national level
• Macedonian Breeders Association for ovcepolka sheep
• Macedonian Breeders Association for busha cattle
• Macedoniana club for sharplanina dog
Scientific research and educational institutions- performing different scientific and research activities wich are defined in national programme for protection livestock biodiversity and trough application and implementation of national and international research projects.
• Faculty of Agricultural Sciences and Food
• Livestock Institute
• Faculty of Veterinary Medicine</td></tr>
<tr><td>Montenegro</td><td>Ministry of Agriculture and Rural Development,
Biotehcnical Faculty
Department of Livestock Science
Livestock Selection Service
Farmers,
NGO</td></tr>
<tr><td>Norway</td><td><table>
<tr><td>GENO - Breeding association</td><td>Breeding Norwegian Red (Dairy cattle) and buy annually 2-3 bull for AI-production of those native cattle breeds that don’t have a breeding association. The selection of bulls is done together with Norwegian Genetic Resource Centre (NGRC) and the respective breed society.</td></tr>
<tr><td>Breeding association for the STN breed.</td><td>Breeding programme and buying bulls for AI-production for the STN-breed (dairy breed).</td></tr>
<tr><td>Breeding association for the Telemark breed.</td><td>Breeding programme and buying bulls for AI-production for the Telemark-breed (dairy breed).</td></tr>
<tr><td>Breeding society for Døla cattle.</td><td>Recommend to GENO and NGRC on which bulls of Døla cattle that should be selected for AI-production. Networking and communicate live animals for sail.</td></tr>
<tr><td>Breeding society for Western Fjord Cattle.</td><td>Recommend to GENO and NGRC on which bulls of Western Fjord Cattle that should be selected for AI-production. Networking and communicate live animals for sail.</td></tr>
<tr><td>Breeding society for Western Red Polled Cattle.</td><td>Recommend to GENO and NGRC on which bulls of Western Red Polled Cattle that should be selected for AI-production. Networking and communicate live animals for sail.</td></tr>
<tr><td>Breeding society for Eastern Red Polled Cattle.</td><td>Recommend to GENO and NGRC on which bulls of Eastern Red Polled Cattle that should be selected for AI-production. Networking and communicate live animals for sail.</td></tr>
<tr><td>Norwegian Sheep and Goat Breeders’ Association (NSG)</td><td>Commercial sheep and goat breeding. Facilitate AI-production of both commercial and endangered native sheep- and goat breeds. NGRC support the costs for AI-production on endangered breeds and give advice on which rams/bucks to select for AI-production.</td></tr>
<tr><td>Old Norwegian Spæl Sheep society</td><td>Recommend to NSG and NGRC on which rams of Old Norwegian Spæl Sheep that should be selected for AI-production. Networking and communicate live animals for sail. Work out breeding program for their breed in cooperation with NGRC.</td></tr>
<tr><td>Coastal Goat Society</td><td>Recommend to NSG and NGRC on which bucks of Coastal Goat Society that should be selected for AI-production. Networking and communicate live animals for sail. Work out breeding program for their breed in cooperation with NGRC.</td></tr>
<tr><td>Fuglestadbroget and Blæset Sheep society</td><td>Recommend to NSG and NGRC on which rams of Fuglestadbroget and Blæset Sheep that should be selected for AI-production. Networking and communicate live animals for sail. Work out breeding program for their breed in cooperation with NGRC.</td></tr>
</table></td></tr>
</table>

<table>
<tr><td></td><td>
<table>
<tr><td>The Rygja Sheep Society</td><td>Recommend to NSG and NGRC on which rams of Rygja Sheep that should be selected for AI-production. Networking and communicate live animals for sail. Work out breeding program for their breed in cooperation with NGRC.</td></tr>
<tr><td>Breeding society for the Dala sheep breed.</td><td>Recommend to NSG and NGRC on which rams of Dala Sheep that should be selected for AI-production. Networking and communicate live animals for sail. Work out breeding program for their breed in cooperation with NGRC.</td></tr>
<tr><td>Norsk Villsaulag BA - Old Norse Sheep Society</td><td>Recommend to NSG and NGRC on which rams of Old Norse Sheep that should be selected for AI-production. Networking and communicate live animals for sail.</td></tr>
<tr><td>Norsvin - Commercial pig breeding association</td><td>Commercial breeding for Norwegian Landrace, Norwegian Duroc and Yorkshire. No work on endangered native breeds, as there are none.</td></tr>
<tr><td>Norwegian Kennel Klub (NKK)</td><td>Umbrella organization for dog breed societies in Norway. The native Norwegian dog breed societies are members of the NKK. NKK facilitates a gene bank for frozen dog semen of the native breeds. NGRC cover most of the costs in this project and the respective native dog breed societies provide dogs for semen production.</td></tr>
<tr><td>Norwegian Horse Center</td><td>Umbrella organization for horse breeds and horse breeding associations in Norway. All the native horse breed societies are members of the Norwegian Horse Center.</td></tr>
</table>
</td></tr>
<tr><td>Poland</td><td>• Ministry of Agriculture and Rural Development: setting policy in the livestock sector, development of breeding law and overseeing its implementation
• Breeder’s Organizations: herdbook keeping, performance recording, breeding value estimation - development and implementation of breeding programmes
• National Animal Breeding Centre: animal breeding inspection and international cooperation (Interbull, ICAR)
• Agricultural Universities/ Universities of Life Sciences: advisory functions
• Research Institutes: National Research Instititue of AnimalProduction: coordination of animal genetic resources conservation programmes, building public awareness on roles and values of native breeds
• Breeders: participate in the conservation programme, raise and keep breeding animals and develop and market their products.
• Non Governmental Organizations: promotion and popularisation of utilisation of native breeds and their products</td></tr>
<tr><td>Portugal</td><td>Breed associations are responsible for carrying out conservation and genetic improvement programs, as approved by the Ministry of Agriculture</td></tr>
<tr><td>Serbia</td><td>• Ministry of Agriculture, Forestry and Water Management – responsible for set up and implementation of AnGR policies
• Institute for Husbandry Zemun, Agriculture Faculty of Zemun and Agriculture Faculty of Novi Sad - Livestock Department – responsible for developing of breeding and research programmes, selection, evaluation and monitoring of breeds
• Veterinary Service – responsible for animal health
• Association of old breeds and NGO`s – promote keeping of autochthonous breeds and increasing of public awareness</td></tr>
<tr><td>Slovakia</td><td>Breeders` associations responsible for maintaining the herd books, developing the breeding programmes and evaluations;

Breeding services of SR,s.e. responsible for performance testing</td></tr>
</table>

Slovenia	All the Stakeholders are included in the Expert Council of Public service for Farm Animal Genetic Resources Conservation (Council). The role of the Council is to give its opinion on the annual program for AnGR, the annual report on the results of work done, and the major technical issues in the field of AnGR. The member of the Council comes from the different organizations: • The association of cattle breeders of the indigenous Cika • Agriculture Chamber of Slovenia • Sheep and goat Breeders Association of Slovenia • Lipica Stud Farm • Lipizzan Association of Slovenia • Slovenian Association of cold-blooded horse breeders • Slovenian Association for Posavje horse breeders • Slovenian association of Haflinger breeders • Slovenian Trotting Association • University of Ljubljana, Veterinary Faculty • Slovenian Beekeepers' Association • University of Ljubljana, Biotechnical Faculty, Department of Animal Science • Semen collection centre Ptuj • Semen collection centre Preska • Slovenian Breeders Association for Brown cattle • Slovenian Breeders Association for Simmental cattle • Slovenian Breeders Association for black and white cattle • Slovenian Association for Beef Cattle Breeding, • Slovenian Breeders Association of warm-blooded horse • Slovenian Breeders association for Trotting
Spain	• Ministry of Agriculture, Food and Environment: coordination and national legislation for management of AnGR • Autonomous Communities: management, implementation, within their competences. • Breeding Organization: creation or management of herd books and the • development of improvement programmes • Genetic centres: carrying out of evaluation genetic tests on performances within the framework of an improvement programme • Breeding centres: collect and obtain genetic material • Storage centre: maintain and preserve semen in optimal conditions • Germplasm bank: store genetic material indefinitely from animals registered in the herd book of their breed • Research centres: AnGR research
Sweden	• Individual livestock owners (keeping animals) • Breed associations and breeding organizations (responsible for breeding plans) • The Sami parliament (policy) • National Board of Fisheries (policy) • Swedish open-air museums and zoos (public contact, animal keeper) • 4H farms (public contact, keeping animals) • Agricultural schools (education and keeping animals) • Universities and university colleges (research, policy and education) • Nordic Genetic Resource Centre (NordGen) (policy makers and education)

Switzerland	ProspecieRara and Save. They also take care of rare breeds and breeders, mainly through Arche farms, products and marketing strategies, less zootechnical matters.
The Netherlands	Dutch Rare Breeds Society (SZH) Centre for Genetic Resources, the Netherlands (CGN), Wageningen University and Research Centre Breed societies and recognized herd books Breeding industry and AI Centres Wageningen University and Research Centre and Education Private breeders Nature and landscape management organisations Food movement, such as Slow Food, Youth Food Movement
Turkey	Ministry of Food Agriculture and Livestock Veterinary and Agriculture Faculties National Consultative Committee for conservation of AnGR Sheep and Goat Breeders Associations Individual livestock owners
UK	**FAnGR Committee** The FanGR committee is an expert committee reporting to Defra and provides advice to Defra, the Devolved Administrations in Scotland, Wales and Northern Ireland and other stakeholders on all issues relating FAnGR, particularly its conservation and sustainable use. **Rare Breeds Survival Trust** - RBST is the UK's only charity dedicated to conserving Britain's native farm livestock. RBST maintains a "Watchlist" that is updated and published annually, classifying breeds into six different categories depending on the degree of danger that each is facing. It has also worked closely with UK Government to develop the UK Breeds at Risk Register. **Breed Societies and associated umbrella organisations –** Breed societies and umbrella organisations (e.g. British Pig Association, National Beef Association, National Sheep Association, Royal Association of British Dairy Farmers) have a key role in providing the information on what FAnGR we have. Breed societies are responsible for maintaining herd, flock and studbooks and are responsible for deciding what needs to be done to improve or enhance the breed. Others with a key interest include executive non-departmental public bodies such as Natural England, Scottish Natural Heritage and Countryside Council for Wales; conservation grazing organisations; farmers, landowners and livestock keepers; research institutes, colleges and universities.
Ukraine	Ministry of Agrarian Policy and Food of Ukraine – legislative and coordinative function National Academy of Agrarian Sciences – coordinative function Institute of Animal Breeding and Genetics –development and implementation of Global Plan of Action with holding of National Heritage – Bank of Animal Genetic Resources Different institutes, which subordinate to National Academy of Agrarian Sciences and coordinate work of husbandries of their region. Holders of gene pool herds – to preserve animals and fulfil the directions of Institutes, coordinating these herds.

SUMMARY:

1) The level of details and description between countries is different!

2) The number of organisations involved in AnGr differ very much!

3) In many countries NGO and GO are included in protection, management and research of AnGR

Question:

8. Do you have a specialized NGO for AnGR conservation and if so, what are its roles / responsibilities?

Country	Do you have a specialized NGO for AnGR conservation? What are its roles / responsibilities?
Albania	Non
Austria	The biggest Austrian NGO for endangered breeds of AnGR is the Arche Austria *www.arche-austria.at*
Azerbaijan	Animal Breeder Assosiasion, Buffalo breeder Assosiasion, Beekipeing Assosiation
Bosnia and Herzegovina	No
Bulgaria	Breeding organizations: their role is to materialize the breeding activities with animals from different species, aiming conservation and management of the AnGR
Croatia	No specialized NGO for AnGR
Cyprus	No
Czech Republic	Breeders' organizations as specified in table before, and a few endangered breed-specific clubs. These are in charge of maketing breed-specific products, education of people interested in breeding and utilization these breeds, public awareness etc.
Denmark	n.a.
Estonia	No
Finland	No
France	Regional conservatories, FRB, IDELE, Races de France
Germany	n.a.
Greece	n.a.
Hungary	Breeding organizations The breeding organizations are responsible for working out breeding programs for different breeds.
Iceland	Small societies operate for: Icelandic Leadersheep, Icelandic Goats, Icelandic Dairy Cattle, Icelandic Roan (Colour-change) Horses and Icelandic Old Poultry
Ireland	n.a.
Italy	n.a.
Latvia	In Latvia we don't have a single organization for AnGR conservation. With AnGR are working farm animal breeding organizations. There is only one organisation, which was founded specifically to work for conservation of breed (Latvian Blue cow) – Breed Conservation Society „Blue cow". Other farm animal breeding organizations are not created for conservation of breeds, but side occupation of these organisations is genetic resources. All organizations develop breeding programmes for farm animal breeds, including AnGR breeds.
Lithuania	Lithuanian Endangered Farm Animal Breeders Association
FYR Macedonia	Ovcepole sheep, Sharplanina sheep, Karakachacan sheep, Busha cattle, Macedonian bee, Sharplanina dog, Domestic Buffalo, Hors ,Donkey and Pig, Domestic Balkan goat

Montenegro	No
Norway	Breeding society for Døla cattle. Breeding society for Western Fjord Cattle. Breeding society for Western Red Polled Cattle Breeding society for Eastern Red Polled Cattle Norwegian Bufe Old Norwegian Spæl Sheep society Coastal Goat Society Fuglestadbroget and Blæset Sheep society The Rygja Sheep Society Breeding society for the Dala sheep breed Old Norse Sheep Society These NGO's responsibilities are to cooperate with Norwegian Genetic Resource Centre with the breeding programmes and communicate live animals for sale between farmers/owners etc.
Poland	The Society for Old Varieties and Breeds (Stowarzyszenie dla Dawnych Odmian i Ras) *http://www.ddoir.org.pl/site/*
Portugal	In addition to the breed associations, there is a scientific society of Animal Genetic Resources (SPREGA)
Serbia	Breeders association of Old Breeds, its role is promotion conservation and sustainable use of AnGR and increasing of public awareness
Slovakia	No NGOs
Slovenia	Slovenia doesn't have NGO for AnGR
Spain	From scientific framework: Unión de Entidades Españolas de Ciencia Animal – UEECA - and SERGA • To advise the Department for Environment and Rural and Marine Affairs in matters related to science and animal production • To represent Spain at the European Federation of Animal Science (EAAP) and promote the participation of young researchers and Spanish technicians in EAAP activities and especially at its annual meetings. • To promote, coordinate and channel conveniently the participation of the associations dedicated to the study of animal zootechnical science, livestock policy and training plans on the matter, advising in the debates, discussions and decisions. • To inform and disseminate to society knowledge. • To participate in national and international forums on the livestock. From livestock sector: FEAGAS, FEDERAPES (federations that include associations of breeders) to represent the general breeds interests and develop common programs
Sweden	No
Switzerland	ProSpecieRara is active in both, animals and plants.
The Netherlands	Dutch Rare Breeds Society (SZH) www.szh.nl Landscape and Nature Management Association
Turkey	No
UK	**Rare Breeds Survival Trust** - RBST is the UK's only charity dedicated to conserving Britain's native farm livestock. RBST maintains a "Watchlist", classifying breeds into six different categories depending on the degree of danger that each is facing.
Ukraine	Institute of Animal Breeding and Genetics –development of methodology and implementation

SUMMARY:

4) NGOs have different roles

5) In some countries new organisations were established

6) Different engagement of society

Summary of Chapter 5.

1. The most countries have different type of legislation concerning of AnGR (Livestock law or Animal breeding act). Some countries have another type of legislation, like national rural development programs, biodiversity conservation programs and so on.

Only three countries do not have any regulation. Generally, all countries have sufficient legislation regarding AnGR.

2. The policy setting and overall management of AnGR is under responsibility of the Ministry. In some countries the other stakeholders as breeding organizations or research institutions participate in process of policy setting.

Implementation of AnGR policies is under responsibility of research institutions or ministries or breeding organizations or combined.

3. Stakeholders involved in the management of AnGR generally are farmers and farmers association, breeding organization, research institutions, ministries and NGOs. Number of involved stakeholders varies from county to country. Also level of description of the responsibilities differs between countries.

4. One half of countries have specialized NGOs for AnGR. The main roles of NGOs are mentioned as conservation of rare breeds (rearing), training of farmers, promotion of local products and public awareness.

6. COUNTRY PROGRAMME (ACTION PLAN) FOR THE CONSERVATION OF "ANIMAL GENETIC RESOURCES"

Questions:

9. Does your country have the National programme for Animal Genetic Resources conservation?

10. On what level your national programme for the conservation of AnGR is implemented?

11. What is the time frame for your national AnGR conservation programme?

Country	National programme YES/NO	The level of national programme	Timeframe
Albania	YES	local	On going
Austria	YES	n.a.	n.a.
Azerbaijan	NO		
Bosnia and Herzegovina	NO		
Bulgaria	YES	National, regional, local	On going
Croatia	YES	National	No time limit
Cyprus	NO		
Czech Republic	YES	National	since 1995 as a specific Ministry task, since 2006 by the law, on-going with no time limit
Denmark	YES	n.a.	n.a.
Estonia	NO		
Finland	YES	National	On going
France	YES	National, regional, local	On-going, no time limit
Germany	YES	n.a.	n.a.
Greece	NO		
Hungary	NO		
Iceland	YES	National	2009 - 2013
Ireland	NO		
Italy	YES	State, regional	On-going
Latvia	NO		
Lithuania	YES	National	No time limit
FYR Macedonia	YES	National	7 years
Montenegro	YES	National	On going
Norway	YES	National, regional	renewed every 4th year
Poland	YES	National	On going

Portugal	YES	National	On going
Serbia	NO		
Slovakia	YES	State	5 years
Slovenia	YES	National	7 years
Spain	YES	National	No time limit
Sweden	YES	National	2010-2020
Switzerland	YES	local	On going
The Netherlands	YES	National	5 years (in case of agreement between CGN and national government to carry out Statutory Research Tasks)
Turkey	YES	National	No time limit
UK	YES	National	On going
Ukraine	YES	National	years

SUMMARY

From 35 countries 9 of them have "NO" National programme (NP) for Animal Genetic Resources and 10 countries have on going. From 26 countries with NP have 6 countries no time limit for the program for years, 5, 7, 10 years timeframe of NP. Most of countries have NP approved by state level

In countries like Estonia, Greece, Hungary, Latvia, Serbia,... - there is no approved National level of the programme, however in these countries breed organisations have been acknowledged for conservation of endangered breeds and AnGR in situ conservation subsidies are part of Rural Development Programe or other programmes.

Questions:

12. Is your national programme formally adopted by the Ministry?

13. Who is responsible for the progress evaluation and possible revisions of the programme?

Country	Is National programme formally adopted by the Ministry?	Who is responsible for the progress evaluation and possible revisions of the programme?
Albania	YES	MoAFCP – Animal Production Department, National Coordinator for FAnGR in collaboration with Regional Center for Agricultural Technology Transfer and regional focal points of National Network for conservation and use of FAnGR.
Austria	YES	The ÖNGENE together with the OCs are responsible for the evaluation of the conservation programmes and for possible amendments.
Azerbaijan	NO	NO
Bosnia and Herzegovina	NO	NO
Bulgaria	YES	Executive director of EASRAB
Croatia	YES	National Council for the Programme for protection of native and protected breeds of domestic animals in the Republic of Croatia (NCP). NCP was established by the Ministry of Agriculture, Fisheries and Rural Development
Cyprus	NO	NO
Czech Republic	YES	Ministry of Agriculture evaluates the program both annually and in five-year cycles, after which the program is restorted and adjusted. Except that regular adjustment, based on continuous monitoring and evaluation of breed status, the National coordinating centre may propose necessary changes at any time
Denmark	YES	
Estonia	NO	NO
Finland	YES	Advisory Board for Genetic Resources within Ministry of Agriculture and Forestry
France	YES	the evaluation of programme in the field of genetics is conducted by CNAG
Germany	YES	
Greece	NO	NO
Hungary	NO	NO
Iceland	YES	The Ministries of Fisheries and Agriculture in consultation with the Agriculture University of Iceland
Ireland	NO	NO
Italy	YES	Ministry of Agriculture and the 21 Regional and provincial governments
Latvia	NO	NO
Lithuania	YES	Ministry of Agriculture
FYR Macedonia	YES	Ministry of agriculture water management and forestry
Montenegro	YES	Ministry of Agriculture and Rural Development

Norway	YES	The Norwegian Genetic Resource Centre on advice from The Committee on AnGR
Poland	YES	Ministry of Agriculture and Rural Development National Research Institute of Animal Production Advice provided by: Advisory Board of the National Focal Point for AnGR and Working Groups on species genetic resources (cattle, sheep, horses, pigs, fur animals, poultry, honey bees and fish)
Portugal	YES	Ministry of Agriculture
Serbia	NO	NO
Slovakia	NO	MAaED SR
Slovenia	YES	Ministry of Agriculture and environment of Public service for Farm Animal Genetic Resources Conservation and his Council
Spain	YES	General Directorate of Animal Production and Agricultural Markets of the Ministry of Agriculture, Food and Environment
Sweden	YES	SBA together with relevant stakeholders
Switzerland	Not yet	FOAG, NC and expert group
The Netherlands	YES	Ministry of Economic Affairs
Turkey	Not yet	Ministry of Food, Agriculture and Livestock, General Directorate of Agricultural Research and Policy
UK	Not in legislation	Ministry / Government Departments
Ukraine	YES	Ministry of Agrarian Policy and Food of Ukraine

Question:

14. Who supervises the implementation of AnGR in situ conservation programme and how is the supervision undertaken?

Country	Who supervises the implementation of AnGR *in situ* conservation programme and how is the supervision undertaken?
Albania	Regional expert of the National Network for conservation and use of FAnGR – staff of Regional Directorat of Agriculture, Food and Consumer`s Protection. Periodic visits in the farm
Austria	n.a.
Azerbaijan	n.a.
Bosnia and Herzegovina	Nobody
Bulgaria	n.a.
Croatia	Croatian Agricultural Agency - annual control of animals/herd
Cyprus	Regular inspections by officers of the Department of Agriculture and the Veterinary Services
Czech Republic	n.a.
Denmark	n.a.
Estonia	The supervision of breed and breeding organisations is carried out by Veterinary and Food Board by regular inspections and the annual reports.
Finland	Ministry of Agriculture and Forestry
France	MAAF / FranceAgriMer / Agency for services and payments
Germany	n.a.
Greece	The Centres for Animal Genetic Improvement and the Ministry of Rural Development and Food
Hungary	Breeding authority, Paying agency, Agricultural and Rural Development Agency
Iceland	Ministry of Fisheries and Agriculture, The Farmers Association of Iceland + Agricultural Genetic Resources Committee
Ireland	n.a.
Italy	Regional and provincial governments.
Latvia	n.a.
Lithuania	Budgetary institution National Paying Agency under the Ministry of Agriculture, State animal breeding supervision service under the Ministry of Agriculture of the Republic of Lithuania
FYR Macedonia	n.a.
Montenegro	Ministry of Agriculture and Directorate for Agricultural inspection
Norway	The advisors at the Norwegian Genetic Resource give advice to farmers by personal contact and work shops.

Poland	• •Species coordinators, working in the Animal Genetic Resources Conservation Unit in the National Research Institute of Animal Production that have a direct contact with breeders participating in the conservation programsMembers of the Working Groups on species genetic resources (cattle, sheep, horses, pigs, fur animals, poultry, honey bees and fish) • Members of the Advisory Board
Portugal	Ministry of Agriculture, through supervision of the databases and local assessment of farms chosen randomly
Serbia	Ministry of Agriculture, Forestry and Water Management and Department for Agricultural inspection. Control is based on annual level.
Slovakia	n.a.
Slovenia	Ministry of Agriculture and environment
Spain	Audit services of the administrations supervise it. They control the entire process: legal rules that establish the subsidies, the processing of applications, justification of eligible costs, grant procedure and the payment for the subsidies.
Sweden	SBA
Switzerland	Breeding organizations and FOAG
The Netherlands	Ministry of Economic Affairs, supported by CGN
Turkey	Each project leader, who works in the research institutes, is responsible for the implementation of the *in situ* (community based) conservation project.
UK	Ministry/Government Departments, plus public service delivery bodies.
Ukraine	Ministry of Agrarian Policy and Food, as well as National Academy of Agrarian Sciences.

SUMMARY:

NP is not formaly adopted in national legislative by 13 countries, adopted is by 21 countries.

Ministry are responsible for the progress evaluation and possible revisions of the programme in 15 countries

NP is supervised by 24 countries.

Questions:

15. Are the Strategic Priorities of Action for the Global Plan of Action included in the national programme?

16. Which organisation or body is responsible for implementation and carrying out the national programme for the conservation of farm Animal Genetic Resources?

Country	Are the Strategic Priorities of Action for the Global Plan of Action included in the national programme?	Which organisation or body is responsible for implementation and carrying out the National programme for the conservation of farm AnGR?
Albania	YES	National Network for Conservation and Use of FAnGR. Agricultural University and NGO
Austria	YES	The Agrar Markt Austria
Azerbaijan	NO	-
Bosnia and Herzegovina	NO	-
Bulgaria	YES	EASRAB
Croatia	YES	Ministry of Agriculture, Fisheries and Rural Development Croatian Agricultural Agency Breeding organisations
Cyprus	n.a.	n.a.
Czech Republic	YES	National coordinating centre for animal genetic resources
Denmark	YES	Committee for the Management of Farm AnGR – appointed by the Minister for Food, Agriculture and Fisheries
Estonia	NO	
Finland	YES	MTT Agrifood Research Finland
France	YES	MAAF
Germany	YES	Federal Ministry in cooperation with the Laender Ministries and with the technical support of the National Committee on AnGR
Greece	NO	
Hungary	NO	
Iceland	YES	The Farmers Association of Iceland Agricultural Genetic Resources Committee
Ireland	YES	Ministry of Agriculture, Food & the Marine
Italy	YES	Ministry of Agriculture and the 21 Regional and provincial governments
Latvia	NO	
Lithuania	YES	Ministry of Agriculture, National Board of AnGR, Center for Farm Animal, Genetic Resources Conservation of LUHS (IAS), Breeders associations

FYR Macedonia	YES	University Ss. Cyril and Methodius in Skopje, Faculty of Agricultural Sciences and Food Skopje, Department of Livestock Production
Montenegro	YES	University of Montenegro, Biotechnical Faculty, Department of Livestock Science
Norway	YES, where it is relevant	Norwegian Genetic Resource Centre together with different breeding associations and breeding societies.
Poland	YES	National Research Institute of Animal Production
Portugal	partly	Ministry of Agriculture and Breed associations
Serbia	NO	
Slovakia	YES	MAaRD SR, APRC Nitra
Slovenia	YES	Public service for Farm Animal Genetic Resources Conservation at the Department of Animal Science , Biotechnical Faculty, University of Ljubljana
Spain	YES	Ministry of Agriculture, Food and Environment with regions for regulation and breeders associations for the implementation
Sweden	YES	A shared responsibility between all stakeholders such as universities, authorities, museums, farmers and their organisations
Switzerland	YES	NC at FOAG
The Netherlands	YES	Coordination by CGN and in collaboration with Dutch Rare Breeds Society. National policy and plan is based on the fact that multiple stakeholders play a role in conservation and sustainable use of AnGR
Turkey	YES	Ministry of Food Agriculture and Livestock, General Directorate of Agricultural Research and Policy
UK	YES	Ministry/Government Departments and public service delivery bodies
Ukraine	Partly	Ministry of Agrarian Policy and Food of Ukraine, National Academy of Agrarian Sciences and the Institute of Animal Breeding and Genetics

SUMMARY:

The Strategic Priorities of Action for the Global Plan of Action included (full or partly) in the national programme have 25 countries.

In some countries like Estonia, Hungary, Latvia, Greece, Serbia,... were answers NO, it means the elements of the programme for conservation are part of different programmes (e.g. Rural development programme, ...) and different breeds conservation programme

Questions:

17. Are there any specific awareness raising or promotion plans/activities in your country?

17a. If you have any specific awareness raising or promotion plans/activities, please describe them

Country	Are there any specific awareness raising or promotion plans/activities?	Describe the main characteristics of these activities
Albania	NO	n.a.
Austria	YES	The Agrar Markt Austria as central marketing organisation is carrier of promotion measures. Special information for multipliers (teachers, schools, stakeholders) is provided by education projects.
Azerbaijan	NO	n.a.
Bosnia and Herzegovina	partly	The focus is on two points, raising awareness about the importance of indigenous breeds for farmers and consumers, as well as negotiations with the entity ministries for agriculture. Everything is done through the organization of workshops, presentations, distribution of printed materials without formal plan.
Bulgaria	YES	Organizing meetings with breeding organizations and farmers; Organizing meetings with different state bodies; Conducting international, national, and regional exhibitions; Performing particular genetic resources Participation in different international activities, aiming conservation and management of the AnGR.
Croatia	YES	Development of a programme for economic utilization and rise in competitiveness of native breeds is one of basic postulates for a long term sustainability of native and protected breeds of domestic animals in Croatia, endangered breeds, in particular. Primary goals of the development of supporting measures for the protection of native and protected breeds are: promotion and affirmation of native and protected breeds through programme of protection via sustainable management; support of marketing activities with a goal of promoting products of native and protected breeds; encouraging inclusion of native and protected breeds into folklore, tourist, hobbyist and other programme; encouraging inclusion of native and protected breeds into management of protected areas; finding material funds for the support of breeding organizations and other non-profitable participants of programme for the preservation of native and protected breeds.
Cyprus	partly	Information events; open days at state-owned farms
Czech Republic	partly	• Development of specific market products (labeled, presently in a process of obtaining trade mark) • Design, verification and implementation breed-specific (alternative) technologies • Organization of exhibition of native breeds during the National and other specific animal shows • promotion and popularization native breeds (publication of livestock posters, booklets, information materials for schools, coloring books and puzzles for kindergardens, organizing programs for families and public, newspaper interviews, TV reports)
Denmark	YES	Specific Action Plan for raising awarenes (information til relevant partners)

Estonia	YES	Different meetings (round-tables, workshops, conferences) with breeding organizations and farmers. Participation in different international activities, aiming conservation and management of the AnGR. Participation in TV and raadio programmes. Films about Estonian Native cattle, Estonian horse breeds and endangered breeds in Estonia. Various publications: brochure of endangered breeds in Estonia, journal "Tõuloomakasvatus/ Animal Breeding", journal „Oma Hobu/ Our Own Horse", special issues of Estonian Native horse have been released in the journal „Oma Hobu/ Our Own Horse"; breed monographs "History of Estonian Native cattle" and "Breeding of Estonian Red cattle", leaflets, posters, calendars. Animal exhibitions and shows, most of them are traditional like show of pedigree animals, shows of different breeds, day of endangered breeds, live animals of endangered breeds in two agricultural museums, etc.
Finland	partly	Regular appearance in public media on strategies, research projects, research results, etc.
France	YES by Races de France, Conservatories, Breeding organizations	promoting breeds in Paris International Agricultural Show (Parade of the breeds) and others agricultural shows, promoting of products under quality signs linked with breeds, education of youth through pedagogic farms and conservatories
Germany	YES	various actions such as the campaign for biological diversity, publication of information material for various audiences
Greece	YES	Different initiatives are undertaken by local authorities and farmers organisations in relation to the promotion of local products. These include mainly local events and regional congresses.
Hungary	YES	The Breeding Association of Mangalitza organizes the so called Mangalitza Festival, every year. The Breeding Association of Hungarian Grey Cattle organizes the so called Grey Cattle Fest.The Association of Hungarian Small Animal Breeders for Gene Conservation (MGE) organized and made a further development of HU-BA (Hungaricum poultry product) programme which was started for establishing the breeding background of poultry meat and egg production, preferably in some underprivileged regions of Hungary. Another programme aims the sustainable usage of local poultry breeds. It is the Model Village Programme (MVP) which was launched by MGE. It includes an educational programme and the reintroduction of local breeds to small villages to develop family poultry production.
Iceland	YES	Publication of livestock posters and booklets, writing articles for journals, appearing on radio and television, taking part in newspaper interviews, taking part in livestock shows.
Ireland	YES	National Advisory Committee for Genetic Resources in Food and Agriculture
Italy	partly	Activities are organized in different ways in different Regions and Autonomous Provinces
Latvia	partly	Awareness is raised in various ways – in seminars, excibitions etc.

Lithuania	YES	Organization of exhibition of native breeds during the International, National and regional exhibitions and other specific animal shows, promotion and popularization native breeds (publication of livestock posters, booklets, information materials for schools, newspaper interviews, TV reports), Organizing meetings with breeding organizations and farmers
FYR Macedonia	YES	Orgazing promotion activities, Sheep and goat breeders days, Bee and honey breeding days. Other type of promotion activities such as workoshops, university courses and lectures.
Montenegro	YES	Promotion of local products as well as organic way of production which enchance an importance of local breeds and local products.
Norway	YES	Information to public, special action plans for specially threatened populations / breeds.
Poland	YES	Activities of the National Research Institute of Animal Production: • Organization of exhibition of native breeds during the annual National Animal Show • Development and promotion of products originating from native breeds • Various publications: albums on native breeds, leaflets, posters, calendars • Development of gadgets: T-shirts, clips, etc. • Participation in TV and radio programmes
Portugal	YES	Promotion of local breeds and their specific products in fairs, local restaurants, gastronomic and tourist events, TV shows, etc.
Serbia	partly	Organization of exhibition of native breeds during the National and other specific animal shows - Agrobiodiversity fair Development of specific market products (labeled, presently in a process of obtaining trade mark) Promotion and popularization native breeds (publication of livestock posters, booklets etc.), promoting native breebs true the rural development measures.
Slovakia	YES	Promoting AnGR issues via daily and periodic press, TV and radio broadcasting, professional journals, seminars and conferences. AnGR issues are included in study branches (sample lectures) at universities. Regional and local livestock exhibitions.
Slovenia	YES	Publishing data regarding AnGR, professional contributions on the field of AnGR, publishing and spreading various promotional materials, exhibitions of autochthonous farm animals, every year organized workshop of AnGR.

Spain	YES	• Breeding organizations developed programs authorized by the competent authority, for the diffusion of the improvements, including: publications, plans for promotion, expansion and advertising and distribution programs for genetic material. • **Department for Agriculture, Food and Environment** has developed a National Information System (ARCA) as a tool for storing information and management, with all data of interest about the breeds, with different levels of access; promotion of zootechnical publications; awareness, promotional and advertising campaigns for the breeds, their production systems and their products, to inform society in general.
Sweden	YES	Animal keepers and breeding organizations can be supported.
Switzerland	YES	Workshops from FOAG with breeding organizations and NGO's, raising public awareness
The Netherlands	YES	Imported role for SZH, and supported by CGN. Workshops with breeders, communication to society through education, e.g. on children's farms, and variety of communication and promotion activities to wider public and through different channels p.e. Farm and Country Fairs or Living Heritage Days.
Turkey	YES	Stamp serials which are drawn local animal breeds have been prepared and delivered all around the country (100.000 units). Documentary films about local animal breeds have been prepared and broadcasted on the national TV channels. The Breed Catalogue has been prepared and delivered to the relevant stakeholders.
UK	YES	Agri-Environment Scheme Literature Farm Animal Genetic Resources (FAnGR) Newsletter Website: http://www.defra.gov.uk/fangr/
Ukraine	Partly	Promotion in articles, describing the exclusive qualities of local breeds.

SUMMARY:

Most countries doing public promotion in different ways.

Different initiatives are undertaken by local authorities and farmers organisations in relation to the promotion of local products. These include mainly local events and regional congresses.

Many different stakeholders are active for promoting AnGR

Questions:

18. What is in your opinion "a knowledge level" of the wider public in your country about conservation of the Animal Genetic Resources and particularly conservation of autochthonous breeds?

19. What activities take place to build public awareness and promote conservation of farm Animal Genetic Resources – especially the conservation of autochthonous and endangered breeds?

Country	"A knowledge level" of the public in your country about conservation of the farm AnGR and particularly conservation of autochthonous breeds	Activities which take place to build public awareness and promote conservation of farm AnGR – especially the conservation of autochthonous and endangered breeds
Albania	The level of awareness about the value and importance of the conservation of the Farm Animal Genetic Resources and, for the necessity of conservation and sustainable use of local animal breeds, in particular, is not sufficient The level of knowledge and susceptibility about the values and economic importance of farm animal genetic resources it is not enough both in decission marker and other stakeholders. Strengthen of the efforts for increassing the awarness, regarding the evaluation of the autochthonous breeds and their importance as a key factor for rural development and sustainable development of agri-traditional farms, is necessary	Different workshops, seminars at regional and national level and annual scientific symposiums were carried out. Exhibitions and concurs for promote the local animal breeds, their traditional products, economic values and the role of autochthonous breeds for develop the agro-tourism was carried out annually in different regions of Albania
Austria	Generally low but increasing.	The Institute of Organic Farming and Biodiversity of Farm Animals regularly offers seminaries on biodiversity for school teachers or school classes. The Arche Austria and the ÖNGENE jointly produce brochures, organise PR at agricultural fairs and in the public and private media.
Azerbaijan	"Knowledge level" is not high	Rural Advisory Services, Scientific Institutes
Bosnia and Herzegovina	"A knowledge level" is at a low level	No official activities for the promotion to build public awareness and promote conservation of farm Animal Genetic Resources. All activities are confined to the private initiative, mainly from the side of Faculty for Agriculture and Food Sciences, University of Sarajevo.
Bulgaria	"Knowledge level" is **good**.	Conducting different exhibitions and activities, aiming the promotion of the AnGR, publications in the press, maintenance of different websites, establishment of info systems, supply of information for farmers and state administration bodies at national and regional levels, technical equipment for cryoconservation of AnGR, subsidies, establishing a Gene bank for mapping the populations. Development of contact net on regional level regarding the management of AnGR.

Croatia	"Knowledge level" is **very good**.	Establish national species and breed development strategies and programme. Promote agro-ecosystems approaches to the management of animal genetic resource. Support indigenous and local production systems and associated knowledge systems of importance to the maintenance and sustainable use of animal genetic resource.
Cyprus	Low knowledge level	Information events, open days at state-owned farms, translation of GPA in national language (Greek), other publications and articles in local press.
Czech Republic	Still low however increasing especially through promotion of local products	Development of specific market products (labeled, presently in a process of obtaining trade mark) Design, verification and implementation breed-specific (alternative) technologies Organization of exhibition of native breeds during the National and other specific animal shows promotion and popularization native breeds (publication of livestock posters, booklets, information materials for schools, coloring books and puzzles for kindergardens, organizing programs for families and public, newspaper interviews, TV reports)
Denmark	It is important to raise awareness on all levels - also wider public	n.a.
Estonia	**GOOD.** The reason for that is the publicity done by breed and breeding organisations – brochures, books, yearly shows and competitions of endangered animal breeds. A lot of publications have been released in local journals and newspapers, TV and radio, several video films about endangered breeds have been produced.	• Yearly shows and competitions of endangered animal breeds;' • Brochure of endangered breeds in Estonia, leaflets of endangered breeds; • Publications in newspapers and journals; • Special journal for horses „Oma Hobu/ Our Own Horse" • The breed monograph "History of Estonian Native cattle" was released in May 2007 • Meetings and round-tables; • TV and radio have been regularly invited to participate in actions (meetings, round-tables, animal shows and exhibitions) for raising public awareness; • Exchange of information – the other countries experience in the field of AnGR (Czech, Slovenian and Austrian experience) and Estonian farmers visits to other countries (e.g. Estonian Native Cattle Breed Society visit to Tampere, Mouho and Seppäla agricultural schools and Pelso prison farm in Finland).

Finland	Satisfactory	• College and university level education • Brochures on the national action plan and few important breeds • An annual information bulletin (Geenivarat) • Promoting special products of breeds • Publicity in media (TV, radio, main newspapers) • Web pages • Seminars and workshops
France	no data available (but around 700,000 visitors every year at Paris International Agricultural Show)	promoting breeds in Paris International Agricultural Show (Parade of the breeds) and others agricultural shows, promoting of products under quality signs linked with breeds, education of youth through pedagogic farms and conservatories
Germany	The awareness for the underlying problem is very much limited.	n.a.
Greece	The recent years there is an increase of awareness of the public on conservation of autochthonous breeds. The public shows particular interest in exhibitions on farm animal breeds, their products, visiting farms, etc.	Publications, animal shows, exhibitions.
Hungary	It is very low among the public, but among the experts it is world level.	**The Breeding Association of Mangalitza** organizes the so called Mangalitza Festival, every year. The Breeding Association of Hungarian Grey Cattle organizes the so called Grey Cattle Fest. **The Association of Hungarian Small Animal Breeders for Gene Conservation** (MGE) organized and made a further development of HU-BA (Hungaricum poultry product) programme which was started for establishing the breeding background of poultry meat and egg production, preferably in some underprivileged regions of Hungary. Another programme aims the sustainable usage of local poultry breeds. It is the Model Village Programme (MVP) which was launched by MGE. It includes an educational programme and the reintroduction of local breeds to small villages to develop family poultry

Iceland	Excellent support, linked to food security in an isolated country as all milk and much of the meat from native, old, local breeds.	Publication of livestock posters and booklets, writing articles for journals, appearing on radio and television, taking part in newspaper interviews, taking part in livestock shows. The endangered goat breed and the small population of Old Icelandic Poultry receive much attention, for example, due to efforts of official bodies and the respective breed societies.
Ireland	Good Knowledge, as we have a small number of native breeds. Some of the breeds are linked by name to geographical areas which also helps in their conservation.	n.a.
Italy	The knowledge level is still moderate but it is increasing and it is different in different regions and autonomous provinces.	Their activities are very different according to different regional and provincial governments
Latvia	Knowledge level is satisfactory.	Awareness is raised in various ways – in seminars, excibitions etc.
Lithuania	Good Knowledge, as we have a small number of native breeds	Taking part in livestock exhibition, conferences; writing articles for journals, newspaper, and booklets, appearing on radio and television, taking part in newspaper interviews.
FYR Macedonia	A “knowledge level” is very low up to date.	Presentation of indeginous breeds at national shows, thematic seminars during national exebitions, workshops and trainings. Breeding organizations for specific species and breed in the frame of this species are more active but there is lack of breeding organizations for some indegionous breeds
Montenegro	Wider public knowledge is still on the **low level.**	Still there is no appropriate activities
Norway	Generally rather low in most European countries. The level of knowledge of the importance of farm AnGR is not too bad in Norway. This might be due to the fact that Norway still has native breeds as main production breeds within dairy cattle and dairy goat production, pork and sheep production. The commercial breeding associations are all involved in the conservation work for the endangered native breeds.	Active web-pages with weekly newsletters covering AnGR, PGR and FGR. Giving lectures at University level, arranging meetings and workshops, handing out leaflets.

Poland	No hard data available. Knowledge and awareness seems to be still limited but gradually increasing.	• Cooperation with the Slow Food – participation in events aimed at promotion of products from native breeds • Education through media, especially TV programmes on cooking • Presentations of native breeds during the National Animal Show • Seminars during the National Animal Show • Preparation of gadgets for public promoting native breeds (eg. T-shirts, fridge clips) • Open days at experimental farms
Portugal	Nowadays, the general public is more aware than it used to be about the importance and role played by autochthonous breeds in sustainable development and support to rural communities. Nevertheless, there is still much to be done to reach a higher level of awareness in the general public.	National Animal Germplasm Bank Financial support to breeds at risk Breed exhibitions
Serbia	Wider public in Serbia are well informed about conservation of the AnGR and autochthonous breeds	The fairs of autochthonous breeds Printing brochures Workshops and trainings
Slovakia	Low, but improving	Conferences – "Conservation and sustainable use of livestock diversity" (2010) The National Animal Exhibition (held on yearly basis)
Slovenia	Knowledge of the wider public is very limited about genetic resources and rare animals breeds.	Public Service (PS) publishes data on the status of farm animal biodiversity and professional contributions of the importance of maintaining biodiversity in farm animals in various events, lectures and newsletters. Various promotional materials for the purpose of raising awareness and informing the public are prepared each year (calendars, leaflets). Every year since 2010 exhibition of the autochthonous farm animals in Gornja Radgona (the biggest agricultural fair in the Region) was organized by the PS for Farm Animal Genetic Resources Conservation. In 2011, in the Nature-Health Fair in the capital city Ljubljana, the autohtonous breeds of farm animals was presented to more than 5.000 children from the various schools and other 20.000 visitors of the fair.

Spain	The actions mentioned above have made the wider public aware of the existence of autochthonous breeds and differentiation of products, and the necessity to continue the expansion of this knowledge level. We believe it is very important to disclose the role of livestock as a whole, and specifically that of autochthonous breeds because of its environmental and social impact.	Breeding organizations developed programs authorized by the competent authority, for the diffusion of the improvements, including: publications, plans for promotion, expansion and advertising and distribution programs for genetic material. **Department for Agriculture, Food and Environment** has developed a National Information System (ARCA) as a tool for storing information and management, with all data of interest about the breeds, with different levels of access; promotion of zootechnical publications; awareness, promotional and advertising campaigns for the breeds, their production systems and their products, to inform society in general.
Sweden	The knowledge level is rather limited.	Animal keepers and breeding organisations can be supported.
Switzerland	Medium	Articles, markets, arche farms…
The Netherlands	Knowledge level is very limited. Awareness is slowly increasing in society, in particular the values of local breeds which are closely connected to citizens: cultural value, landscape and nature management, special products, etc.	E.g. publications, brochures, presentations, and also promotion of typical products of local breeds ("Zeldzaam Lekker, SZH")
Turkey	It can be considered as **poor.**	Several instruments have been used in order to build public awareness and promote conservation of farm animal genetic resources, such as TV and radio interviews, local breeds' stamp serials, documentary films, broad dissemination of breed catalogues, breeder unions' educations, on farm visits etc.
UK	The wider public is definitely interested. However, the general level of knowledge is low. This knowledge level would be greatly increased if FAnGR was fully and specifically recognized as a core part of national, European, and other international "Biodiversity", "Ecosystems", 'Natural Capital', 'Ecological networks', etc.	Activities through RBST for example to promote its Watchlist of endangered breed. Individual breed societies/associations, and 'umbrella' (multiple-breed) organizations and individual keepers and owners of such breeds also undertake activities to promote conservation of FAnGR.
Ukraine	Extremely low.	Promotion in articles, describing the exclusive qualities of local breeds.

Summary of Chapter 6:

Most countries (76.4%) have a National programme (NP) for Animal Genetic Resources and also 8 (23.6%) countries have not. From 26 countries with NP 6 countries have no time limit for the program. Most of countries have NP approved by state level.

From 34 countries 8 of them "61.7%" have a national programme adopted by the Ministry. Reponsible for the progress evaluation and revision are Governmental institutions 20 countries (58.8%), scientific institutions 2 (5.8%) countries and No information from 12 countries (35.1%). NP is not formaly adopted in national legislative by 13 (38.2%) countries, adopted is by 21 (61.8%) countries.

The Strategic Priorities of Action for the Global Plan of Action included (full or partly) in the national programme have 25 (73.5%) countries and 9 (26.5%). In some countries like Estonia, Hungary, Latvia, Greece, Serbia,... were answers NO, it means the elements of the programme for conservation are part of different programmes (e.g. Rural development programme, ...) and different breeds conservation programme. Mostly combination between institution, administrative bodies, farmers associations (Ministries, breeding associations, National councils for AnGR, Regional authorities, scientific institutions advisory services in agr.

Most countries doing public promotion in different ways. Different initiatives are undertaken by local authorities and farmers organisations in relation to the promotion of local products. These include mainly local events and regional congresses.

Different initiatives are undertaken by local authorities and farmers organisations in relation to the promotion of local products. These include mainly local events and regional congresses. Participant countries have very different view and/or perception on knowledge level of the wider public!) (Low 50%, Medium 23.5%, Good 26.5%). Workshops, seminars, exhibitions, animal shows, publications (booklets, brochures, articles, journals), media, promotional campaigns.

7. DEFINITION OF BREEDS

Question:

20. Could you provide definitions of breeds that are used in your country?

Country	Definitions of breeds that are used in your country
Albania	We have three categories of farm animal populations: **1. Authochtonous or native breeds** - Animal population belong to ancient races **2. Ecotype** - animals of local populations that are breeded in an isolated area **3. Local adapted breeds** - Animal populations belong to croosbreed of authochtonous breeds with exotic breeds before 40-50 years ago. **4. Imported breeds** and their crosses with local breeds
Austria	**Autochthonous breed:** A breed can only be acknowledged as an Austrian breed if it fulfils the said requirements and • if it already had a herdbook in Austria before 1938 (continued or discontinued) or • if there is ample evidence that the breed has always been present and bred in a part of Austria as it is today (native landrace breeds) or • if it stems from the Austro-Hungarian Monarchy and there is ample evidence that the breed has had relations to regions of Austria as it is today (e.g. Racka sheep, Mangalica and Turopolje pigs, Hucul horse). We do not define other categories of breeds.
Azerbaijan	n.a.
Bosnia and Herzegovina	Farm animal breeds are classified into the following two groups: - **local breeds** (autochthonous and traditional), and - **foreign breeds** (breeds from third countries)
Bulgaria	As per Breeding Act, 2010 "Breed" is a group of animals from one and the same species with common origin and evolution, created by the man in concrete environmental and economic conditions, possessing unique biological and economic traits, which are sustainably inherited.
Croatia	Definitions used in Croatia are harmonized with the FAO / EAAP recommendations
Cyprus	No regional definitions are applied, FAO recommendations are followed
Czech Republic	**Autochtonous breed** - taxatively named breeds given by the law from 1992, **Locally adapted** = non autochtonous but kept purebred at least for 4 generations without mixing with another breeds
Denmark	We included autocthonous breeds of Danish origin

Estonia	Definitions from the Farm Animals Breeding Act Breed and breed name: (1) For the purposes of this Act, a **breed** is a population of animals of the same species: a. with the same parentage; b. with similar conformation inherited by progeny; c. with similar economic utility; d. whose number is sufficient for breeding purposes and for the preservation of the breed; e. who are adapted to the climate and rearing conditions of the geographical region suitable for this breed; f. who is significantly distinguishable from the related breeds on the basis of genetic distance; g. whose breed type and other characteristics have not changed considerably during at least three last generations. (2) A breed shall have a name which: a. is different from other breed names being used; b. is distinguishable from all registered trade marks and trade designations. **Endangered breed** (1) A breed or a distinguishable part of a population of animals of the same species is deemed to be endangered if the number of female or male animals used for breeding is less than one thousand or less than twenty respectively or if the number of female or male birds used for breeding is less than ten thousand or less than one thousand respectively (hereinafter endangered breed).
Finland	FAO and EU definitions and criteria
France	Article D. 653-9 of the Rural Code: Definitions of the terms used in this chapter (i.e. chapter III) : - **Animal genetic resource**: any animal, any animal population or material of animal origin containing functional units of heredity of actual or potential value; - **Selected animal population**: a population of animals that are differentiated from closest populations by a set of identifiable and hereditary characteristics that are the consequence of a specific and reasoned management policy of matings; - **Breed**: a set of animals that has enough in common to be considered by one or more homogeneous groups of farmers who agree on the organization of breeding renewal and induced trade, including international level; - **Local breed**: a breed predominantly linked by its origin, place and type of farming to a given territory *; - **Small population size breed**: a breed with less than a number of females of breeding females to be defined according to the species; - **Hybrid genetic type**: a set of hybrid or crossbred breeding animals produced by a planned crossbreeding either between pure-bred or of different selected animal populations breeding animals, or between breeding animals which are themselves the outcome of a cross between breeds or different selected animal populations, or between pure-bred breeding animals and breeding animals belonging to one or the other of the above categories.
Germany	The Animal Breeding Act defines which breeds are classified as „indigenous“.
Greece	n.a.

Hungary	Autochthonous breed according to the Animal Breeding Act: Those breeds which were developed in the natural geographical environment of Hungary, and those of which keeping and breeding have historical tradition.
Iceland	Only two definitions are applied: 1. Native breeds, all of Nordic origin 2. Imported breeds, all foreign
Ireland	Native breeds
Italy	Definitions used in Italy are harmonized with the FAO / EAAP recommendations
Latvia	In accordance with Animal breeding law: Farm animal Genetic resources – numerically small breeds and populations with heritage, scientific or economical value. Breed – population of one species that has genetically similar traits.
Lithuania	Lithuanian native breeds are divided in to: indigenous (autochthonous) animal and poultry breeds, breeds which were developed in 20th century.
FYR Macedonia	According to the Low of Animal Production (15.01.2008), in terms (article 4), Breed is phenotypic or geographical subspecies of livestock, which has typical genes frequencies which separate it from the other animals in the same species.
Montenegro	**Breed** is defined as group of animals of the same species with same or similar morphological and production traits, reared in specific region and specific natural condition and that is able to transmit its specific characteristics to the next generations of the offspring
Norway	Criteria for being regarded as a **native breed** in Norway 1. The **breed** shall have been imported to or established in Norway before 1950 2. The breed shall have been bred in Norway without major import of breeding material, unless the import has been in line with breeding goals defined by Norwegian breeding associations. 3. The breed shall have or have had economic and cultural importance. **Breeds established or imported after 1950** Imported breeds with a breeding program run and defined by Norwegian breeding associations and established after 1950 are not regarded as native breeds worthy of conservation. However, the Norwegian Committee on Animal Genetic Resources appeals to the breeding associations with these breeds, and especially those breeds with documented breeding progress, to establish, where appropriate, long term genebanks with frozen semen. If the breeding program is closed, the Norwegian Committee on Animal Genetic Resources furthermore appeal to the respective breeding associations not to destroy their gene banks.
Poland	We don't have any specific / national definition or official list of Polish breeds. It is commonly understood that Polish breeds are those that originate from the historical territory of Poland.
Portugal	Animals are considered to belong to a breed if they are registered in the corresponding herdbook. A breed is recognized by the Ministry of Agriculture.

Serbia	The breeds are domestic animals of the same species with similar morphological and physiological traits;
Slovakia	Definitons and criteria by FAO and EU
Slovenia	1. CLASSIFICATION OF BREEDS Farm animal breeds are classified into the following two groups: - local breeds (autochthonous and traditional), and - foreign breeds (alochthonous, exotic) 2. BREED DEFINITIONS 2.1. BREED Is a group of geographically or regionally separated farm animals, originating from the same ancestors, sharing the same characteristics defined in breed standards. According to the adaptation to local environmental conditions the farm animals are classified to local (autochthonous, traditional) and foreignbreeds.
Spain	Breed animal, native Spanish breeds, integrated breeds in Spain, European Union breeds, breeds from third countries, Spanish synthetic breeds, other registered equidae.
Sweden	We only differentiate between commercial breeds and rare breeds on numbers.
Switzerland	Contributions only for approved projects carried out by a breeding organization or projects at University level
The Netherlands	1) commercial and widely used breeds, 2) recently imported breeds, 3) native Dutch breeds. Definition of native Dutch breeds largely based on Alderson *et al*. criteria, e.g. 40 years + 6 generations bred in the Netherlands without continuous importations from other countries.
Turkey	'**Genetic resources'** means genetic material of actual or potential value (as described in CBD). '**Domestic Animal Genetic Resources'** include all subspecies, breeds, types, ecotypes, lines and groups belong to domesticated animal species which are reared in Turkey.
UK	The expert Committee's latest working definitions are available at: http://www.defra.gov.uk/fangr/2011/03/17/national-inventory/
Ukraine	**Native breeds** – breeds, which are created for specific conditions of the country. **Imported improving breeds**, which are not native, but imported and crossing with which as expected will increase the productivity of native breeds. **Local (indigenous, aboriginal) breeds**, which are bred long time at specific area. **Endangered breeds**, which are going disappear without proper management and raising public awareness.

Question:

21. Do you have a national system to define specific breeds (e.g. locally adapted, rare, etc.: please, provide the definitions that are used in your country)

Country	Do you have a national system to define specific breeds?
Albania	They don`t have any specific definition
Austria	n.a.
Azerbaijan	n.a.
Bosnia and Herzegovina	NO
Bulgaria	As per Animal Breeding Law, 2010 "**Native breeds**", also called "**autochthonous**", are breeds, originating from, adapted to, and used in concret geogrfic region of the country. "**Locally adapted breeds**" are breeds, created in accordance with concrete breeding schemes, which have been in the country for sufficiently long time (more than 5 generations) to get adapted to one or more of the traditional production systems or geographic regions. "**Newly created breeds**" are breeds, created in accordace with concrete breeding schemes and recognized by the competent country authorities. The predominant number of the animals that forms the breed are in the limits of last 5 generations. "**Transboundary breeds**" are native breeds existing in two or more nabouring countries in concrete region (on a continent). "**Introduced breeds**" are breeds imported in the country for breeding purposes. "**Synthetic breeds**" are populations from a concrete livestock species, obtained as a result of crossbreeding of existing breeds in accordance with a recognized breeding scheme aiming incorporation of specific traits of different breeds.
Croatia	In Croatia exists three level of AnGR: • native/autochtonous breeds, • protected breeds, • allochtonous breeds. Definition the status of endangerment was described in country report of this book.
Cyprus	No regional definitions are apllied, FAO recommendations are followed
Czech Republic	no fixed definitions
Denmark	They included autocthonous breeds of Danish origin
Estonia	The only definition used is for endangered breed (FAO criteria).
Finland	FAO and EU criteria
France	Article D. 653-9 of the Rural Code: Definitions of the terms used in this chapter (i.e. chapter III) : - **Animal genetic resource**: any animal, any animal population or material of animal origin containing functional units of heredity of actual or potential value; - **Selected animal population**: a population of animals that are differentiated from closest populations by a set of identifiable and hereditary characteristics that are the consequence of a specific and reasoned management policy of matings; - Breed: a set of animals that has enough in common to be considered by one or more homogeneous groups of farmers who agree on the organization of breeding renewal and induced trade, including international level;

	- **Local breed**: a breed predominantly linked by its origin, place and type of farming to a given territory *; - **Small population size breed:** a breed with less than a number of females of breeding females to be defined according to the species; - **Hybrid genetic type**: a set of hybrid or crossbred breeding animals produced by a planned crossbreeding either between pure-bred or of different selected animal populations breeding animals, or between breeding animals which are themselves the outcome of a cross between breeds or different selected animal populations, or between pure-bred breeding animals and breeding animals belonging to one or the other of the above categories.
Germany	According to the new Animal Breeding Act a breed is defined as „**indigenous**“ if the original herd-book was established in Germany and has been maintained ever since. A breed can be acknowledged as „indigenous“ by the responsible authorities, if the herd-book was not established in Germany but the only herd book for the breed is maintained in Germany and a breeding programme is carried out or a herd-book has been maintained since 1949 in Germany and a separate breeding programme is carried out.
Greece	n.a.
Hungary	Autochthonous breed according to the Animal Breeding Act: Those breeds which were developed in the natural geographical environment of Hungary, and those of which keeping and breeding have historical tradition.
Iceland	Yes! 1. Population of a few thousand individuals is considered rare, namely Old Icelandic Poultry, low risk 2. Population of 1000 – 2000 individuals is considered rare, namely Icelandic Leadersheep, high risk 3. Population of less than 1000 individuals considered, namely the Icelandic Goat, very high risk, high level of inbreeding
Ireland	Animals entered in the herdbooks, flockbooks or studbooks of the following breeds are eligible for funding, if their owner is participating in the Rural Environmental Protection Scheme or the Agri- Environmental Options Scheme: Kerry Bog Pony, Connemara Pony, Kerry, Dexter and Irish Moiled Cattle, Irish Draught Horse and Galway Sheep.
Italy	The FAO definitions are used
Latvia	All native breeds are defined as GR breeds.
Lithuania	• **Local breeds**: indigenous (autochthonous) animal and poultry breeds and breeds which was development at 19th century. • **Foreign breeds**
FYR Macedonia	No, there are no separated definitions for specific breeds.
Montenegro	No
Norway	To be regarded as a breed worthy of conservation, the breed must be classified as native to Norway with an endangered or critical endangered population size. *Criteria for being regarded as a breed native to Norway* 4. The breed shall have been imported to or established in Norway before 1950 5. The breed shall have been bred in Norway without major import of breeding material, unless the import has been in line with breeding goals defined by Norwegian breeding associations. 6. The breed shall have or have had economic and cultural importance.

	Breeds established or imported after 1950 Imported breeds with a breeding program run and defined by Norwegian breeding associations and established after 1950 are not regarded as native breeds worthy of conservation. However, the Norwegian Committee on Animal Genetic Resources appeals to the breeding associations with these breeds, and especially those breeds with documented breeding progress, to establish, where appropriate, long term genebanks with frozen semen. If the breeding program is closed, the Norwegian Committee on Animal Genetic Resources furthermore appeal to the respective breeding associations not to destroy their gene banks.
Poland	No, they don't have such a system.
Portugal	The major classification used is: autochthonous or exotic breed. The autochthonous breeds are then classified according to their risk status.
Serbia	Autochthonous breeds of domestic animals are the breeds that have sprung up the Republic of Serbia
Slovakia	No
Slovenia	**BREED** Is a group of geographically or regionally separated farm animals, originating from the same ancestors, sharing the same characteristics defined in breed standard. According to the adaptation to local environmental conditions the farm animals are classified to local (autochthonous, traditional) and foreign breeds. **LOCALLY ADAPTED BREEDS (LOCAL BREEDS)** Farm animals of these breeds are reared in defined geographic area and are adapted to the climatic and feeding conditions, to the structure and configuration of the land. They are divided into autochthonous and the traditional breeds. **AUTOCHTHONOUS (INDIGENOUS, ORIGINAL, PRIMARY, NATIVE) BREEDS** Farm animals of these breeds are, on the basis of historic sources, proven to originate from the Republic of Slovenia. The territory of the Republic of Slovenia was the prime geographic region for the development of these breeds. There exists the Slovene breeding documentation, where pedigree recording is found for at least five generations. Autochthonous breeds are under breeding and selection control. **TRADITIONAL BREEDS** The animals of these breeds do not originate from the Republic of Slovenia, or the origin has not been proven by the historic sources. The traditional breeds have been continuously bred on the territory of the Republic of Slovenia for more than fifty years (equines, cattle), or for thirty years (other farm animal species). In addition, the existing Slovene breeding documentation proves that the pedigree of a separate traditional breed had been recorded for at least five generations. They are under breeding and selection control. The term Slovene (Slovenian), or some other Slovene geographical term is included in the name of the traditional breed. **FOREIGN BREEDS (ALOCHTHONOUS, EXOTIC):** To foreign breeds belong those farm animals that do not originate from the region of the Republic of Slovenia, or the animals which have not been continuously bred on the territory of Slovenia for more than fifty years (equines, cattle), or for thirty years (other farm animal species).

Spain	The definitions that are used in our country are included in the National programme for the preservation, improvement and development of livestock breeds, as follows: **Breed animal:** all animals belonging to any breed of interest from a livestock breeding and productive point of view which is catalogued, registered or which can be registered in a herd book managed by an officially-recognized association or an official service, in order to be able to participate in an improvement programme. Animals will be considered to be pure-breed where their parents and grandparents are registered in the herd book of the same breed. Encastes, blood-lines, and varieties can be established for each breed. **Native Spanish breeds:** those which have originated in Spain. Those which, in terms of population and organization, are expanding, are classified as breeds in development, while those which are in serious decline or in the process of disappearing are classified as breeds in danger of extinction, in accordance with criteria established at national or international level. Integrated breeds in Spain**:** those which have been fully incorporated into Spanish Livestock farming, with over twenty years in our country, with known genealogy and performance test results and which have a known number of breeding animals which will allow an improvement programme to take place. **European Union breeds:** those breeds recognized by the competent authorities of one or several member states, with animals registered in a herd book, performance testing for the genetic evaluation of the breeding animals and which in Spain have sufficient numbers of purebred animals for an improvement programme to take place. **Breeds from third countries**: those originating in these countries and resident in Spain which, in order to be included in the Catalogue of Breeds of Spain, need to have been adequately assessed for their suitability to the Spanish ecosystem and their productive and economic value, following a period of observation and monitoring, as well as having sufficient numbers of pure-bred animals in our country registered in a herd book for an improvement programme to take place. **Spanish synthetic breeds:** those which have been characterizes and developed in Spain from planned crosses of different breeds, which have a defined functional or productive objective within an improvement programme, in sufficient number for it to be carried out and which do not meet the other requirements for inclusion in the other categories of the official Catalogue of Breeds. **Other registered equidae:** those which do not belong to any of the breeds in the previous categories.
Sweden	No
Switzerland	Swiss breed: Origin in Switzerland or since 1949 a herd-book in Switzerland
The Netherlands	We keep track of all breeds in the country, and categorize them. See previous question(s) for answers.

Turkey	**Line:** A homozygous group of animals established via inbreeding within a breed. **Hybrid:** A group of animals established via crossbreedings between breeds or lines possess specific features but incapable of heritage them to the offsprings. **Breed:** A group of animals which has distinctive features and able to heritage them to the offsprings, and established via breeding implementations and breeding environment within a species. **Type:** A group of animals which is differenciated in terms of certain features within a breed or established via crossbreedings and capable of heritage them to the offsprings. **Species:** A group of animals which has common features and capable of interbreeding and producing fertile offspring. **Newly established breed:** A group of animals established via crossbreedings, resemble to each other in terms of certain features and capable of heritage them to the offsprings. **Native Breed:** A group of animals established via crossbreeding for a long period of time or naturally found in the breeding area. **Local Type:** A group of animals which is differentiated in terms of certain features within a breed with the effect of local conditions and capable of heritage them to the offsprings.
UK	The expert Committee's latest working definitions are available at: http://www.defra.gov.uk/fangr/2011/03/17/national-inventory/
Ukraine	Local – breeds, which are bred at specific area. Endangered animal genetic resources – breeds, which are going disappear without proper management and raising public awareness.

Summary of Chapter 7.

- More or less for every country there is a definition of breed: Autochthonous, native, ecotype, local, locally adapted, imported, Breed according to FAO/EAAP recommendations (.....), just a breed, endangered breed, EU-definitions/criteria, animal genetic resources, selected animal population, small population size breed, hybrid genetic type, imported breed, foreign breed, commercial and widely used breed, recently imported breed, international breed, rare breed, exotic breed, imported improving breeds, local (indigenous, original) breeds, protected breed, allochtone breed, rare population, traditional breed, integrated breed, European Union breed (from Spain), breeds from third countries, synthetic breed, other registered equidae which don't belong to the previous category, newly established breed
- EU zoo-technical legislation there is no definition. You have herdbooks/studbooks but no definition of breed. P.e. Sporthorse for jumping or dressage or Lipizzan. Lipizzan is an autochthon breed in Hungary, Austria and Slovenia
- Breed is a population within a species which is having the same image, performance, but it is a kind of "expert" definition
- Diversity of definitions
- Historical tradition of a breed
- Definition of native breeds largely based on Alderson et al. criteria, e.g. 40 years + 6 generations bred in a country without continuous import from other countries.

FAO definitions for breed:

Either a subspecific group of domestic livestock with definable and identifiable external characteristics that enable it to be separated by visual appraisal from other similarly defined groups within the same species or a group for which geographical and/or cultural separation from phenotypically similar groups has led to acceptance of its separate identity.

Source: FAO (1999).

"A domestic animal population may be regarded as a breed, if the animals fulfil the criteria of (i) being subjected to a common utilization pattern,

(ii) sharing a common habitat/distribution area,

(iii) representing largely a closed gene pool, and

(iv) being regarded as distinct by their breeders"

(Köhler-Rollefson, 1997).

"A breed is a group of domestic animals, termed such by common consent of the breeders, ... a term which arose among breeders of livestock, created one might say, for their own use, and no one is warranted in assigning to this word a scientific definition and in calling the breeders wrong when they deviate from the formulated definition. It is their word and the breeders' common usage is what we must accept as the correct definition" (Lush, 1994).

Resources:

FAO. 1999. *The global strategy for the management of farm animal genetic resources.* Executive Brief. Rome.

Kohler-Rollefson, I. 1997. Indigenous practices of animal genetic resource management and their relevance for the conservation of domestic animal diversity in developing countries. *Journal of Animal Breeding and Genetics,* 114: 231–238.

Lush, J.L. 1994. *The genetics of populations.* Iowa Agriculture and Home Economics Experiment Station. Special Report 94. Ames, Iowa, USA. Iowa State University.

8. ENDANGERMENT LEVEL: CRITERIA and ASSESSMENT

9. THE LEVEL OF SUBSIDIES

10. BUDGET ALLOCATED FOR AnGR CONSERVATION AT THE NATIONAL LEVEL

ALBANIA

22. Do you have the national criteria to evaluate the level of endangerment for livestock breeds species (description and examples)?

To evaluate the level of endangerment the criteria that are use in Albania are the following:

- the estimation of effective number of population
- or the number of breeding femele

The use of the criterias (first or second) depend by the disponibility of the information about the population datas

If the criteria will be "the effective numbers" for estimation of the level of "risk of extinction" use:

Effective population size	Endangerment class
> 1000	no threat
400 -1000	vulnerable
100 - 400	endangered
50 -100, <5 not related males	critical
< 50	uncertain

If the criteria will be "**the number of breeding femele**" estimation of the level of "risk extinction"carried out following:

Level of the risk	Cattle	Equines	Sheep & goat	Pigs	Rabbit	Poulltry
1. Critical	<150	<300	<300	<100	<100	<100
2. Endangered	250	500	500	200	250	250
3. Vulnerable	450	900	900	300	500	500
4. At risk	750	1500	1500	500	1000	1000
5. Not endangered	1500	3000	3000	1000	2500	2500

Livestock species	Description of criteria	Comments
Buffalo	Efective number N_e	The periodic census is possible - consequently we have the exact number of breeding animals – Male and Female.
Goat	Number of breeding	The census is imposible. Through the statistical service it is possible to evaluate the number of breeding females

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment and for which species/breeds?

For all species/breeds - National committee chaired by National Coordinator of FanGR in close collaboration with the Regional commissions that are part of Regional Directorates of Agriculture, Food and Consumer`s Protection.

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Members of Network for Conservation and Use of FAnGR:

- The Sector of Animal Production in Directorate of Production policies & Agricultural Market in Ministry of Agriculture,
- The Sector of Animal Production in Regional levels
- ALBAGENE Association

For monitoring the state and evaluating the trend, the regional commissions uses the data of periodic census for local breeds. The procedures are:

- Periodic census
- Statistical evaluation data-annualy

25. What are the minimal criteria to consider a breed eligible for subsidies?

Species	Breed	Minimal criteria to consider a breed eligible for subsidies
Buffalo		Number of breeding animal
Cattle	Busha	Number of breeding animal and geographic distribution of the population
Sheep	Shkodrane	Number of breeding animal and number of farms
	Lara e Polisit	Number of breeding animal and number of farms
Goats	Manskurise	Number of breeding animal and number of farms
	Lara e Kallmetit	Number of breeding animal and number of farms

26. Please describe the level of subsidies (€) for *in situ* conservation in your country for different species / breeds, both for males and females, if applicable:

Species	Breed	Subsidies in € for male animals		Subsidies in € for female animals		Started in year
		No. of animals	Per animal, €	No. of animals	Per animal, €	
Bufallo	Albanian Buffalo	27	250	197	150	2003
Sheep	Shkodrane	35	20	240	15	2011
	Lara e Polisit	20	20	180	15	2011
Goat	Lara e Kallmetit	28	20	210	15	2011
	Dhija e Manskurise	32	20	200	15	2011
	Dhija e Liqenasit	44	20	290	15	2011

26a. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

YES – see Q26 above

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Public Payments Agency – part of MoAFCP

29. What budget was allocated at the National level for AnGR conservation?

From public budget has been expensed a total of 56.000 €/year 2010, as subsidies. This financial support is implemented for buffalo – 36.000€, local sheep and goat breeds- 20.000€, that are at risk.

In total the public budget for last 5 years – 286.000 €

Species	Total amount of money in € - invested by species in 2010	Total amount of money in € - invested last 5 years
Buffalo	36.000	266.000
Sheep	7.400	7.400
Goats	12.550	12.550

30. What are the trends in the population size of local / autochthonous / endangered breeds?

Species	Breed	Decrease	Increase	Stable – no changes	Was stopped decreasing of the size of population
Buffalo	Albanian		x		
Sheep	Lara e Polisit			x	
	Shkodrane		x		
Goats	Lara e Kallmetit				x
	Dhija e Manskurise				x
	Dhija e Liqenasit				x

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Interest of farmers for the subsidies

32. Which level of subsidies would stop a decrease in population size of endangered breed? (payments per head in € for different species/breeds)

Species	Breed	Yearly payment in € per head
Cattle		300 (m) 200(f)
Sheep		20 (m) 15 (f)
Goats		20 (m) 15 (f)
Pigs		100 (m) 50(f)

m=male; f=female

Ilyric Dwarf Cattle "Presa cattle" Foto: K.Kume

Nativ pig breed Foto: K.Kume

Ecotype "Velipoja goat" Foto: K.Kume

"Ruda" sheep breed Foto; K.Kume

Albanian donkey Foto: K.Kume

Local rabbit Foto: K.Kume

AUSTRIA

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Upper limits per species and breeds are defined by EC-thresholds (breeding females).

Any Austrian breed below these limits is classified as “endangered”. A breed can be classified as “highly endangered” if the breed has less than 1000 breeding females in the herdbook or a $N_e < 50$ (Falconer) and a sustainable conservation program is developed by the breeding organisation in charge (OC) and acknowledged by the Ministry of Agriculture, Forestry, Environment and Water Management.

For example all horse breeds are in the category “endangered” although several breeds fulfil the numeric criteria of “highly endangered”. The argument of the OC was that most of these horses are not kept by farmers any longer and are not eligible for subsidies. In the “endangered” category the breeders still are obliged to keep the breed pure but they have free choice of approved sires for their mares and need not follow a strict mating plan.

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

The Austrian Association for Rare Endangered Breeds (ÖNGENE) is a national platform containing the Universities of Agriculture and Veterinary Medicine, the Federal Countries, the Ministry of Agriculture, Forestry, Environment and Water Management, the Institute of Organic Farming and Biodiversity of Farm Animals, breeding organisations and the biggest Austrian NGO for rare breeds, the Arche Austria. The level of endangerment is estimated according to the national criteria and recommended to the Ministry of Agriculture, Forestry, Environment and Water Management.

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

The conservation programs are developed by the OCs along general guidelines for all mammalian farm animal species and have to be recommended to the Ministry by the ÖNGENE.

The monitoring process has three levels:

1. The OC makes a yearly report to the ÖNGENE of the number of breeding animals (male/female) in the herdbook and, in case highly endangered breeds of important population genetics (level of inbreeding in the population, Δf/generation, N_e, generation equivalent, generation interval).

2. The AMA yearly reports to the ÖNGENE the amount of subsidies paid, the number of subsidized animals and farms.

3. The ÖNGENE evaluates and compiles the reports for the Ministry of Agriculture, Forestry, Environment and Water Management.

25. What are the minimal criteria to consider a breed eligible for subsidies?

Criteria are identical for all species and breeds (Level of endangerment please see table below)

1. The breeder has to have at least 2 ha of agricultural area.

2. The breeder is member of the OC (all species) and recording organisation (only cattle).

3. The breeder joins the conservation program.

4. Only active breeding animals are eligible (females after first birth/males after first mating season with documented offspring)

5. (Highly endangered breeds only) The farmer has to comply with the mating plan.

Species	Breed	Minimal criteria to consider a breed eligible for subsidies - Level of endangerment
Cattle	Original Austrian Brown	highly endangered
Cattle	Original Pinzgau	endangered
Cattle	Tyrolean Grey	endangered
Cattle	Waldviertel Blond	highly endangered
Cattle	Carinthian Blond	highly endangered
Cattle	Tux-Zillertal	highly endangered
Cattle	Pustertal	highly endangered
Cattle	Murboden	highly endangered
Cattle	Ennstaler Bergscheck	highly endangered
Sheep	Carinthian	highly endangered
Sheep	Brown Mountain	highly endangered
Sheep	Tiroler Steinschaf	endangered
Sheep	Krainer Steinschaf	highly endangered
Sheep	Waldschaf	highly endangered
Sheep	Alpines Steinschaf	highly endangered
Sheep	Montafoner Steinschaf	highly endangered
Sheep	Racka	highly endangered
Goat	Chamois Alpine	endangered
Goat	Pinzgau Goat	highly endangered
Goat	Tauernschecken	highly endangered
Goat	Steirische Scheckenziege	highly endangered
Goat	Österreichische Pfauenziege	endangered
Goat	Pinzgauer Strahlenziege	highly endangered
Goat	Blobe Ziege	highly endangered
Horse	Noriker	endangered
Horse	Old Austrian Warmblood	endangered
Horse	Lipitsan	endangered
Horse	Shagya Arab	endangered
Horse	Hucul	endangered
Pig	Mangalica	highly endangered
Pig	Turopolje	highly endangered

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Subsidies for endangered populations

Mare	€	160
Cow	€	140
Ewe, Goat	€	30
Bull, Stallion	€	430
Ram, Buck	€	75

Enhanced subsidies for highly endangered populations

Cow	€	280
Ewe, Goat	€	55
Sow	€	150
Bull	€	530
Ram, Buck	€	120
Boar	€	300

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

n.a.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

The Agrar Marketing Austria (AMA) is responsible for the distribution of subsidies.

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

Depending on the federal counties support for landscaping, buying of approved sires or participation in various marketing programs is given.

Subsidies ÖPUL 2010 (€)	
cattle	3.368.927
sheep	559.946
goat	113.146
horse	423.577
pig	48.382
total	4.513.978

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed (subsidized since)	Decrease*	Increase*	Stable*	Decrease
		%	%		stopped*
Cattle	Original Austrian Brown (1997)		1457,50		yes
Cattle	Original Pinzgau (1997)		41,10		yes
Cattle	Tyrolean Grey (1997)		4,60		yes
Cattle	Waldviertel Blond (1997)		618,20		yes
Cattle	Carinthian Blond (1997)		197,00		yes
Cattle	Tux-Zillertal (1997)		439,40		yes
Cattle	Pustertal (2002)		882,10		yes
Cattle	Murboden (1997)		997,00		yes
Cattle	Ennstaler Bergscheck (2002)		247,70		yes
Sheep	Carinthian (1997)		991,30		yes
Sheep	Brown Mountain (1997)		1203,40		yes
Sheep	Tiroler Steinschaf (1997)		10,20		yes
Sheep	Krainer Steinschaf (1997)		1952,20		yes
Sheep	Waldschaf (1997)		460,00		yes
Sheep	Alpines Steinschaf (2002)		171,20		yes
Sheep	Montafoner Steinschaf (2004)		37,50		yes
Sheep	Racka (1997)		709,10		yes
Goat	Chamois Alpine (1997)		151,40		yes
Goat	Pinzgau (1997)		357,10		yes
Goat	Tauernschecken (1997)		242,70		yes
Goat	Steirische Scheckenziege (2002)		470,40		yes
Goat	Österreichische Pfauenziege (2006)	- 1,3			yes**
Goat	Pinzgauer Strahlenziege (2006)	- 47,5			yes**
Goat	Blobe Ziege (2009)		29,80		yes
Horse	Noriker (1997)	-15,4			no
Horse	Old Austrian Warmblood (1997)	-44,4			no
Horse	Lipitsan (1997)***	-77,2			no
Horse	Shagya Arab (1997)	-57,5			no
Horse	Hucul (2002)	-17,6			no
Pig	Mangalica (2002)		103,00		yes
Pig	Turopolje (2002)		197,30		yes
* decrease or increase of subsidized breeding animals					
** mostly kept as pets by non-farmers					
***owned by farmers outside Piber Stud					

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

n.a.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Subsidies play a major role in the conservation of highly endangered breeds but private engagement is more important as only successful marketing of the breed and its products will guarantee the existence in the future. Also the decrease in numbers in the horse breeds shows clearly the importance of a sustainable breeding program for small populations – without the population is decreasing instead of subsidies.

Species	Breed	Yearly payment in € per head	
		mare	stallion
Horse	Noriker	320	860
Horse	Old Austrian Warmblood	320	860
Horse	Lipitsan	320	860
Horse	Shagya Arab	320	860
Horse	Hucul	320	860

Originalni Pinzgauer

Noriker

Montafoner Steinschaf

Jaritz Blobeziege

AZERBAIJAN

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

No any National criteria for evaluate level for lives.

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

No answer!

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

No answer!

25. What are the minimal criteria to consider a breed eligible for subsidies?

Species	Breed	Minimal criteria to consider a breed eligible for subsidies

No anwser!

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

There are not any subsidies

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

NO

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

n.a.

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

No answer!

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	Decrease	Increase	Stable – no changes	Other
Cattle	Red Gazakh			-	Few number
Sheep	Jaro			-	Few number
Goats					
Horses	Guba and Shirvan			-	Few number
Zebu	"Azerbaijan"			-	Few number
Other breeds are increase.					

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

n.a.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

No answer!

BOSNIA and HERZEGOVINA

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

NO

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

There are no organizations for evaluation the level endangerment breeds, but it should be noted that Faculty for Agriculture and Food Sciences University of Sarajevo on their own initiative attempts determine the degree of endangerment specific breeds.

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

There are no organizations for evaluation the level endangerment breeds, but it should be noted that Faculty for Agriculture and Food Sciences University of Sarajevo on their own initiative attempts determine the degree of endangerment specific breeds.

25. What are the minimal criteria to consider a breed eligible for subsidies?

Species	Breed	Minimal criteria to consider a breed eligible for subsidies

No minimum criteria!

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

There are no subsidies for indigenous breeds in Bosnia and Herzegovina!

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

NO

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

NO

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

0 Euro!

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

There are no exact data for the number of animals of the above mentioned breeds. According to unofficial data from Faculty for Agricultural and Food Sciences in Sarajevo, there was a decline of number of native breeds in Bosnia and Herzegovina.

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Financial support,

Animation of local communities,

Establishment of breeding associations.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Species	Breed	Yearly payment in € per head
Cattle	Busha cattle Gatacko cattle	0
Sheep	Dubian pramenka Kupres pramenka Privor pramenka Herzegowian pramenka	0
Goats	Bosnian spotted goats	0
Horse	Bosnian mountain horse	0
Donkey	Bosnian donkey	0

Since there are no subsidies for all of the above breeds, it is our opinion that the introduction of permanent subsidies, through next period would enable to increase the number of animals by breed.

Bosnian mountain horse

Bosnian busha cattle

Bosnian dubian pramenka

Bosnian gatacko cattle

Bosnian dunkey

BULGARIA

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
For all species	No national criteria	
For all species	In the Animal Breeding Act are accepted the criteria of FAO (2007)	**critical**: a breed is categorized as critical if the total number of breeding females is less than or equal to 100 or the total number of breeding males is less than or equal to five; or the overall population size is less than or equal to 120 and decreasing and the percentage of females being bred to males of the same breed is below 80 percent, and it is not classified as extinct **endangered**: a breed is categorized as endangered if the total number of breeding females is greater than 100 and less than or equal to 1 000 or the total number of breeding males is less than or equal to 20 and greater than five; or the overall population size is greater than 80 and less than 100 and increasing and the percentage of females being bred to males of the same breed is above 80 percent; or the overall population size is greater than 1 000 and less than or equal to 1 200 and decreasing and the percentage of females being bred to males of the same breed is below 80 percent, and it is not assigned to any of above categories.
For all species	The animals are supported in accordance with Regulation No 11 dated 06 April 2009	The breeds are supported if in EU there are: Horses < 5000 Cattle < 7500 Sheep < 10 000

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

MAF, EASRAB – for all species

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

EASRAB – at national level.A national register for all species and breeds is kept. The register is updated at least a year by the breeding organizations. The register is kept by the EASRAB. EASRAB exercises control of the herds for compliing with the register.

25. What are the minimal criteria to consider a breed eligible for subsidies?

Species	Breed	Minimal criteria to consider a breed eligible for subsidies
Cattle	All	1.Zootechnical certificate 2.Herd book registration 3.National database registration
Sheep	All	
Goats	All	
Horses	All	1.Herd passport 2.Herd book registration 3.National database registration

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Subsidies in € for male animals		Subsidies in € for female animals		Started in year
		No. of animals	Per animal, €	No. of animals	Per animal, €	2007
Cattle	Rhodope Shorthorn cattle	34	200 per AU1	698	200 per AU	2007
	Bulgarian Gray Cattle	62	200 per AU	1630	200 per AU	2007
Buffaloes	Bulgarian Murrah	150	200 per AU	4500	200 per AU	2007
Horse	Karakachan Horse	55	200 per AU	622	200 per AU	2007
	East Bulgarian Horse	15	200 per AU	140	200 per AU	2007
	Danubian Horse	33	200 per AU	103	200 per AU	2007
	Pleven Horse	11	200 per AU	34	200 per AU	2007
Sheep	Stara Zagora Sheep	14	165 per AU	680	165 per AU	2007
	Patch-fased Maritza Sheep	47	165 per AU	1665	165 per AU	2007
	White Maritza Sheep	25	165 per AU	773	165 per AU	2007
	Central Rodope Sheep	73	165 per AU	3356	165 per AU	2007
	Duben Sheep	174	165 per AU	5302	165 per AU	2007
	Koprivshtitsa Sheep	29	165 per AU	1039	165 per AU	2007
	Sakar Sheep	45	165 per AU	1450	165 per AU	2007
	Karakachan Sheep	103	165 per AU	3529	165 per AU	2007
	Central Stara Planina Sheep	183	165 per AU	10019	165 per AU	2007
	Teteven Sheep	17	165 per AU	694	165 per AU	2007
	West Stara Planina Sheep	31	165 per AU	1076	165 per AU	2007
	Local Karnobat Sheep	10	165 per AU	255	165 per AU	2007
	Copper-Red Shumen Sheep	142	165 per AU	4138	165 per AU	2007
	Replyanska Sheep	48	165 per AU	1454	165 per AU	2007
	Sofia Sheep	58	165 per AU	1380	165 per AU	2007
	Breznik Sheep	24	165 per AU	812	165 per AU	2007
Goats	Kalofer Long-haired Goat	84	165 per AU	643	165 per AU	2007
Pig	East Balkan Pig	72	122 per AU	930	122 per AU	
Bee	Bulgarian Honey bee			10000	7.50 per royal family	2012

[1] "Animal Unit" is a conditional unit/coefficient for assimilation of the density of animals on an unit of forage area, used for their feding. The number of the different animal species and categories is transformed in AU as follows:

a. A horse over six months, a buffalo, and a cattle a cattle over 2 years are equal to one AU;

b. A cattle or a buffaloe from 6 months to 2 years is equal to 0.6 AU;

c. A cattle or a buffalo up to 6 months is equal to 0.4 AU;

d. A sheep or a goat is equal to 0.15 AU;

e. A breeding pig over 50 kgs is equal to 0.5 AU;

f. A pig of other categories less than 50 kgs is equal to 0.3 AU.

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

The subsidies are provided annually.

There is no sex differentiation.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

State Fund Agricultural Payment Agency

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

Species	Total amount of money in € - invested by species in 2010	Total amount of money in € - invested last 5 years
Honey bees 2010-2013	50.000	

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	Decrease	Increase	Stable – no changes	Other
Cattle	Bulgarian Grey cattle		X		
	Rhodopean short-horn cattle		X		
Buffaloes	Bulgarian Murrah		X		
Sheep	Stara-Zagora sheep	X			
	Patch-faced Maritza		X		
	White Maritza	X			
	Middle Phodopean sheep		X		
	Duben sheep		X		
	Koprivshtitza sheep			X	
	Karakachan sheep		X		
	Middle Stara Planina sheep		X		
	Teteven sheep	X			
	West Stara Planina sheep		X		

	Local Karnobat sheep	X			
	Copper-red Shumen sheep		X		
	Repljanska sheep	X			
	Sofia /Elin- Pelin/ sheep		X		
	Sakar sheep	X			
	Breznik sheep		X		
Goats	Kalofer long-hair goat		X		
Horses	Karakachan horse		X		
	East Bulgarian horse		X		
	Danubian horse			X	
	Pleven horse	X			
Pigs	East Balkan Pig	X			

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Reasons for increase – enhanced economic interest after the implementation of subsidizing. Rediscovering of the native breeds'merits.

Reasons for decrease – not good enough policy for conservation, low sudsidies, bureaucratic obstacles.

For East Balkan pig:

- limitation of habidat and the possibilities for graze breeding
- weak market and low purchase prices

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Species	Breed	Yearly payment in € per head
Cattle	Bulgarian grey cattle	250
	Rhodopean short-horn cattle	350
buffaloes	Bulgarian Murrah	400
Sheep	Stara-Zagora sheep, White Maritza, Teteven Sheep, Local Karnobat sheep, Breznik sheep	90
	Koprivshtitza sheep, West Stara Planina sheep, Sakar, Repljanska sheep, Sofia/Elin-Pelin sheep	500
	• Patch-faced Maritza, Copper-red Shumen sheep, Karakachan sheep	40
	Duben sheep, Middle Phodopean sheep, Middle Stara Planina sheep	30
Goats	Kalofer long-hair goat	50
Horses	Karakachan horse, East Bulgarian horse	300
	Danubian horse, Pleven horse	500
Pigs	East Balkan pig	200

Bulgarian murra buffalo (Photo: prof.dr. Vasil Nikolov)

Karakachan sheep (Photo: prof.dr. Vasil Nikolov)

Karakachan horse (Photo: prof.dr. Vasil Nikolov)

Karakachan horse (Photo: prof.dr. Vasil Nikolov)

Karakachan horse (Photo: prof.dr. Vasil Nikolov)

Karakachan horse (Photo: prof.dr. Vasil Nikolov)

Phodopean short horn cattle (Photo: prof.dr. Vasil Nikolov)

Phodopean short horn cattle (Photo: prof.dr. Vasil Nikolov)

East Balkan Swine (Photo: prof.dr. Vasil Nikolov)

CROATIA

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Yes, in Croatia exist the National criteria.

Defining the status of endangerment of the native and protected breeds of domestic animals in the Republic of Croatia with regards to the effective population size.

Category of risk	Description of criteria	Comments
Ia (critically endangered)	Ne<50	A critically endangered population is to be urgently included into programmes for storing genetic materials into the gene bank (sperm, embryos, eggs and somatic cells). Critically endangered populations are seldom self-sustainable and, if necessary, related populations are to be integrated into the breeding programme as a „carrying component“ of the genetic material. These breeds should be saved for their traditional, cultural and genetic value.
I (highly endangered)	Ne > 50; Ne < 200	Conservation measures are supposed to stabilize a highly endangered population (effective size, growth of the share of kinship breeding, population trends, loss of genetic variability). It is necessary to include it urgently into the programme for storing genetic materials into the gene bank.
II (potentially endangered)	Ne > 200; Ne < 1 000	The endangered population needs to be under constant watch. It is necessary to monitor the indicators of population size, trends in population and the level of genetic variability. It would be desirable to include the population urgently into the programme for storing genetic materials into the gene bank.
III (not endangered)	Ne > 1 000	Population should be controlled and population trends monitored and documented on a regular basis.

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

On the regular annual meetings, National Council for AnGR proposes the categorisation of breeds with regards to the status of endangerment. With regards to the status of endangerment, National Council for AnGR places the breeds into four distinct groups: Ia (critically endangered), I (highly endangered), II (endangered) and III (not endangered). When categorizing the status of endangerment, besides from the effective population size, National Council for AnGR takes other indicators into regard as well: the level of kinship breeding, population trends, geographical population dispersion, reproductive efficiency, risk of epidemiological events, existence of a sustainable utilization programmes and public's interest in the breed.

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Croatian Agricultural Agency; Croatian Centre for Horse Breeding - State Stud Lipik; Breeding organisations

Findings on the status of native and protected breeds in the Republic of Croatia are regularly unified and published in the "Report on the status of native and protected breeds of domestic animals in the Republic of Croatia". Creating

and supplementing the Report is coordinated by National Council for AnGR and National Coordinator, while breeding organizations, Coordination Information Centres, scientific institutions and other interested subjects partake in its formulation. The report is supplemented (revised) every four years and delivered to Ministry of Agriculture, Fisheries and Rural Development and other interested subjects.

25. What are the minimal criteria to consider a breed eligible for subsidies?

Species	Breed	Minimal criteria to consider a breed eligible for subsidies
Cattle		Status of endangerement. (Ne < 1000)
Sheep		Status of endangerement. (Ne < 1000)
Goats		Status of endangerement. (Ne < 1000)
Horses		Status of endangerement. (Ne < 1000)
Pigs		Status of endangerement. (Ne < 1000)
Donkey		Status of endangerement. (Ne < 1000)

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Subsidies in € for male and female animals		Total amount of money in € invested by breeds in 2010	Started in year
		No. of animals	Per animal, €		
Cattle	Buša	411	528,8	217.333	2003
	Istrian cattle	1023	522,2	534.200	1994
	Slavonian Symirian podolac	279	521,9	145.600	1994
Horse	Lipicanac horse	970	266,7	258.667	1994
	Croatian cold-blood horse	4484	266,7	1.195.733	1998
	Croatian Posavac horse	3667	266,7	977.867	1998
	Međimurje horse	29	381,6	11.067	2001
Donkey	Istrian donkey Littoral Dinaric donkey North Adriatic donkey	1311	133,3	174.800	1998
Sheep	Pag island sheep	3342	46,7	155.960	1998
	Krk island sheep	73	46,7	3.407	1998
	Lika sheep	5917	46,7	276.127	1998
	Ruda sheep	530	70,0	37.100	1998
	Rab island sheep	608	46,7	28.373	1998
	Dalmatian pramenka	7915	46,7	369.367	1998
	Istrian sheep	2171	46,7	101.313	1998
	Cres island sheep	712	46,7	33.227	1998
	Tzigai sheep	1363	46,7	63.607	1998
Goats	Croatian white goat	52	46,7	2.427	2005
	Croatian spotted goat	433	46,7	20.207	2005
Pig	Black Slavonian pig	847	93,3	79.053	1995
	Turopolje pig	156	140,0	21.840	1995
Poultry	Hen “Hrvatica”	472	8,0	3.776	2004
	Zagorje turkey	2615	20,0	52.300	1998

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

There subsidies male and females provided each year.

There subsidies ate not different between genders.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Croatian Agricultural Agency

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

Species	Total amount of money in € - invested by species in 2010	Total amount of money in € - invested last 5 years
Cattle	897.133	4.200.000
Sheep	1.068.480	5.100.000
Goats	22.633	110.000
Horses	2.443.333	11.500.000
Pigs	108.893	520.000
Donkey	174.800	820.000

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed			Stable – no changes	Other
		Decrease	Increase		
Cattle	Buša		250 %		
	Istrian cattle		500 %		
	Slavonian Symirian podolac		100 %		
Horse	Lipicanac horse			x	
	Croatian cold-blood horse		400 %		
	Croatian Posavac horse		400 %		
	Međimurje horse		50 %		
Donkey	Istrian donkey Littoral Dinaric donkey North Adriatic donkey		50 %		
Sheep	Pag island sheep			x	
	Krk island sheep			x	
	Lika sheep			x	
	Ruda sheep		250 %		
	Rab island sheep			x	
	Dalmatian pramenka			x	
	Istrian sheep			x	
	Cres island sheep			x	
	Tzigai sheep			x	

Goats	Croatian white goat			**x**	
	Croatian spotted goat			**x**	
Pig	Black Slavonian pig		200 %		
	Turopolje pig			**x**	
Poultry	Hen “Hrvatica”		150 %		
	Zagorje turkey		300 %		

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Financial support - subsidies

Animation of local communities

Development of markets for local products

Establishment of breeding associations

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Difficult to assess - population trend not depends only on subsidies.

Buša (Photo: Ante Ivanković)

Slavonsko srijemski podolac (Photo: Ante Ivanković)

Hrvatski hladnokrvnjak (Photo: Ante Ivanković)

Posavski konj (Photo: Ante Ivanković)

Istarski magarac (Photo: Ante Ivanković)

Primorsko dinarski magarac (Photo: Ante Ivanković)

Istarska ovca (Photo: Ante Ivanković)

CYPRUS

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

No, FAO recommendations are followed

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

Ministry of Agriculture, Natural Resources and Environment

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Ministry of Agriculture, Natural Resources and Environment

Assessing numbers of autochthonous animals and number of farms involved in raising them.

25. What are the minimal criteria to consider a breed eligible for subsidies?

N/A, specific breeds are selected from the Department of Agriculture, according to numerical estimations and recommendations.

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Subsidies in € for male animals		Subsidies in € for female animals		Started in year
		No. of animals	Per animal, €	No. of animals	Per animal, €	
Cattle	Breed 1	30	300	200	300	
Sheep	Breed 1		57.80	550	57.80	

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

No difference!

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Ministry of Agriculture, Natural Resources and Environment

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

Species	Total amount of money in € - invested by species in 2010	Total amount of money in € - invested last 5 years
Cattle		
Sheep		
Total	450.000	N/A

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	Decrease	Increase	Stable – no changes	Other
Cattle			√		
Sheep				√	

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Subsidies allow the breeders to financially be able to maintain breeds of low production, at least for a given period of time. However, for a stable increase in numbers, it is not an adequate measure, with no other action taken.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

n.a.

Cyprus fat-tailed sheep (Photo: Dr. Christos Papachristoforou)

Machaeras goat (Photo: Dr. Christos Papachristoforou)

Cyprus local (native) cow (Photo: Dr. Andreas Mavrogenis)

CZECH REPUBLIC

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Early warning system and inclusion into protection mode

Data of breeds, as provided by breeders associations, are evaluated annually and breeds concerned are included in the various conservation modes, which confers specific measures and also affects the amount of support provided. The value of Critical population size Nek (limit for inclusion in protection mode) is based on the current size of the active population (Na) with regard to other indicators, like the generation interval, the average number of offspring, the length of productive life and the inbreeding coefficient of the concerned breed and is determined by the respective Breed Project.

Setting conservation provisions by actual population size (Na)

Na	Categories of endangerment	Conservation provisions
Na > 2 Nk	not endangered	regular monitoring, occasional collection samples for gene bank
Na Na = 1,2 to 2 Nk	vulnerable	random preservation of genetic material (semen doses, embryos, somatic cells)
Na < 1,2 Nk		***inclusion of breed (population) into protection mode***
Na = 0,8 to 1 Nk	endangered	controlled mating system in situ, systematic cryopreservation of reproductive material ex situ
Na = 0,8 to 0,5 Nk	critically endangered	Use of embryo transfer event. other biotechnology
Na< 0,5 Nk	not sustainable	considering the effectiveness of breed reconstruction

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

Institute of Animal Science , as a designated body (the National coordinating centre for Animal genetic resources) by the ministry

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

VUZV with breeders assocations which gather and submit data (numbers of males/females purebred, number of herds/flocks, pedigree data to evaluate inbreeding coefficiet) on annual base

25. What are the minimal criteria to consider a breed eligible for subsidies?

The keeper must be a registered participant of the National program, i.e. to respect the breed conservation project included type of matting, obligation to produce purebred offspring, to pass performance tests, to provide samples for genebank, to allow collecting semen doses, to report its intention to export breeding animals

included into the conservation project, to provide regularly required data etc.

Due to specific requirements on performance testing and a need of on-farm selection, in pigs and poultry there is a requirement of minimum no. of animals.

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

There are subsidies for endangered breeds only from the National program what represents roughly 0,5 M Euro per year

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

n.a.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

There are national subsidies provided to the participants of the National program for conservation and utilization genetic resources released by the Ministry of Agriculture

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

In Euro: cattle 53.000, goats 77.000, sheep 72.000, pig 57.000, horses 115.000, poultry 8.000, rabbits 15.000, honey bee 13.000, aqaculture fish 154.000 + 60.000 for cryobanks, collection ID, embrya, tissue and DNA samples, genotyping, performance tests etc.

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Development of population parameters of breeds included in the subsidized National program

	starting year	n fem	Ne	breed status	n fem 2013	Ne 2013	breed status
Cattle							
Czech Red cattle	1995	16	10	critical-maintained	175	24	endangered-maintained
Czech Spotted cattle	2011	30	8	critical-maintained			
Horses							
Old Kladruby horse	1995	320	79	endangered-maintained	520	144	endangered-maintained
Bohemio-Moravian Belgian horse	2003	740	106	endangered	1 012	162	not at risk
Silesian Noriker horse	2003	320	88	endangered-maintained	476	103	endangered-maintained
Hutsul horse	1995	580	57	endangered-maintained	145	45	endangered-maintained

Pig							
Black-Spotted Prestice pig	1995	1600	221	not at risk	120	105	endangered-maintained
Goat							
White Shorthaired goat	1995	32 000	4 318	not at risk	14 000	3 564	not at risk
Brown Shorthaired goat	1995	160	55	endangered	1 100	760	not at risk
Sheep							
Sumavska	1995	1 800	45	endangered-maintained	3 800	326	not at risk
Valachian	2004	170	36	endangered-maintained	500	97	endangered-maintained

n fem = number of active females

Ne= effective population size according to the formula Ne=(4MF/(M+F)) (Wright,1931) where M and F are respectively the number of breeding males and females, modified by the model of Santiago and Caballero (1995) which takes in account selection in populations and is implemented in a simplified way as Ne x 0.7.

breed status = according to the FAO rank

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

n.a.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Not a question of subsidies but a question of sustaining animal production in country as a whole, to ensure a kind of certainity and perspective for farmers.

Current payments are considered satisfactory (in EURO, cattle: female calf 140, heifer 220, cow 400, bull 700, goat 28, sheep 24, pigs: sow 160, boar 450, horses: mare 400, stallion 500, hen 12, geese 20, rabbits 7-20 according to the dagree of endangerment, fish: 2700-5000 per broodstock of 120 individuals, honeybee 12-140 per inseminated queen according to her quality)

Czech red rabit (Photo: Jitka Pikousova)

Czech gold-speckled hen (Photo: Jitka Pikousova)

Valachian sheep (Photo: Michal Milerski)

Brown shorthaired goat (Photo: Martina Kosova)

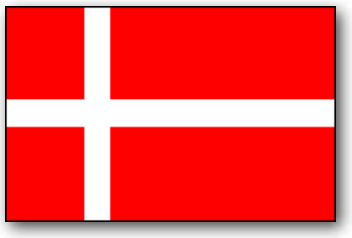
Czech-moravian belgier horse (Photo: Martina Kosova)

Prestice pig (Photo: Anne Dostalova)

Czech red cattle (Photo: Jitka Pikousova)

Prestice pig (Photo: Anne Dostalova)

DENMARK



22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

In Denmark we are following FAOs criteria

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

Committee for the Management of Farm Animal Genetic Resources – which is appointed by the Minister for Food, Agriculture and Fisheries

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Committee for the Management of Farm Animal Genetic Resources – which is appointed by the Minister for Food, Agriculture and Fisheries

25. What are the minimal criteria to consider a breed eligible for subsidies?

Once a year Committee for the Management of Farm Animal Genetic Resources decide on a 'moneyframe' for each species. The exact subsidy for each species is then 'back-calculated' by dividing the frame bt the number of animals (for each species). Male animals get 2 times subsidy.

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

No data!

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

n.a.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

n.a.

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

No data!

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Decrease for the 2 pig breeds. Pigs are less popular. Increase for the rest of the breeds.

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

n.a.

31. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

More focus on the subject. Increase support for the 2 pig breeds. Money could come from horses.

Red Danish Dairy cattle (RDM) (Photo: H. Palmø)

Piebald Danish Dairy cattle (SDM – 1965) (Photo: H. Palmø)

Jutlandic Cattle (Photo: H. Palmø)

Black spotted Danish Landrace (Photo: Kim Conrad Petersen)

Danish Landrace Sheep (Photo: Kim Conrad Petersen)

Danish Marsh Sheep (Photo: Kim Conrad Petersen)

Danish Landrace goat (Photo: Kim Conrad Petersen)

Jutlandic Horse (Photo: Kim Conrad Petersen)

The Frederiksborg Horse (Photo: Kim Conrad Petersen)

The Knabstrup Horse (Photo: H. Palmø)

The Danish Landrace Goose (Photo: Kim Conrad Petersen)

The Danish Duck (Photo: Kim Conrad Petersen)

The Danish Hen (Photo: Kim Conrad Petersen)

Tumlinge – pigeon

Danish Landrace Pig (DL – 1970) (Photo: H. Palmø)

ESTONIA

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
Cattle, horses, sheep, pigs	The number of female or male animals used for breeding	If the number of female or male animals used for breeding is less than one thousand or less than twenty respectively
Birds	The number of female or male birds used for breeding	If the number of female or male birds used for breeding is less than ten thousand or less than one thousand respectively

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

Veterinary and Food Board, all species and breeds

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

The monitoring of the state of AnGR is carried out by Veterinary and Food Board (all species and breeds). Monitoring is based on the data from annual reports presented by the breed organizations to the Veterinary and Food Board for the June 30.

25. What are the minimal criteria to consider a breed eligible for subsidies?

Species	Breed	Minimal criteria to consider a breed eligible for subsidies
Cattle	Estonian Native Cattle	The subsidy for rearing Estonian Native Cattle will be paid if the owner has Estonian Native cattle entered into main part of herd book or eligible for entering there into and on the May 2, at least 6 months old Estonian Native cattle entered in the animals register, whose parents and grandparents have been entered into main part of herd book.
Sheep	-	-
Goats	-	-
Horses	Estonian Native, Estonian Heavy Draught and Tori universal type horse	The subsidy for rearing Estonian Native, Estonian Heavy Draught and Tori universal type horse will be paid if the owner has on the May 2, at least 6 month old purebred and according to the requirements identified Estonian Native or Estonian Heavy Draught horse entered in the main part of stud book or eligible for entering thereinto or Tori universal type horse entered into Tori horse stud book TA-section or eligible for entering thereinto.
Pigs	-	-

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Subsidies in € for male animals		Subsidies in € for female animals		Started in year
		No. of animals	Per animal, €	No. of animals	Per animal, €	
Cattle	Estonian Native Cattle	751* 9	196,21	742	196,21	2005
Horses	Estonian Native	1492* 563	186,62	929	186,62	2002
	Estonian Heavy Draught	199* 71	199,08	128	199,08	2005
	Tori universal type horse	519* 157	186,62	362	186,62	2005

*- Total number of male and female animals, below number of male animals

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

Yes, the subsidies for both male and females provided each year, however the subsidies are not different between genders.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Estonian Agricultural Registers and Information Board (http://www.pria.ee/)

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

There have not been done investments at the national level for AnGR.

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	Decrease	Increase, %	Stable – no changes	Other
Cattle	Estonian Native cattle		24		
Sheep	-				
Goats	-				
Horses	Estonian Native horse		172		
	Estonian Heavy Draught horse		150		
	Tori universal type horse		14		

Pigs	-				
Quail	Estonian Quail		370		

The subsidies paid within Agri-environment programme have promoted rearing the animals of endangered breeds (Estonian Native Cattle, Estonian Native Horse, Estonian Heavy Draught Horse, Tori Horse universal type and Estonian Quail).

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

The reason for increasing the populations of endangered breeds is the payment of subsidies.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Species	Breed	Yearly payment in € per head
Cattle	Estonian Native cattle	250
Sheep	-	
Goats	-	
Horses	Estonian Native horse	187
	Estonian Heavy Draught horse	199
	Tori horse universal type	187
Pigs	-	
….		

At least the same level of support would stop decreasing the number of animals, however, the sum for cattle breeds should be increased to compensate the loss of income compared with commercial breeds (e.g. Holsteins).

Estonian Native Cattle (Photo: K. Kalamees)

Estonian Native Horse (Photo: H. Viinalass)

Estonian Native Horse (Photo: H. Viinalass)

Estonian Native Horse (Photo: H. Viinalass)

Estonian Heavy Draught Horse (Photo: A. Ruus)

Tori horse (The best Tori universal type stallion in 2010 Alder) (Photo: K. Sepp)

Tori horse (The best 3 yr old universal type mare) (Photo: K. Sepp)

The Estonian quail (Photo: A. Tanavots)

FINLAND

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
Cattle, chicken	< 1.000 reproducing females	endangered
Cattle, sheep, horse, goat	< 10.000 reproducing females with the number decreasing	vulnerable

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

MTT Agrifood Research Finland, breeding associations (FABA, Hippos), ProAgria Advisory Centre

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

MTT Agrifood Research Finland jointly with breeding organisations maintaining the animal registers

25. What are the minimal criteria to consider a breed eligible for subsidies?

Threshold levels for the number of individuals

- -Cattle and horse 1
- -Sheep and goat 3
- -Chicken 20

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Subsidies in € for male animals		Subsidies in € for female animals		Started in year
		No. of animals	Per animal, €	No. of animals	Per animal, €	
Cattle	Eastern Finncattle	(>2 y old)	500	800	500	2007
	Northern Finncattle	(>2 y old)	500	600	500	2007
	Western Finncattle	(>2 y old)	250	2500	270	2007
Sheep	Finnsheep			10 000	42	2007

(0.15 live-stock unit (LU)	Åland sheep			1000	42	2007
	Kainuu grey sheep			1500	42	2007
Goat	Finngoat			5000	42	2007
(0.15 LU)						
Horse	Finnhorse			3000	270	2007
Chicken	Landrace chicken			3000	100-250 per flock	2007

There have been subsidies earlier since joining EU but the current levels are followed since 2007.

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

Only in cattle there are subsidies also for males

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Ministry of Agriculture and Forestry

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

In the programme period 2007-2013 the objective is to have subsidies for 5000 livestock units per year (1 M€).

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	Decrease	Increase	Stable – no changes	Was stopped decreasing of the size of population
Cattle	Eastern Finncattle		25 %		
	Northern Finncattle		30 %		
	Western Finncattle			x	
Sheep	Finnsheep			x	
	Åland sheep		20 %		
	Kainuu grey sheep		10 %		
Goats	Finngoat			x	
Horses	Finnhorse	5 %			
Chicken	Landrace chicken			x	

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Awareness about the breeds and related gourmet products and subsidies has caused increases.

Poor performance decreases populations of local breeds.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Species	Breed	Yearly payment in € per head
Cattle	Eastern Finncattle	600 €
	Northern Finncattle	600 €
	Western Finncattle	600 €
Sheep	Finnsheep, Åland sheep, Kainuu gray sheep(/ewe)	150 €
Goats	Finngoat	200 €

Finnhorse

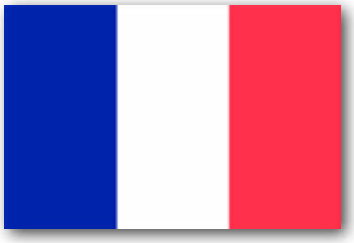
Finnish landrace chicken (hornio)

Eastern Finncattle (Ilotar and Kulturi)

Finngoat

Finnsheep

FRANCE



22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
ruminants, pigs	number of breeding females (<5000 in cattle, <8000 in sheep and goats and <1000 in pigs	evaluation of breed with low population size (regulation : *)
ruminants, pigs, horses, dogs, poultry	genetic criteria	evaluation of genetic diversity within and between breeds
all species	geographic repartition of the breed population	definition of local breed : ** (regulation : *)
all species	genetic criteria	evaluation of endangerment : *** (regulation : *)
…		…

* : Arrêté du 26 juillet 2007 fixant la liste des races des espèces bovine, ovine, caprine et porcine reconnues et précisant les ressources zoogénétiques présentant un intérêt pour la conservation du patrimoine génétique du cheptel et l'aménagement du territoire (ministerial order of 26 July 2007 establishing the list of recognized breeds of cattle, sheep, goats and pigs and specifying animal genetic resources of interest for conservation of genetic heritage and spatial planning).

** : "if sufficient links with a specific territory are demonstrated, in particular if 30 % of population size are located in a single department or 70 % in three neighbouring departments by two"

*** : "if the size of its overall population or all its breeding animals is insufficient, or if conservation program or selection program endangers the within breed genetic diversity, or if a force majeure jorpardizes its zootechnical management"

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

INRA, IDELE, IFIP, IFCE, SYSAAF

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

INRA, IDELE, IFIP, IFCE, SYSAAF based on genetic databases (national databases for ruminants, pigs and horses)

25. What are the minimal criteria to consider a breed eligible for subsidies?

- people or companies running an agricultural activity, or foundations, NGO, educational and research insti-

tuts in the field of agriculture ;

- programme 1.: to be known by approuved breeders organization of the breed ;
- programme 3.: to be a member of the approuved breeders organization of the breed ;
- programme 1.: to keep a minimum of females of a local breed with small population size (pigs : 3 sows, cattle: 3 cows, sheep or goats : 20 females)
- programme 2.: to keep a minimum of 3 non pure-bred females registered as workhorses
- programme 3: to keep at least 1 pure-bred animal (either 1 stallion with at least 1 offspring or 1 mare if older than 6 months)

Species	Breed	Minimal criteria to consider a breed eligible for subsidies
Cattle		3 cows
Sheep		20 ewes
Goats		20 goats
Horses		1 pure-bred stallion or 1 pure-bred mare, or 3 non pure-bred mares

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Subsidies to organizations (breeders organizations keeping books of small population size breeds, programmes of national technical institutes supporting selection and conservation programmes) in 2011: 724 000 €

direct subsidies to farmers according to Commission Regulation (EC) No 1698/2005 and 1974/2006: 1 national programme, 6 regional programmes:

- programme 1. cattle, sheep, goats and pigs of local and small population size breeds (pure-bred animals): 50 €/LSU/year

- programme 2. horses: local and small population size breeds: 107 €/LSU/year

- programme 3. horses: local and small population size breeds (pure-bred animals): 153 €/LSU/year

Number of eligible breeds:

- cattle : 19
- sheep : 27
- goat : 6
- pigs : 6
- donkey : 7
- horse : 14

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

Direct subsidies: depend on number of females in all species except pure bred horses in programme 3 (see question 26) in which there are subsidies for males and females (no difference between genders)

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

National establishment for agricultural and sea produce (FranceAgriMer) and the Agency for Services and Payment

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

Investments are not possible

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

All the population sizes of local breeds increase, but it is difficult to tell weather this trend is due to one measure or another, as well as to the promotion of products of these breeds (in particular products under sign of quality and origin).

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Economic reasons and breeders demographics

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Since population sizes are increasing, this question is not applicable

Rove (Photo: Coralie Danchin / Idele)

Normande (Photo: Cheick Saïdou / Min.Agri.Fr)

Charolais (Photo: Cheick Saïdou / Min.Agri.Fr)

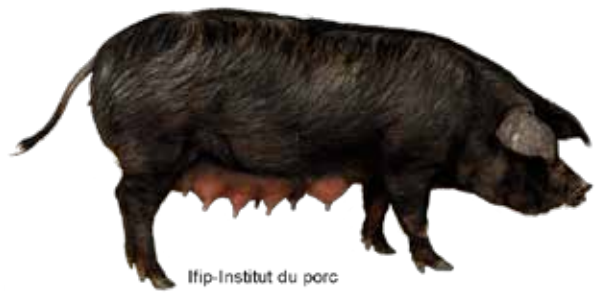
Béarnaise (Photo: Lucie Markey / Idele)

Bordelaise (Photo: Lucie Markey / Idele)

Gasconne (Photo: Cheick Saïdou / Min.Agri.Fr)

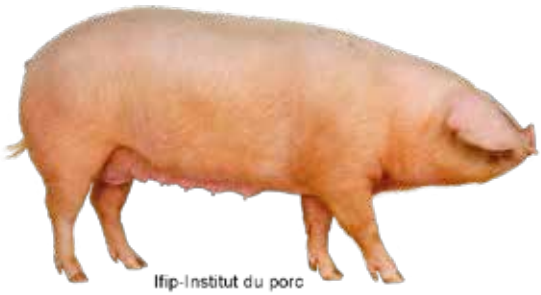
Mirandaise (Photo: Lucie Markey / Idele)

Montbéliarde (Photo: Cheick Saïdou / Min.Agri.Fr)



Porc Gascon (Photo: IFIP – Institut du porc)

Porc Basque (Photo: IFIP – Institut du porc)



Porc blanc de l'Ouest (Photo: IFIP – Institut du porc)

Porc Cul noir limousin (Photo: IFIP – Institut du porc)

Porc de Bayeux (Photo: IFIP – Institut du porc)

Rouge du Roussillon (Photo: Coralie Danchin / Idele)

Salers (Photo: Pascal.Xicluna / Min.Agri.Fr)

Vendéen (Photo: Pascal.Xicluna / Min.Agri.Fr)

GERMANY

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

According to the National Programme the National Committee on Animal Genetic Resources classifies the indigenous farm animal breeds into categories of endangerment. The classification is based on the effective population size (Ne) which is calculated with the herd-book data as documented in TGRDEU according to the following formula:

(4 x males x females) / (males + females)

The National Programme distinguishes the following categories:

Risk Category	Criterion	Description
Phenotypic Conservation Population (PCP)	**Ne ≤ 50**	

Within the conservation population, most breeds with Ne < 50 have only a slight chance of becoming an independent live population again in the long run. Their existing genetic stock should thus be secured by means of cryoconservation. They could then be integrated into larger related populations. Live conservation of such breeds, particularly of their phenotype, can nevertheless be relevant due to their cultural and historical value. This is why some (a total of twelve) populations have been especially identified as PCP in table.

Conservation Population (CP) Ne ≤ 200

Highly endangered population for which immediate conservation measures are needed to stabilise the effective population size and to minimise further genetic loss.

Monitoring Population (MP) 200 < Ne ≤ 1000

Endangered population which should be monitored and for which a semen cryoconservation programme should be initiated as soon as the number of adult male animals falls below 100.

Non-Endangered Population (NE) Ne < 1000

A Non-endangered population in which Ne should be regularly calculated and the trend documented.

However, the National Committee can classify a breed into an endangerment category different to the one recommended by calculation if special conditions or reasons apply.

The “Red List of Germany’s endangered indigenous farm animal breeds” is updated on a regular basis and published in TGRDEU.

examples:

species	breed	endangerment category	year	male	female
sheep	Alpines Steinschaf	phenotypic conservation	2008	14	304
horse	Alt-Württemberger	phenotypic conservation	2008	8	64

cattle	Ansbach-Triesdorfer	phenotypic conservation	2009	3	30
sheep	Bentheimer Sheep	monitoring population	2008	87	2130
goat	Harzer Ziege	conservation population	2008	20	363
sheep	Braunes Bergschaf	monitoring population	2008	59	1470
cattle	Braunvieh	not endangered	2008	1267	144076
cattle	Braunvieh alter Ztrg	conservation population	2009	18	309
sheep	Brillenschaf	conservation population	2008	33	666
pig	Bunte Bentheimer	conservation population	2009	66	248

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

National Committee on Animal Genetic Resources

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

National Committee on Animal Genetic Resources

procedure:

until a regular monitoring procedure is established, the Information and Coordination Centre on Biological Diversity (IBV) of the Federal Office for Agriculture and Food (BLE) gathers stock numbers of herd-book animal annually and thus provides the data basis for the decision of the National Committee

25. What are the minimal criteria to consider a breed eligible for subsidies?

No answer!

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

No data!

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

n.a.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

n.a.

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

No data!

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

No such trend linked with support measures

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

n.a.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Financial support of breeders, specifically financed breeding programmes, a National Genebank

Domestic Balcan goat

Domestic hen

Ovcepolka sheep

Apis mellifera macedonica

Sharplanina dog

GREECE

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

The level of support to farmers and breed associations after application according to the Council Regulation (EC) No 1968/2005 and Commission Regulation (EC) No 1974/2006 on the basis of the loss of income due to the raising of less productive breeds.

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

Ministry of Rural Development and Food

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Ministry of Rural Development and Food

25. What are the minimal criteria to consider a breed eligible for subsidies?

Species	Breed	Minimal criteria to consider a breed eligible for subsidies
Cattle		No of animals <7,500
Sheep		No of animals <10,000
Goats		No of animals <10,000
Horses		No of animals <5,000
Pigs		No of animals <15,000

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Subsidies in € for male animals		Subsidies in € for female animals		Started in year
		No. of animals	Per animal, €	No. of animals	Per animal, €	
Cattle	Katerinis		335			
	Brachykeratiki					
Buffalo	Greek buffalo		335			
Sheep	Katsika, Zakynthos, Florina, Sarakatsaniko, Skopelos, Kymi, Agrinio, Thraki, Pelio Kalarritiko, Karystos, Kefallenias		221			

Goats	Skopelos		194			
Horses	Thessalia, Skyros Messara, Pineias Pindos		350			
Pigs	Local pig		219			

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

No difference between gender!

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

n.a.

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

No specific data have been reported

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Reproductive females per year									
	Agrinio	**Zakynthos**	**Kalarritiko**	**Katsika**	**Kymi**	**Pelio**	**Sarakatsaniko**	**Skopelos**	**Florina**
1996	515	590	5120	1250	855	2470	240	2060	475
2001	515	704	5123	1294	559	2462	239	2059	467
2007	653	845	5960	1880	703	2906	1496	2815	367
2011	798	860	6570	1820	904	2768	1240	3984	252
Increase / decrease % of 1996									
	55	46	28	46	6	12	417	93	-47

The following breeds **increased:**

- Buffalos
- Brachykeratiki cattle
- Sheep breeds increased at a range from 6 to 417 %,

Florina breed **decreased**.

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

The population increased in the following cases:

1. successful promotion of products (i.e. greek buffalo)
2. good productivity in marginal environment (i.e. Kalarritiko sheep)
3. the farmers are proud of their breed (i.e. Katsika and Kalarritiko sheep)
4. farmers with interest

The population decreased in the following cases:

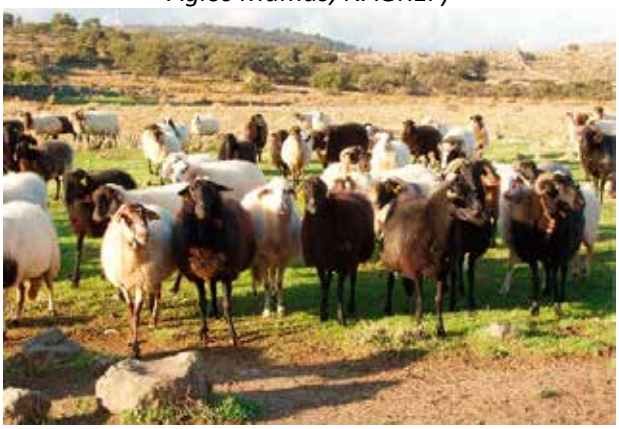
1. not viable economical (even considering the subsidies)
2. not well established breeders' associations

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Species	Breed	Yearly payment in € per head
Cattle		335
Sheep		221
Goats		194
Pigs		219

Chios (Photo: G. Gabriilidis - Research Station of Agios Mamas, NAGREF)

Karagouniko (Photo: G. Mastranestasis)



Lesvos (Mytilini) (Photo: G. Mastranestasis)

Katsika (Photo: D. Pappas - Livestock Genetic Improvement Centre of Ioannina)

Kalarritiko (Photo: D. Pappas - Livestock Genetic Improvement Centre of Ioannina)

Sarakatsaniko (Photo: D. Dervisis)

Skopelos (Photo: G. Pachis - Skopelos Goat Breeders' Association)

Brachyceros (Photo: Andreas Georgoudis)

Katerinis (Photo: Andreas Georgoudis)

Greek Buffalo (Photo: Andreas Georgoudis)

HUNGARY

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
Bovine animals	<200 critical; 200-1500 endangered; 1501-7500 to be preserved	number of female animals
Sheep	<200 critical; 200-1500 endangered; 1501-10000 to be preserved	number of female animals
Goat	<200 critical; 200-1500 endangered; 1501-10000 to be preserved	number of female animals
Equide	<200 critical; 200-1500 endangered; 1501-5000 to be preserved	number of female animals
Swine	<200 critical; 200-1500 endangered; 1501-15000 to be preserved	number of female animals
Poultry	<500 critical; 500-3000 endangered; 3001-25000 to be preserved	number of female animals
Rabbit	<500 critical; 500-3000 endangered; 3001-15000 to be preserved	number of female animals

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

National Food Chain Safety Office as breeding authority

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Ministry of Rural Development; National Food Chain Safety Office as breeding authority.

Procedure: the breeding organizations have to give annual reports to the authority with the number of animals. These data are controlled by the authority. The breeding authority also has to give an annual report to the Minisry of Rural Development.

25. What are the minimal criteria to consider a breed eligible for subsidies?

Species	Breed	Minimal criteria to consider a breed eligible for subsidies
Cattle		The animal has to be registered in book.
Sheep		The animal has to be registered in book.
Goats		The animal has to be registered in book.
Horses		The animal has to be registered in book.
Pigs		The animal has to be registered in book.

See: Decree of minister of rural development on the detailed conditions of the subsidies from the European

Agricultural Fund for Rural Development for the protection of the genetic stock of the protected and endangered indigenous farm animals in breeding (38/2010. (IV. 15.) FVM)

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Subsidies in € for male animals		Subsidies in € for female animals		Started in year
		No. of animals	Per animal, €	No. of animals	Per animal, €	
Cattle	Hungarian grey			5439	284 for nucleus stock; 160 for breed maintaining stock	2011
	Hungarian Simmental			4029	200 for nucleus stock; 115 for breed maintaining stock	2011
Buffalo	Hungarian domesticated buffalo			1000	200 for nucleus stock; 115 for breed maintaining stock	2011
Sheep	Cigája (Tsigai)			2015	45 for nucleus stock; 24 for breed maintaining stock	2011
	Cikta			300	45 for nucleus stock; 24 for breed maintaining stock	2011
	Gyimes racka			1745	45 for nucleus stock; 24 for breed maintaining stock	2011
	Hortobágy racka			4260	45 for nucleus stock; 24 for breed maintaining stock	2011
	Milking cigája (tsigai)			460	45 for nucleus stock; 24 for breed maintaining stock	2011
Goat	Hungarian plain goat			180	45 for nucleus stock; 24 for breed maintaining stock	2011
Horse	Furioso-north star			285	200 for nucleus stock; 115 for breed maintaining stock	2011
	Gidrán			198	200 for nucleus stock; 115 for breed maintaining stock	2011

	Hucul			187	200 for nucleus stock; 115 for breed maintaining stock	2011
	Kisbér half-bred			423	200 for nucleus stock; 115 for breed maintaining stock	2011
	Lipizzaner			469	200 for nucleus stock; 115 for breed maintaining stock	2011
	Hungarian cold blood			340	200 for nucleus stock; 115 for breed maintaining stock	2011
	Nóniusz			381	200 for nucleus stock; 115 for breed maintaining stock	2011
	Shagya Arab			241	200 for nucleus stock; 115 for breed maintaining stock	2011
Donkey	Hungarian plain donkey			232	180 for nucleus stock; 100 for breed maintaining stock	2011
Swine	Blond mangalica			2894	150 for nucleus stock; 78 for breed maintaining stock	2011
	Swallow belly mangalica			678	150 for nucleus stock; 78 for breed maintaining stock	2011
	Red mangalica			1081	150 for nucleus stock; 78 for breed maintaining stock	2011
Hen	White Transylvanian naked neck hen			312	20 for nucleus stock; 8 for breed maintaining stock	2011
	White Hungarian hen			389	20 for nucleus stock; 8 for breed maintaining stock	2011
	Black Transylvanian naked neck hen			379	20 for nucleus stock; 8 for breed maintaining stock	2011
	Partridge colour Hungarian hen			316	20 for nucleus stock; 8 for breed maintaining stock	2011
	Speckled Transylvanian naked neck hen			509	20 for nucleus stock; 8 for breed maintaining stock	2011

	Speckled Hungarian hen			966	20 for nucleus stock; 8 for breed maintaining stock	2011
	Yellow Hungarian hen			1317	20 for nucleus stock; 8 for breed maintaining stock	2011
Guinea fowl	Hungarian plain guinea fowl			1099	20 for nucleus stock; 8 for breed maintaining stock	2011
Duck	White Hungarian duck			158	27 for nucleus stock; 10 for breed maintaining stock	2011
	Mottled Hungarian duck			201	27 for nucleus stock; 10 for breed maintaining stock	2011
Goose	Frizzled feather Hungarian goose			424	40 for nucleus stock; 16 for breed maintaining stock	2011
	Hungarian goose			115	40 for nucleus stock; 16 for breed maintaining stock	2011
Turkey	Bronze turkey			379	35 for nucleus stock; 14 for breed maintaining stock	2011
	Copper turkey			330	35 for nucleus stock; 14 for breed maintaining stock	2011

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

Only for female.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Agricultural and Rural Development Agency

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

No data!

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	No. of female animals 2010	No. of female animals 2012	the size of population change (%)
Cattle	Hungarian grey	5683	7219	+ 27

	Hungarian Simmental	4029	4119	+ 2.2
Buffalo	Hungarian domesticated buffalo	1137	2280	+ 100.5
Sheep	Cigája (Tsigai)	2408	2739	+ 13.7
	Cikta	336	624	+ 85.7
	Gyimes racka	2026	2339	+ 14.5
	Hortobágy fehér racka	3295	3703	+ 12.4
	Hortobágy fekete racka	2564	2875	+ 12.1
	Milking cigája (tsigai)	547	598	+ 9.3
Goat	Hungarian plain goat	240	382	+ 59.1
Horse	Furioso-north star	575	543	- 5.56
	Gidrán	304	298	- 1.97
	Hucul	247	257	+ 4
	Kisbér half-bred	756	766	3 1.3
	Lipizzaner	871	805	- 7.6
	Hungarian cold blood	838	501	- 59.8
	Nóniusz	619	618	- 1.6
	Shagya Arab	449	525	+ 16.9
Donkey	Hungarian plain donkey	241	391	+ 62.2
Swine	Blond mangalica	4219	4443	+ 5.3
	Swallow belly mangalica	735	1171	+ 59.3
	Red mangalica	1237	1877	+ 51.7
Hen	White Transylvanian naked neck hen	311	867	+ 179
	White Hungarian hen	389	839	+ 115.7
	Black Transylvanian naked neck hen	358	870	+ 143
	Partridge colour Hungarian hen	316	2371	+ 650.3
	Speckled Transylvanian naked neck hen	475	934	+ 96.6
	Speckled Hungarian hen	1007	1883	+ 87
	Yellow Hungarian hen	1586	2761	+ 741
Guinea fowl	Hungarian plain guinea fowl	1199	3201	+ 167

Duck	White Hungarian duck	185	550	+ 197.3
	Mottled Hungarian duck	384	645	+ 68
Goose	Frizzled feather Hungarian goose	404	1473	+ 264.6
	Hungarian goose	115	612	+ 432.2
Turkey	Bronze turkey	379	1172	+ 109.2
	Copper turkey	330	868	+ 163

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Decreasing: In case of horses the usage was narrowed.

Increasing: Subsidies, market demand.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Species	Breed	Yearly payment in € per head
Horse	All	More than 200 € for nucleus stock; more than 115 € for breed maintaining stock

Hungarian Grey Cattle (Photo: Dr. Andrea RADÁCSI)

White racka sheep (Photo: MJKSz)

Blond mangalica pig (Photo: MOE)

ICELAND

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
Iceland Goat Breed	Below 1000 (n = 729)	Endangered, at risk
Old Iceland Poultry Breed	Low numbers (n = 3000)	Rare, at risk

These breads are of lower economic value compared to the more numerous “production” breeds.

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

The Farmers Association of Iceland and the Agricultural Resources Committee

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

The Farmers Association of Iceland and the Agricultural Resources Committee

Collection of records in all flocks in the country, both individual identification and recording and an annual census of total numbers.

25. What are the minimal criteria to consider a breed eligible for subsidies?

Species	Breed	Minimal criteria to consider a breed eligible for subsidies
Goats		1 – 20 animals

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Subsidies in € for male animals		Subsidies in € for female animals		Started in year
		No. of animals	Per animal, €	No. of animals	Per animal, €	
Goats		50	40	596	40	1966

Only paid for individual recorded goats.

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

Yes, no difference between genders!

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

The Farmers Association of Iceland

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

Species	Total amount of money in € - invested by species in 2010	Total amount of money in € - invested last 5 years
Goats	Highest priority	Highest priority
Total	33.000 €	122.353 €

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	Decrease	Increase	Stable – no changes	Was stopped decreasing of the size of population
Goats	Icelandic		**450%**		

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

a. Subsidy

b. Public awareness and support

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Not known!

An adult doe of the native Iceland Goat Breed (Photo: Baendabladid).

An adult leaderewe with her 4-month old ewe lamb twins, a unique strain within the native Iceland Breed of Sheep (Photo: Jón Eiríksson).

An adult cock, with hens in the background, of the native Iceland Breed of Poultry

(Photo: Ragnar Sigurjónsson).

IRELAND

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

The FAO scale is used

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

Ministry of Agriculture, Food & the Marine

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Ministry. Monitoring of population numbers and inbreeding coefficients using the EFABIS system and research data from projects funded by the National Advisory Committee.

25. What are the minimal criteria to consider a breed eligible for subsidies?

No info!

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

No data!

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

n.a.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

n.a.

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

No info!

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Populations have increased for all breeds. The subsidies have been beneficial in increasing population numbers. They have also developed interest amongst farmers for keeping the breeds.

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

n.a.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

1. Continue the current system and

2. Focus on the sustainable use, conservation and development of breeds.

ITALY

22. Do you have the national criteria to evaluate the level of endangerment for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
All species	FAO criteria	

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment and for which species/breeds?

Italian National Focus Point for Animal Genetic Resourses and the Ministry of Agriculture Food and Forestry Politics

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Italian National Focus Point for Animal Genetic Resourses, the Ministry of Agriculture Food and Forestry Politics, AIA, National Breeders Associations.

25. What are the minimal criteria to consider a breed eligible for subsidies?

Variables in different regions.

26. Please describe the level of subsidies (€) for *in situ* conservation in your country for different species / breeds, both for males and females, if applicable:

The levels of subsidies are different in different areas of the Country (19 regions and 2 Autonomous Provinces) according to specific regional laws and rural development programmes.

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

The subsidies are provided each year according with the funds availability of different regions and provinces and the differences between genders is also variable.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

The Regional and Provincial Agencies for Payments in Agriculture

29. What budget was allocated at the National level for AnGR conservation?

The levels of investments are different in different areas of the Country (19 regions and 2 Autonomous Provinces) according to specific regional laws and rural development programmes.

30. What are the trends in the population size of local / autochthonous / endangered breeds?

The results are variable according to different breeds

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

The main reasons are the amount and continuity of funding, the valorization of products, the knowledge of populations.

32. Which level of subsidies would stop a decrease in population size of endangered breed?

(payments per head in € for different species/breeds)
The optimum level of subsidies is different according not only to species but also to environment, product valorization, public awareness, etc.

Razza Maremmana

Napoletano horse breed

LATVIA

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
Cattle	Number of AnGR animals reported for state subsidies each year. Number of AnGR animals in database of State agency "Agricultural data centre".	Fluctuation of number of animals is indicator for endangerment level
Sheep		
Horses		
Goats		
Pigs		

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

The Ministry of Agriculture of Latvia

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Agricultural data centre have database for all farm animals, including AnGR animals.

Farm animal breeding organisations are responsible for recognizing AnGR animals (Native breed animals which fulfil requirements of animal breeding programmes). Recognised AnGR animals can receive state subsidies.

25. What are the minimal criteria to consider a breed eligible for subsidies?

Species	Breed	Minimal criteria to consider a breed eligible for subsidies
Cattle	All 6 breeds	Appropriate origin and productivity.
Offspring in given time.		
Sheep		
Goats		
Horses		
Pigs		

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Subsidies in € for male and female animals		Started in year
		No. of animals	Per animal, €	
Cattle	Latvian brown	104	155	2004
	Latvian blue	340	200	2004

Sheep	Latvian dark head sheep	550	75	2004
Horse	Draught type of Latvian horses	285	200	2004
Goat	Latvian native	70	75	2004
Pigs	Latvian white	213	160	2004

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

Subsidies are provided each year and these subsidies are not different between genders.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

The Rural Support service

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

Species	**Total amount of money in € - invested by species in 2010**	**Total amount of money in € - invested last 5 years**
Cattle	~ 84 210 €	~ 1 000 000 €
Sheep	~ 41 250 €	
Goats	~ 5250 €	
Horses	~ 57 000 €	
Pigs	~ 34 080 €	
Total in 2010	~ 221 700 €	

Each year together for all species more than 200 000 €

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	**Breed**	**Decrease**	**Increase**	**Stable – no changes**	**Other**
Cattle	Latvian brown	~ 50% decrease			
	Latvian blue			X	
Sheep	Latvian dark head sheep			X	
Goats	Latvian native			X	
Horses	Draught type of Latvian horses	~ 10% decrease			
Pigs	Latvian white	~ 80% decrease			

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Populations of Latvian brown cow and Latvian white pig decrease because of low productivity of mentioned breeds.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Species	Breed	Yearly payment in € per head
Cattle	Latvian brown	~ 400 €
	Latvian blue	~ 400 €
Sheep	Latvian dark head sheep	~ 150 €
Goats	Latvian native	~ 150 €
Horses	Draught type of Latvian horses	~ 400 €
Pigs	Latvian white	~ 350 €

Latvian dark head sheep

Latvian white pig

Latvian brown cow

Latvian native goat

Draught type of Latvian horse

Latvian blue cow

LITHUANIA

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
For all species	Adopted FAO criteria	

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

Research institution, Ministry of agricultures, Lithuanian center for Farm Animal Genetic Resources Conservation of LSMU GI

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Lithuanian Center for Farm Animal Genetic Resources Conservation of LSMU GI

25. What are the minimal criteria to consider a breed eligible for subsidies?

Species	Breed	Minimal criteria to consider a breed eligible for subsidies
Cattle		1
Sheep		1
Goats		1
Horses		1
Pigs		1
Geese		10 geese flock

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Subsidies in € for male and female animals		Started in year
		No. of animals	Per animal, €	
Cattle	Lithuanian Ash-Grey	345	180	2005
	Lithuanian White-Backed cattle	339	180	2005
	Lithuanian Black-and-White old genotype	645	180	2005
	Lithuanian Red old genotype	9	180	2005
Sheep	Lithuanian coarsewooled	135	28	2005
	Lithuanian black face	2048	28	2005
Pigs	Lithuanian native	46	65	2005

	Lithuanian white old genotype	922	65	2005
Horses	Zemaitukai	226	198	2005
	Large-type Zemaitukai	374	198	2005
	Lithuanian Heavy Draught	765	191	2005
Geese	Vistines geese	0	3	2005-2009, 2011

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

There are no differences between genders

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Rural Development Programme for Lithuanian (2007-2013)

National payments for the implementation of the National Programme for the Preservation of the Native Farm Animal Genetic Resources

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

No info!

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	Decrease	Increase	Stable – no changes	Other
Cattle	Lithuanian Ash-Grey		22%		
	Lithuanian White-Backed cattle		20		
	Lithuanian Black-and-White old genotype		99		
	Lithuanian Red old genotype	+	0	+	
Sheep	Lithuanian coarsewooled		12	+	
	Lithuanian black face		31	+	
Pigs	Lithuanian native			+	
	Lithuanian white old genotype			+	
Horses	Zemaitukai		90	+	
	Large-type Zemaitukai		86	+	
	Lithuanian Heavy Draught		80	+	
Geese	Vistines geese	28.8		+	

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

There are too small subsidies

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Species	Breed	Yearly payment in € per head
Cattle	Lithuanian Ash-Grey;	180€ female- 400€ male
	Lithuanian White-Backed cattle	180€ female - 400€ male
	Lithuanian Black-and-White old genotype	180€ female - 400€ male
	Lithuanian Red old genotype	180€ female - 400€ male
Sheep	Lithuanian coarsewooled	65€ female - 85€ male
	Lithuanian black face	28€ female - 50€ male
Horses	Zemaitukai	200€ female - 400€ male
	Large-type Zemaitukai	200€ female - 400€ male
	Lithuanian Heavy Draught	191€ female - 300€ male
Pigs	Lithuanian native	160€ female - 200€ male
….	Lithuanian white old genotype	160€ female - 200€ male
Geese	Vistines geese	20€

Razza Maremmana

Horses- Zemaitukai breed

Horses- Zemaitukai breed

Sheep - Lithuanian coarsewooled breed

Sheep - Lithuanian coarsewooled breed,

Pigs - Lithuanian native bree

Pigs - Lithuanian native bree

Geese - Lithuanian Vistines geese

Cattle - Lithuanian Ash-grey and Lithuanian White-backed cattle breeds

THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
Cattle	< 150 female animals*	Critical
	< 250	Endangered
	< 450	Vulnerable
	< 750	At risk
	< 1500	Not endangered
Equidae	< 300 female animals*	Critical
	< 500	Endangered
	< 900	Vulnerable
	< 1500	At risk
	< 3000	Not endangered
Sheep and goats	< 300 female animals*	Critical
	< 500	Endangered
	< 900	Vulnerable
	< 1500	At risk
	< 3000	Not endangered
Pigs	< 100 female animals*	Critical
	< 200	Endangered
	< 300	Vulnerable
	< 500	At risk
	< 1000	Not endangered
Poultry	< 100 female animals*	Critical
	< 250	Endangered
	< 500	Vulnerable
	< 1000	At risk
	< 2500	Not endangered

* - female animals which are in herd book recording

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

University Ss. Cyril and Methodius-Skopje

Faculty of agricultural sciences and food

Department of Livestock Production

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

University Ss. Cyril and Methodius-Skopje

Faculty of agricultural sciences and food

Department of Livestock Production

Montinoring is performed in the frame of yearly state programme and activies, but there is inconsistency of state support to perform montioring activies each year.

25. What are the minimal criteria to consider a breed eligible for subsidies?

The criteriaia to recive support from Agri Environmental Measues programme are presented in following table (in the process of acreditation)

Specific eligibility requirements	The beneficiary: • Must be registered in the Farm Registry of MAFWE, • Must register the animals according to the Law for identification and registration of the animals (Off. Gazette 69/2004,81/2007), • Must participate in a breeding programme approved by the National Livestock Council according to Chapter 4, Article 16-22 of the Law of Livestock Breeding (OG RM, N7/02008), • For applying the submeasure he should have at least 5 breeding females of Busha cattle, or 50 breeding females of Karakachanka, Ovchepole or Sharplanina sheep, • To have an valid 5-year contract with the Pasture Management Agency if he use public pastures, • The livestock breeder must participate in the annual and multiannual programme for Animal Health Protection and Public Veterinary Health.
Baseline standards	Relevant mandatory standards (baseline standards) for Agri-environment measures are identified under national rules which address compulsory GAEC standards (relating to soil erosion, soil organic matter, soil structure, minimum level of maintenance, as well as protection and management of water), minimum requirements for use of fertiliser and plant protection products (see Annex 5).
Management requirements	• During the commitment period, a beneficiary eligible for payments under agri-environmental sub-measures shall participate in a training programme lasting at least 4 hours annually, • All the beneficiaries must keep farm records containing information on all the agricultural activities performed on the farm relevant to the commitment, • Not more than 1.9 LU/ha on the whole farm, • To develop AE plan (with plan for pasture), • The livestock breeders should keep and/or increase the heard according to the breeding programme for at least 5 years, • When applying the payment claim, he should have at least 5 breeding females of Busha cattle, or 50 breeding females of Karakachan, Ovchepole or Sharplanina sheep

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Subsidies in € for male animals		Subsidies in € for female animals		Started in year
		No. of animals	Per animal, €	No. of animals	Per animal, €	
Cattle	Breed 1, 2, 3 (it is for all breeds the same)	45 Euros	1-80 heads-100% 81-150-60%, 151-300 heads - 40%, for more than 301 heads - 20%	45 Euros	1-80 heads-100% 81-150-60%, 151-300 heads - 40%, for more than 301 heads - 20%	2011
Sheep	Breed 1, 2, 3 (it is for all breeds the same)	15 Euros per head	For more than 30 heads per farm	15 Euros per head	For more than 30 heads per farm	2011

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

No, subsidies are the same for both genders, but it is counted per animal (for both - males and females separately)

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Ministry of Agriculture, Forestry and Water Management.

IPARD and National Agrienvironmental measurures for native breeds/strains are under of process of acreditation.

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

There is not direct support for specific species and breed, but there are measures for implementation of Program for protection of livestock biodiversity protection. Total amount of support was around 65.000 € in 2011 and 114.000 € in 2013, primarily addressed to the responsible organizations in order to built sustainable system for inventory, characterization, conservation and monitoring of AnGR. That would help in implementation of AEM, which objectives are to to maintain genetic diversity and cultural heritage by supporting the preservation of the endangered breeds.

Indicative payment rates after accreditation of AEM for 2014 forward

Species	Population	E	CE	GD	Equation 1	LU	Financial support by LU (MKD)	Financial support by LU (€)	Financial support per head (MKD)	Financial support per head (€)
1	2	3	4	5	6 Σ=(3*4*5)	7	8 Σ=(6/7)	9	10	11
Cattle	Busha	10,865	1.01	1.0	10,973.65	1.00	10,973.65	178.43	10973.65	178.43

Sheep	Karakacha-nian	1,510	1.20	1.0	1812	0.15	12,080.00	196.42	1812	29.46
	Ovchepolian	1,017	1.01	1.2	1,232.60	0.15	8,217.36	133.62	1232.60	20.04
	Sharplanin-ian	1,017	1.01	1.00	1,027.17	0.15	6,847.80	111.35	1027.17	16.70

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Until now ther is limitimng data regarding population trends in local/autochthonous/ endangered breeds. Curretntly we are developing and implementing activities defined at the national level in the frame of the Programme for protection livestock biodiversity

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Population of local / autochthonous/ endangered breeds decreased because of no national policy for their conservation up to date.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/reeds?)

Not applicative in this moment.

Ovcepolka sheep

Sharplanina sheep

Karakachanka sheep

Domestic hen

Ovcepolka sheep

Sharplanina sheep

Busha cattle

Apis mellifera macedonica

Sharplanina dog

Domestic Balcan goat

Domestic buffalo

MONTENEGRO

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
For all species		Addopted to FAO criteria from 1995 and 2007
	≤ 100 female animals	Critical
	More than 100, less than 1000	Dangered
	More thsn 1000 less than 5000	Vulnerable
	More than 5000 less than 10000	Possible vulnerable
	More than 10000	Stabile

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

Biotechnical Faculty, Department of Livestock Science

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Biotechnical Faculty, Department of Livestock Science

25. What are the minimal criteria to consider a breed eligible for subsidies?

Species	Breed	Minimal criteria to consider a breed eligible for subsidies
Cattle	Busa	Minimum 3 female and one male purebred animal
Sheep		20 breeding female and 1-2 male

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Subsidies in € for male animals		Subsidies in € for female animals		Started in year
		No. of animals	Per animal, €	No. of animals	Per animal, €	
Cattle	Buša	8	70	75	70	2006
Sheep	Zetska žuja	4	15	108	15	2008
	Pivska pramenka	8	8	275	8	2008
	Sora	6	8	240	8	2008
	Ljaba	2	8	78	8	2011

Note: The breeds included into the Program of conservation are eligible also for regular direct payments: those subsidies in 2012 were 70 Euro per animal of cattle and 9 Euro per animal of sheep.

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

The same amount of subsidies is allocated every year for males and females.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Ministry of Agriculture and Rural Development – Department for Rural Development

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

No precise evidence on the level of support.

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	Decrease	Increase	Stable – no changes	Other
Cattle	Busha		15%		But only in herds involved in program of conservation
Sheep	Zetska žuja	10%			
	Pivska pramenka	10%			But only in herdsinvolved in program of conservation
	Sora		10%		But only in herdsinvolved in program of conservation
	Ljaba		5%		

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

The main reason is economic benefits which farmers can get from the some breeds, or competitiveness of high productive breeds. Very low production, for example, in case of Zetska žuja is the main obstacle for increasing of its population, even with higher amount of subsidies (16 Euro per animal) in comparison to the other sheep breeds of 8 Euro.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Species	Breed	Yearly payment in € per head
Cattle		≈ 200 euro
Sheep	Zetska žuja	30
	Other breeds	15
Goats		20
Horses		150

Balkan goat red (Photo: Božidarka Marković)

Domestic Balkan goat (Photo: Božidarka Marković)

Bardoka (Photo: Božidarka Marković)

Pivska pramenka (Photo: Božidarka Marković)

Sjenička (Photo: Božidarka Marković)

Sjenička (Photo: Božidarka Marković)

Buša (Photo: Božidarka Marković)

Sivo tirolsko (Photo: Božidarka Marković)

Domestic mountain horse (Photo: Božidarka Marković)

NORWAY

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Criteria for categorizing breeds as endangered or a critical

In agreement with FAOs "Guidelines on in vivo conservation of animal genetic resources" the livestock species are classified as either species of high or low reproductive capacity. This classification is then being used when categorizing breeds in risk classification.

Reproduction capacity

The high reproductive species of relevance for Norway are:

- Chicken, goose, dog, rabbit and pig.

The low reproductive species of relevance for Norway are:

- Cattle, horse, goat and sheep

Risk classification

- A breed is categorized as endangered if the total number of breeding females is greater than 100 (300 for species with low reproductive capacity) and less than or equal to 1 000 (3 000); or the total number of breeding males is less than or equal to 20 and greater than five (i.e. ΔF is between 1 and 3 percent).

- A breed categorized as critical if the total number of breeding females is less than or equal to 100 (300 for species with low reproductive capacity); or the total number of breeding males is less than or equal to five (i.e. ΔF is 3 percent or greater).

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

Norwegian Genetic Resource Centre in cooperation and on advice from The Committee on Farm Animal Genetic Resources

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Norwegian Genetic Resource Centre in collaberation with national recording systems and breeding associations. The procedure for monitoring is annual breed census.

25. What are the minimal criteria to consider a breed eligible for subsidies?

- Minimum 1 animal

- The animal must be minimum 87,5% purebred

- The farmer has to be intitled to general production subsidies, which recuire an annually turnover of 3700 Euro.

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Only endangered dairy cattle breeds (all six of them) get national subsidies. In 2010, the total numbers of 2300 cows and 235 bulls received this support, appr. 158 Euro per animal per year.

Species	Breed	Subsidies in € for male animals		Subsidies in € for female animals		Started in year
		No. of animals	Per animal, €	No. of animals	Per animal, €	
Cattle		235	158	2300	158	2000
Sheep	All endangered sheep breeds	Only regional subsidies, no data avlailable.				2005

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

No difference between genders.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Norwegian Agricultural Authority and The County Governors (19 in total)

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

No info!

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

The subsidies for endangered and native cattle breeds started in 2000.
Number of animals receiving support in 2000: 1000 (in total for six breeds, only cows).
Number of animals receiving support in 2010: 2235 cows and 235 bulls.
Number of animals divided by breed is not available.

The number of animals receiving support has increased. It is not known if this is due to an increase in actual population size or an increase in farmers applying for this support. I guess it is a combination of both.

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

More interested farmers

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

More support to breeding animals and better general frameworks for small farms with small herds.

Photo: A. Rehnberg (Norsk genresurssenter)

Photo: A. Rehnberg (Norsk genresurssenter)

Photo: A. Rehnberg (Norsk genresurssenter)

POLAND

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

No, we do not have any specific national criteria to evaluate endangerment level of native breeds, we have been using the EU criteria to identify breeds eligible for support within agri-environmental programmes of the EU Rural Development Programmes

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

- The breeders' societies are responsible for herdbooks keeping and performance recording, and through these processes they are able to identify breeds with decreasing population size
- The National Research Institute of Animal Production is monitoring population size of breeds that are included in animal genetic resources conservation programme

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

- The breeders' societies are responsible for monitoring the size of active populations of individual breeds that are under their responsibility (e.g. herdbooks keeping, performance recording, implementation of breeding programmes)
- The Agency for Restructuring and Modernisation of Agriculture (ARMA) (established in 1994) is supporting the agriculture and rural development. ARMA has been designated by the Government of the Republic of Poland to perform the role of an accredited paying agency. It deals with the implementation of instruments co-financed from the European Union budget and provides aid from national funds. Therefore, the Agency is responsible for providing payments for farmers keeping endangered local breeds and through this process is also involved in monitoring population under conservation programmes.

25. What are the minimal criteria to consider a breed eligible for subsidies?

These criteria are applied at farm level. At breed level, as mentioned earlier, we applied EU threshold number for given species (e.g. 5000 femeles for horses, 7500 females for cattle and so on)

Species	Breed	Minimal criteria to consider a breed eligible for subsidies
Cattle		4 cows No breed differences within species
Sheep	Olkuska sheep	5 ewes
	Polish Mountain (C) and Podhale zackiel	15 ewes
	Polish Merino old type	30 ewes
	All remaining breeds	10 ewes
Goats		Not relevant
Horses		2 mares No breed differences within species
Pigs	Puławy pig	10 - 70 sows
	Zlotniki White	8 - 100 sows
	Zlotniki Spotted	8 - 100 sows
Other species		No special criteriaGenerally small population size

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Subsidies in € for female animals		Started in year
		No. of animals	Per animal, €	
Cattle	Polish Red	2091	1 150 PLN	1999
	Whitebacked cattle	265		2004
	Polish red and white	3258		2008
	Polish black and white	2227		2008
		7841		
Horses	Polish Koniks	688	1500 PLN	before 1996
	Hucul	1030		before 1996
	Małopolski	609		2004
	Silesian	598		2004
	Wielkopolski	159		2008
	Sokolski	465		2008
	Sztumski	579		2008
		4162		
Sheep	Polish Heath Sheep	6376	320 PLN	before 1996
	Świniarka	613		before 1996
	Olkuska sheep	648		before 1996
	Polish Mountain (C)	562		1999
	Polish Merino (C)	191		1999
	Uhruska	4441		1999
	Wielkopolska	4208		1999
	Żelaźnieńska	453		1999
	Koridеil	716		1999
	Kamieniecka	1671		1999
	Pomorska	4693		1999
	Podhale zackiel	3541		2008
	Polish Merino old type	4332		2008
		32445		
Pigs	Puławy	837	570 PLN	before 1996
	Zlotniki white	398		before 1996
	Zlotniki spotted	800		before 1996
		2035		

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

- Males are not getting any subsidies, only females are entitled to get subsidies
- There is no difference between breeds within each species as regards the level of payment
- The subsidies, described above, are paid each year

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

The Agency for Restructuring and Modernisation of Agriculture (ARMA), as mentioned above

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

Species	Total amount of money in PLN - invested by species in 2010	Total amount of money in € - invested last 5 years	Total amount of money in PLN projected for period 2007-2013
Included in agri-environmental measures in Rural Development Programme			
Cattle	9 017 150		55 036 500
Sheep	10 382 400		89 759 800
Goats	No breeds included yet		
Horses	6 243 000		81 825 000
Pigs	1 159 950		16 045 500
TOTAL	26 802 500		242 666 800
Supported from state budget			
Fur animals			
Poultry			
Honey bees			
Fish			

For other species, where conservation flocks are supported from the state aid, it is very difficult to estimate total spending as there is no payment per head. The support is provided as reimbursement of eligible costs only. In general, the support is on relatively low level.

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	2000	2005	2008	2010	Mid 2011	%
Cattle	Polish Red	280	735	1572	2091	2425	
	Whitebacked cattle		75	172	265	3221*	
	Polish red and white			1715	3258	3013	
	Polish black and white			641	2227	2070	
	TOTAL	280	1010	4100	7841	7830	
Horses	Polish Koniks	230	261	534	688	754	
	Hucul	200	506	911	1030	949	
	Małopolski	-	349	774	609	576	
	Silesian	-	209	539	598	608	
	Wielkopolski	-	-	157	159	144	
	Sokolski	-	-	176	476	552	
	Sztumski	-	-	255	602	680	
	TOTAL	430	1325	3355	4162	4263	
Sheep	Polish Heath Sheep	1500	1833	4269	6376	6809	
	Świniarka	180	228	338	613	852	

	Olkuska sheep	95	179	456	648	504	
	Polish Mountain (C)	100	142	236	562	772	
	Polish Merino (C)	110	84	90	191	218	
	Uhruska	250	228	2950	4441	4482	
	Wielkopolska	500	1376	1795	4208	3832	
	Żelaźnieńska	200	122	225	453	320	
	Korideil	70	192	303	716	490	
	Kamieniecka	300	622	932	1671	1907	
	Pomorska	500	2998	5266	4693	6365	
	Podhale zackiel	-	-	2716	3541	4660	
	Polish Merino old type	-	-	2699	4332	3955	
	TOTAL	3805	7812	22275	32445	35166	
Pigs	Puławy	390	540	1089	837	973	
	Zlotniki white	90	241	296	398	611	
	Zlotniki spotted	145	183	594	800	1021	
	TOTAL	625	964	1979	2035	2605	

In case of breed of other species (fur animals, poultry, honey bees and fish) that can obtain a very limited financial support from the state aid, the population size is rather small and stable.

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

In case of breeds belonging to four species included in agri-environmental measures, the financial support has been instrumental in increasing their population size

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

The current level of subsidies for four species included in agri-environmental measures is quite sufficient as it supported increase of population size in majority of breeds

Whitebacked cattle (Photo: Elżbieta Martyniuk)

Polish Red cow (Photo: Elżbieta Martyniuk)

Polish Red cattle (Photo: Elżbieta Martyniuk)

Złotniki spotted (Photo: Elżbieta Martyniuk)

Puławy pig (Photo: Elżbieta Martyniuk)

Puławy pigs (Photo: Elżbieta Martyniuk)

Sokólski mare (Photo: Elżbieta Martyniuk)

Sokólski staillon (Photo: Elżbieta Martyniuk)

Polish konik mare (Photo: Elżbieta Martyniuk)

Pomorska sheep (Photo: Elżbieta Martyniuk)

Polish mountain sheep (Photo: Elżbieta Martyniuk)

Polish Heath sheep (Photo: Elżbieta Martyniuk)

Olkuska ewe lambs (Photo: Elżbieta Martyniuk)

PORTUGAL

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

The criteria defined by the EU have been adopted in national programs, as follows.

Livestock species	Description of criteria	Comments (number of females)
Cattle	Rare Highly Endangered Endangered At risk	500 2,500 6,000 7,500
Sheep and Goats	Rare Highly Endangered Endangered At risk	3,000 5,000 8,000 10,000
Swine	Rare Highly Endangered Endangered At risk	1,000 5,000 12,000 15,000
Horse	Rare Highly Endangered Endangered At risk	500 2,000 4,000 5,000
Poultry	Rare Highly Endangered Endangered At risk	2,000 10,000 20,000 25,000

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

Ministry of Agriculture

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Ministry of Agriculture

Direct counting of number of animals registered in herdbooks

• 25. What are the minimal criteria to consider a breed eligible for subsidies?

No info

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Status	Subsidy/female/year	No. registered females
Cattle	Algarvia	Rare	200	7
	Garvonesa/Chamusca	Rare	200	361
	Jarmelista	Rare	200	96
	Cachena	Highly endangered	170	3,660
	Marinhoa	Highly endangered	170	1,347
	Arouquesa	Endangered	110	4,073
	Maronesa	Endangered	110	5,102
	Mirandesa	Endangered	110	4,957
	Preta	Endangered	110	2,935
	Minhota	At risk	90	5,090
	Barrosã	At risk	90	6,594
	Ramo Grande	Highly endangered	170	1,250
Sheep	Churra Algarvia	Rare	30	2,544
	Churra Badana	Rare	30	4,371
	Churra do Campo	Rare	30	210
	Churra do Minho	Highly endangered	25.5	3,767
	Mondegueira	Highly endangered	25.5	2,758
	Bordaleira Entre Douro e Minho	Endangered	16.5	5,396
	Campaniça	Endangered	16.5	6,451
	Churra Galega Mirandesa	Endangered	16.5	6,468
	Merina da Beira Baixa	Endangered	16.5	6,015
	Saloia	Endangered	16.5	3,867
	Churra Galega Bragança	At risk	13.5	9,683
	Merino Preto	At risk	13.5	9,870
	Merino Branco	At risk	13.5	9,750
Goats	Algarvia	Highly endangered	25.5	3,850
	Serpentina	Highly endangered	25.5	4,463
	Charnequeira	Endangered	16.5	3,851
	Bravia	At risk	13.5	9,600
	Preta de Montesinho	Rare	30	674
Pigs	Malhado de Alcobaça	Rare	100	229
	Bisara	Highly endangered	85	2,521
	Alentejana	Endangered	55	6,525

Equidae	Sorraia	Rare	200	138
	Burro de Miranda	Highly endangered	170	850
	Garrana	Highly endangered	170	1,761
	Lusitana	Endangered	110	2,500
Poultry	Amarela	Rare	2.8	1,926
	Pedrês Portuguesa	Rare	2.8	1,898
	Preta Lusitânica	Rare	2.8	1,767

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

Yes. Subsidies have been paid since 2007 with the values in the question 26.

Both males and females qualify for the subsidy, for herds maintaining animals in purebred mattings.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Yes. A branch of the Ministry of Agriculture called IFAP is responsible for these payments.

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

Species	Total amount of money in € - invested by species in 2010	Total amount of money in € - invested last 5 years
Cattle	4,085,420	
Sheep	1,240,979	
Goats	425,343	
Horses	746,470	
Pigs	596,060	

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	Decrease	Increase	Stable – no changes	Other
Cattle			X		
Sheep				X	
Goats		X			
Horses			X		
Pigs		X			
Pultry				X	

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Increase due to increased value of certified products and subsidies for endangered breeds

Decrease mostly due to rural desertification and abandonment of activity

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

No info!

SERBIA

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

According on the Rules on the list of genetic reserves of domestic animals, the way of preserving genetic reserves of domestic animals, as well as a list of indigenous breeds of domestic animals and endangered indigenous breeds ("Official Gazette RS", No. 38/10), endangered indigenous breeds are those breeds of domestic animals for which the total number of female breeding animals is not greater than:

Species	Description of criteria	Comments
Cattle	7500	
Sheep and goat	10000	
Horse	5000	
Pig	15000	
Poultry	25000	…

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

Ministry of Agriculture, Forestry and Water Management for all autochthonous breeds which are in the register of autochthonous breeds.

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Ministry of Agriculture, Forestry and Water Management and main breeding organizations responsible for breeding programmes, selection and evaluation.

The procedure: Every year, when farmers apply for a subsidies, inspectors of the Ministry of Agriculture, Forestry and Water Management of strength tests of animals in the farms. The requirement for submission of applications is that the zootechnical services carried out annually inspect and register all youth in the Herd-Book.

25. What are the minimal criteria to consider a breed eligible for subsidies?

Species	Breed	Minimal criteria to consider a breed eligible for subsidies
Cattle	Podolian	5
	Busha	5
Buffalo	Domestic Buffalo	3
Horse	Domestic Mountain pony	1
	Nonius	1
Donkey	Balkan Donkey	10
Pig	Mangalitsa	20
	Moravka	5

	Resavka	1
Sheep	Bardoka	20
	Pirotska	20
	Karakachanska	20
	Krivovirska	20
	Lipska	20
	Vlashko vitoroga	20
	Chokanska Tsigai	20
Goat	Balkan Goat	20
Poultry	Svrljig Hen	50
	Sombor Crested	50
	Nacked Neck	50

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	**Breed**	**Subsidies in € for male animals**		**Subsidies in € for female animals**		**Started in year**
		No. of animals	Per animal, €	No. of animals	Per animal, €	
Cattle	Podolian	29	350	150	350	2003
	Busha	38	200	192	200	2003
Buffalo	Domestic Buffalo	8	90	40	90	2005
Horse	Domestic Mountain pony	12	200	56	200	2003
	Nonius	3	200	15	200	2003
Donkey	Balkan Donkey	6	35	62	35	2005
Pig	Mangalitsa	9	40	228	40	2003
	Moravka	/	80	22	80	2003
	Resavka	1	100	13	100	2005
Sheep-Zackel	Bardoka	1	24	29	24	2003
	Pirotska	1	24	39	24	2007
	Karakachanska	4	24	116	24	2006
	Krivovirska	12	24	328	24	2003
	Lipska	10	24	280	24	2003
	Vlashko vitoroga	10	24	320	24	2003
	Chokanska Tsigai	8	24	288	24	2003
Goat	Balkan Goat	4	20	159	20	2003

Poultry	Svrljig Hen	/	2,5	/	2,5	2005
	Sombor Crested	/	2,5	/	2,5	2003
	Nacked Neck	4	2,5	242	2,5	2003

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

Yes, the subsidies are provided each year and there are no differences between the genders.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Ministry of Agriculture, Forestry and Water Management

Paying Agency

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

No data!

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	Decrease	Increase	Stable – no changes	Other
Cattle	Podolian		yes		
	Busha		yes		The animals are not been identified yet 2004
Buffalo	Domestic Buffalo		yes		The animals are not been identified yet 2005
Horse	Domestic Mountain pony		yes		
	Nonius		yes		
Donkey	Balkan Donkey		yes		The animals are not been identified yet 2005
Pig	Mangalitsa		yes		
	Moravka		yes		
	Resavka		yes		
Sheep	Bardoka		yes		
	Pirotska		yes		
	Karakachanska		yes		
	Krivovirska		yes		
	Lipska		yes		
	Vlashko vitoroga		yes		
	Chokanska Tsigai		yes		
Goat	Balkan Goat		yes		
Poultry	Svrljig Hen		yes		

	Sombor Crested		yes		
	Nacked Neck		yes		

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

The main reason that population of all autochthonous breeds are increasing is that farmers received the subsidies.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Species	Breed	Yearly payment in € per head
Cattle	Podolian	250
	Busha	250
Buffalo	Domestic Buffalo	250
Horse	Domestic Mountain pony	250
	Nonius	250
Donkey	Balkan Donkey	150
Pig	Mangalitsa	100
	Moravka	100
	Resavka	100
Sheep	Bardoka	30
	Pirotska	30
	Karakachanska	30
	Krivovirska	30
	Lipska	30
	Vlashko vitoroga	30
	Chokanska Tsigai	30
Goat	Balkan Goat	30
Poultry	Svrljig Hen	5
	Sombor Crested	5
	Nacked Neck	5

Podolian (Photo: Srdjan Stojanović)

Busha (Photo: Srdjan Stojanović)

Balkan Donkey (Photo: Srdjan Stojanović)

Karakachan sheep (Photo: Srdjan Stojanović)

Sombor Crested (Photo: Srdjan Stojanović)

SLOVAKIA

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

No info!

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

MAaRD SR, APRC Nitra

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

APRC Nitra in cooperation with breeding associations and Central livestock eveidence.

25. What are the minimal criteria to consider a breed eligible for subsidies?

No minimum criteria for animals, minimum criteria for the size of land (pastures)

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Subsidies level – 199,50 € per livestock unit (sheep and goat), 200,00 € per livestock unit (cattle, horse, chicken, goose). Subsidies are paid since 2007.

Species	Breed
Cattle	Pinzgau
Sheep	Original Valachian
Goat	White Shorthaired
Horse	Slovak Warmblood, Hutsul, Furioso, Nonius, Slovak Sport Pony, Lipitsa, Shagya Arab, Noric of Murany
Chicken	Oravka, Plymouth Rock, Rhode Island Red, New Hampshire, Vlaska, Sussex
Goose	Slovak White, Suchovy

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

Subsidies paid for cattle unit, same for both genders

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Agricultural Paying Agency

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

No info!

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	Decrease	Increase	Stable – no changes	Other
Cattle	Pinzgau	yes			
Sheep	Orig. Valach.		yes		
Goats	White Short.			yes	
Horses					
Pigs					
Chicken	Oravka	yes			
Goose	Slovak White			yes	

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Not competitive to high productive breeds

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Species	Breed	Yearly payment in € per head
Cattle	Pinzgau	300 €
Sheep	Orig. Valach.	182 €
Goats		
Horses		
Pigs		
Chicken		
Goose		

Slovak Pinzgau cattle (Photo: P. Polak)

Valachian sheep (Photo: N. Michalova)

Oravka chicken (Photo: N. Michalova)

Slovak white goose (Photo: E. Ballay)

SLOVENIA

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria				
	CRITICAL	ENDANGERED	VULNERABLE	AT RISK	NOT ENDANGERED
CATTLE	<150	250	450	750	1500
EQUINES	<300	500	900	1500	3000
GOATS AND SHEEP	<300	500	900	1500	3000
PIGS	<100	200	300	500	1000
RABBITS	<100	250	500	1000	2500
POULTRY	<100	250	500	1000	2500

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

For all the breeds of farm animals the Public service for Farm Animal Genetic Resources Conservation at the Department of Animal Science, Biotechnical Faculty of Ljubljana is responsible to estimate the level of endangerment.

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Public service for Farm Animal Genetic Resources Conservation at the Department of Animal Science, Biotechnical faculty, University of Ljubljana is monitoring the state of the AnGr at the national level in the frame of Register of breed and zootechnical assessment.

25. What are the minimal criteria to consider a breed eligible for subsidies?

No info!

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Slovenia		Breed	Female animals	Male animals
environmental programme	Cattle	Cika cattle	72 EUR	
	Horse	Same for the all breed	72 EUR	
	Pigs		28,8 EUR	
	Sheep		10,80 €	
	Goats		10,80 €	
	Chicken		- chicken: 100,8 €/per 100 of adult animals per year	

Slovenia		Breed	Female animals (mother)	Male animals
de minimis aid	Cattle	Cika cattle	96,00 €	336,00 €
	Pigs	Krškopolje pig	48,96 €	171,36 €
	Sheep	Bela Krajina sheep	18,00 €	63,00 €
		Istrian pramenka sheep	18,00 €	63,00 €
	Goats	Drežnica goat	18,00 €	63,00 €

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

Subsidies (Slovenian environmental programme) are provided for both each year.

Subsidies (de mininis aid) are provided for male and for his mother.

Each male gets subsidy only once in his life.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

For AnGR conservation Slovenia has two different subsidies:
- First is incorporated in Slovenia environmental programme and
- second *are de minimmis aid*.

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

No info!

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	Decrease	Increase	Stable – no changes	Other
Cattle	Cika cattle		yes		
Sheep	Jezersko-solčava sheep	yes			
	Bovec sheep			yes	
	Bela Krajina pramenka			yes	
	Istrian pramenka			yes	
Goats	Drežnica goat			yes	
Horses	Lipizzan horse		yes		
	Slovenia cold blooded horse		yes		
	Posavje horse		yes		
Pigs	Krškopolje pig		yes		
Hen	Styrian Hen			yes	
BEE	Carniolan honey bee (number of bee family)	yes			
Dog	Karst Shepherd	yes			

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

n.a.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Depends on breed. At least 300 – 600 €/LU!

Krškopolje pig – swine with piglets (Photo: Angela Cividini)

Cika cow (Photo: Gregor Gorjanc)

Bovec sheep (Photo: Drago Kompan)

Bela Krajina pramenka (Photo: Vida Rezar)

Drežnica goat (Photo: Klavdija Kancler)

Lipizzan horse – breeding mare (Photo: Klemen Potočnik)

Posavje horse – mare with stallion (Photo: Vida Rezar)

Slovenia cold blooded horse (Photo: Matjaž Mesarič)

Styrian Hen – cock and hen (Photo: Nežika Petrič)

Carniolan honey bee (Photo: J. Gregori)

SPAIN

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
Cattle, sheep, goats, pig, horses and poultry	Census criteria Genetic Criteria: Effective Population Size (Ne) other parameters or factors of modulation (Geographical distribution, Nº of farms Population trend and Gene banking)	We have approved by national coordinating Commsion for breeds a document with the national criterio according the FAO recommendations

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

National Coordinating Committee for the conservation, improvement and promotion of livestock breeds; composed of representatives of the **Department for Agriculture, Food and Environment** and the Autonomous Communities. This committee was established in accordance to the National Programme for the preservation, improvement and development of livestock breeds.

Species: cattle, sheep, goats, pig, horses and poultry.

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

The National Coordinating Committee for the conservation, improvement and promotion of livestock breeds. The monitoring is done from information, especially censual and data of performance, which we receive from the organizations and associations and we load and make public in the national data basis for breeds (ARCA).

25. What are the minimal criteria to consider a breed eligible for subsidies?

- Beneficiaries are officially recognized organizations and associations of breeders for the management of the genalogical herd books and for the conservation, improvement and promotion of pure breeds of production of livestock, who meet certain conditons of Community law. This is a national support that has been approved by the European Commission.
  Eligible activities are: education and training in zootchnics; organization of competitions, auctions, national and international exhibitions, and the costs incurrred through participation in such activities; creation and mantenance of gnealogical herd books; tests aimed at determining the genetic, quality of the livestock, through improvement programmes and for breeds in risk of extinction; packges for investment in testing centres, reproduction centres and farms and practices marking innovation in breeding (only until December 31, 2011). Focused on pure breeds, natives or not. Eligible costs must be justified.

- Beneficiaries are associations or federactions of pure breeds which belong to officially recognized livestock associations or organizations with scope above and beyond an Autonomous Community, for their activities and work. Eligible activities are the same as in the previous case. This is a national support that has been approved by the European Commission. Funds are distributed territorially to Autonomous Communities,

giving special priority to indigenous breeds and to breeds in risk of extinction. Eligible costs must be justified.

- The beneficiaries are the owners of farms who have Spanish native breeding and holdings with land area, with a maximum stocking density of 1.5 LU/ha. The beneficiaries undertake to improve and conserve the environment and the native breed. These are subsidies for the promotion of production systems of native breeds in extensive systems. It is a grant set for a maximum period of five years (2008/2012). This is a national support approved by the European Commission.

- Beneficiaries are the owners of farms with sufficient land area and a maximum stocking density of 1.5 LU/ha, who are committed for five years agri-environmental commitments. It is a specific subsidy for endangered native breeds registered in genealogical studbook. Farmers must belong to an association whose aims are livestock improvement and conservation of native breeds.These subsidies are co-financed by the European Agricultural Fund for Rural Development EAFRD.

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

The Department for Environment and Rural and Marine Affairs has different kinds or subsidies for native Spanish breeds:

- Subsidies for organizations and associations of breeders for the management of the herd books and for the conservation, improvement and promotion of pure breeds of production livestock. These associations are officially recognized by the Ministery. The level of these subsidies in year 2010 was 10.834.347 Euros.

- Line of animal genetic resources conservation to help native breeds in danger of extinction. Through this line, organizations and associations of breeders for the management of the herd books and for the conservation, improvement and promotion of native breeds in danger or extinction. These subsidies are for associations and organizations officially recognized by the autonomous communities. The level of these subsidies in year 2010 was 3.019.684 Euros. Each endangered breed of any species (cattle, sheep, goats, pig, horses and poultry) is 60.000 Euros per breed maximum.

- Subsidies for native breeds reared in extensive systems. The beneficiaries are the owners of farms. These subsidies are to native breeds, endangered or not. The level of these subsidies in year 2010 was 13.077.512 Euros. Maximun is 6.000 Euros per holding and year, increasing this amount by 20% if the owner sells its production within a quality program.

- Furthermore, under the framework of the Programs for Rural Development, agro-environmental grants are available to livestock farmers who raise endangered breeds. They are very heterogeneous activities implemented by the autonomous communities with a line for endangered breeds, so we can not indicate the portion of aid to this line. They are co-financed by the European Agricultural Fund for Rural Development EAFRD. The average grant is € 120.20 / LU.

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

Subsidies are no different between genders.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Department for Agriculture, Food and Environment and the Autonomous Communities.

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

Species	Minimal criteria to get subsidies
Cattle	12.254.709
Sheep	10.962.992
Goat	2.302.344
Horse	2.629.828
Pig	1.342.682
Poultry	399.000

30. Did population of local/autochthonous/ endangrment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

In general, breeds that are subsidized show an increase.

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

The increase may be due mainly to economic aid and the decrease is because the less productivity and price.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

It has not been calculated. In any case it should cover the difference in profitability compared to other more productive breeds.

Blanca Cacereña

Iberico

Latxa

Murciano-grandina

Spanish Horse

Zamorano-Leoné

SWEDEN

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
All species	FAO criteria	Numbers of male and female and population trends
We use the criteria for FAO		

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

The Swedish Board of Agriculture together with relevant stakeholders.

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

The Swedish Board of Agriculture through annual reports from the breeding organizations and associations.

25. What are the minimal criteria to consider a breed eligible for subsidies?

The amount of money you apply for must exceed 1000 SEK for the SBA to be able to pay (administrative costs).

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

The amount of subsidy paid is per animal. A fixed sum of 800 SEK (88.9 Euro) per type of livestock and herd/flock is given plus an amount per individual e.g. 1000 SEK (111,1 Euro) per livestock unit except for the linderödsgris for which a sum of 1500 SEK (166.7 Euro) is paid.

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

Yes, but no differentiating between genders.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

SBA

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

No info!

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Several breeds show a positive trend in numbers!

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Increase - small amount of subsidy
Decrease – no profitability, old age of farmers

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Unknown for the moment.

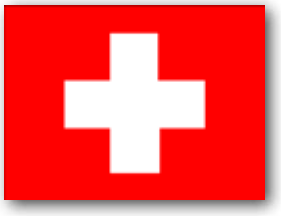
Jämtget – Jämtgoat (Photo: Urban Wigert)

Svensk Röd och vit Boskap (SRB) - Swedish red and white cattle (Photo: Urban Wigert)

Linderödsgris – Linderödspig (Photo: Urban Wigert)

Skånsk blommehöna (Photo: Urban Wigert)

SWITZERLAND



22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
Cattle, horses, pig, sheep, goat, rabbits chicken, all of swiss origin!!	FAO, FEZ and traditions	

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

FOAG and breeding organizations

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

FOAG Effabis, breeding organizations with herd-books, currently a new monitoring project is in the process of evaluation

25. What are the minimal criteria to consider a breed eligible for subsidies?

Program approved by FOAG and expert group

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

It depends on the projects and the total possible amount of yearly contributions is 819'500 Euros for all breeds plus 950'200 Euros for Freiberger Horses

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

Contributions for programs of breeding organizations, independent of gender.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

FOAG

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

No info!

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Fortunately they increased, some by 40%, some by 5%

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Increase: taking care of them

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Not possible to answer this question

Engadiner sheep (sheep over glacier) (Photo: Schweizer Engadinerschaf-Zuchtverein)

Capra Grigia (Photo: ProSpecieRara)

Original Braunvieh(OG-OB) (Photo: Braunvieh Schweiz)

Original Simmental (Photo: Swiss Herdbook)

Freiberger Horse (Photo:Schweizerischer Freibergerverband)

THE NETHERLANDS

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
All species	Level of endangerment	We follow In situ Guidelines FAO
	Native or not	
	Uniqueness of the breed	

We have 113 Dutch rare breeds of 11 species, we have also some Dutch breeds which are not rare (Texelaar, KWPN-riding horse). There are two breeds with a "normal" population size (MRIJ cattle and Frisian horse), which are considered as "rare". Last decades the trend of MRIJ was going down rapidly and the Frisian horse is having a lot of animals but a inbreeding risk.

This digital document provides the more than 100 rare Dutch breeds: http://documents.plant.wur.nl/cgn/downloads/Status%20NL%20landbouwhuisdierrassen_2012def.pdf

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

All breeds: CGN, in collaboration with breed societies

Rare native breeds: CGN in close collaboration with SZH, and with breed societies

This digital document provides the more than 100 rare Dutch breeds: http://documents.plant.wur.nl/cgn/downloads/Status%20NL%20landbouwhuisdierrassen_2012def.pdf

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

CGN, SZH

Collection of information from breed societies, from recognized herd books and from breeding industry. By CGN and in collaboration with Dutch Rare Breeds Foundation (SZH)

25. What are the minimal criteria to consider a breed eligible for subsidies?

No subsidies for keepers of rare animal breeds

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

No direct subsidies for specific breeds. For a short period it is possible to support a system. There was a financial support for flocks of rare heath sheep breeds in this period. Usually there are financially supported by nature or landscape management organisations at provincial level. Levels of support are variable.

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

No subsidies per animal

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

No direct payments from national government to farmers keeping rare breeds. Some rare heath sheep breeds and their organisationsreceive income through nature and landscape management organisations. Indirect support through national programme

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

Not easy to answer this question by species and for all actors. Many actors play at role. Specific government support for CGN programme: around 4 full time equivalent staff, for 1) to develop and maintain gene bank for farm animals, 2) to advice breed societies on breeding strategies and inbreeding, 3) national coordinator, national focal point and policy advice. Specific project funding for Rare Breeds Society SZH, to support breed societies.

In the past (1998) there was money available (330.000 gulden = about 150.000 Euro) for 11 rare breeds of cattle, horse, goat and heath sheep. An adult horse and cow were calculated as 1 unit, the amount of money was about 120 Euro/year. A goat/sheep is 0,15 unit = 20 Euro/year. The conclusions were:

- that there were more applicants for the money than money available, so a lot of farmers were disappointed
- that one cattle breed was taking 60% of the money (one farmer 25% of the total budget)
- that for LASER is was a lot of work to do the administration
- there was discussion over the choice of breeds

Finally: in the Netherlands we concluded this is not a sustainable solution. We prefer other instruments: supporting a system, find unique selling points, gene bank, promotion of rare breeds.

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

General trend is slowly increasing for many breeds, but still major threats to majority of rare, native breeds

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Increase through variety of functions and values=changing role= changing breeds. There has been an increasing awareness in society about the values of local breeds and their product. Multiple initiatives help to conserve the breeds, e.g. adding value through typical products.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Policy of Ministry of Economic Affairs is not to give direct financial support to breeders/farmers, but support them indirectly through CGN and SZH and other initiatives at regional/provincial level.

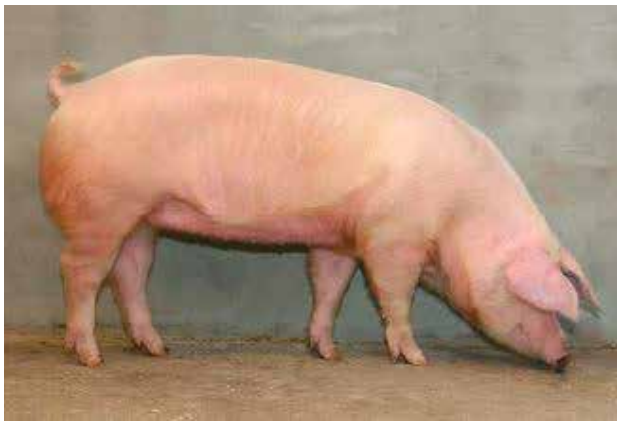
Blaarkop (Photo: CGN, Rita Hoving) and Brandrode rund (Vereniging Het Brandrode Rund, Johan Martens)

Trekpaard and Gelders paard (Photo: CGN, Myrthe Maurice and SZH, Hinke Cnossen)

Melkschaap (Photo: FMS: Henk Oudhoff) and Schoonebeeker (Photo: CGN, Rita Hoving)

Toggenburger (Fokkersgroep Toggenburger, Marielle Schenk)

Krombek eend (CGN)



Bentheimer varken. Vereniging Bonte Bentheimer (Nelleke Meersma) Nederlands landvarken. Topigs.

Nederlandse Kooikerhondje, Margo Kleinjan, VHNK

Gouwenaar (SZH) rabbit

Jämtget – Jämtgoat (Photo: Urban Wigert)

Welsumer kip

TURKEY

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

No!

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

Under the secretariat of General Directorates of Agricultural Research and Policy, National Concultative Committee for AnGR Conservation is responsible for the risk criteria evaluation.

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

Ministry of Food Agriculture and Livestock is responsible of the monitoring of AnGR but the system could not cover detailed information on breed level.

25. What are the minimal criteria to consider a breed eligible for subsidies?

Species	Breed	Minimal criteria to consider a breed eligible for subsidies
Cattle		16 males and 56 females
Sheep		
Goats		

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Subsidies in € for animal			Started in year
		No. of males	No. of females	Per animal, €	
Cattle	Yerli Kara	14	136	160,00	2005
	Kilis	34	93		
	Native Southern Yellow	28	119		
	Eastern Anatolian Red	16	134		
	Anatolian Gray	16	84		
	Zavot	16	70		
Water Buffalo	Anatolian Water Buffalo	20	54	160,00	2005

Sheep	Sakız	7	106	28,40	2005
	Çine Çaparı	7	47		
	Gökçeada	32	168		
	Kıvırcık	16	184		
	Herik	15	178		
	Karagül	32	168		
	Hemşin	16	184		
	Norduz	16	184		
	Dağlıç	16	184		
Goats	Ankara	16	184		
	Honamlı	16	184		
	Kilis	32	162		
Bee	Caucasus	8.000 colony		6,00	2009

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

Yes, the subsidies are both provided for males and females each year. There are no differences between genders.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Ministry of Food Agriculture and Livestock
General Directorates of Agricultural Research and Policy

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

Below table covers subsidies only for in situ conservation

Species	Total amount of money in € - invested by species in 2010	Total amount of money in € - invested last 5 years
Cattle	60.508,00	566.956,00
Sheep	45.724,00	172.804,80
Goats	16.632,00	69.616,80
Horses	-	-
Pigs	-	-
Water Buffalo	55.520,00	55.520,00
Bee*	20.100,00	20.100,00

* : Caucasus bee in situ conservation project has been started in 2010

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	Decrease	Increase	Stable – no changes	Other
Cattle	Boz Irk		√		
	Yerli Kara		√		
	Kilis			√	
	Native Southern Yellow	√			
	Eastern Anatolian Red			√	
	Anatolian Gray		√		
	Zavot			√	
Sheep	Sakız			√	
	Çine Çaparı			√	
	Gökçeada		√		
	Kıvırcık			√	
	Herik	√			
	Karagül	√			
	Hemşin		√		
	Norduz			√	
	Dağlıç			√	
Goats	Ankara		√		
	Honamlı		√		
	Kilis			√	
Water Buffalo	Anatolian Water Buffalo		√		
Bee	Caucasian Bee		√		

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Breeders' and market preferences are the main reasons of population trends. Also adaptation capability of the breeds and cultural importance play a crucial role.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

No info!

Daglic sheep herd

Daglic sheep

East Anatolian Red cattle

Hemsin sheep herd

Honamli Goat

Imbros (Gokceada) sheep herd

Sout Anatolian Red (Kilis) cattle

UNITED KINGDOM

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

The UK's expert committee on FAnGR has recommended the following criteria for the Breeds at Risk Register.

Livestock species	Description of criteria	Comments
Cattle, sheep, goats, equines	3,000 registered breeding females	
Pigs	1,500 registered breeding females	
Poultry	1,000	

In addition, the Committee has recommended that, in line with international guidelines, these figures should be further increased by 20% for any breed where fewer than 80% of the registered purebred females are bred with registered purebred males of the same breed.

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

Ministry/Government Departments, using information provided by others such as Rare Breeds Survival Trust and breed societies and with advice from the FAnGR expert committee.

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

UK Government Departments and others as at Q21 above, but we recognize that our data is very old and we will be updating it this year – we are also exploring the development and establishment of a simple electronic updating facility, so that this information can be collected annually thereafter for most breeds.

25. What are the minimal criteria to consider a breed eligible for subsidies?

UK subsidies in England are paid per hectare for grazing specific habitats with native breeds at risk (principally cattle, sheep, and equines). Please see further details of the different arrangements in Wales, Scotland and Northern Ireland as follow:

- **England:** Up to £70 per hectare per annum in Environmental Stewardship (Higher Level) agri-env. scheme for grazing with native breeds at risk (Cattle, sheep, goats, equines, and pigs);
- **Wales:** 40 points per Livestock Unit (Cattle, sheep, and equine native breeds at risk) in Glastir agri-env. scheme;
- **Scotland:** Part of the Scotland RDP, and only for small units (max. 20 hectares) including upland/peatland habitats: Grazing management of one or more of 8 named native cattle breeds (3 mainstream breeds and 5 native breeds at risk) – Keeping such cattle: £185 per hectare per annum. Introducing such cattle: £273 per hectare per annum.
- **Northern Ireland:** Part of the Countryside Management [agri-env.] Scheme under the heading of "Biodiversity Options". For keeping breeding females of the Irish Moiled breed of cattle: £125 per head per annum.

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Information not currently available but is being sought. Information by species and breed remains potentially difficult to obtain in the UK. Data on males and females is unlikely to be available. UK subsidies in England are paid per hectare for grazing specific habitats with native breeds at risk (principally cattle, sheep, and equines). Please see further details of the different arrangements in Wales, Scotland and Northern Ireland as follow:

England: Up to £70 per hectare per annum in Environmental Stewardship (Higher Level) agri-env. scheme for grazing with native breeds at risk (Cattle, sheep, goats, equines, and pigs);

Wales: 40 points per Livestock Unit (Cattle, sheep, and equine native breeds at risk) in Glastir agri-env. scheme;

Scotland: Part of the Scotland RDP, and only for small units (max. 20 hectares) including upland/peatland habitats: Grazing management of one or more of 8 named native cattle breeds (3 mainstream breeds and 5 native breeds at risk) – Keeping such cattle: £185 per hectare per annum. Introducing such cattle: £273 per hectare per annum.

Northern Ireland: Part of the Countryside Management [agri-env.] Scheme under the heading of "Biodiversity Options". For keeping breeding females of the Irish Moiled breed of cattle: £125 per head per annum.

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

n.a.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Yes, to varying degrees across the UK – depending on the policies of Defra and the Devolved Administrations.

Ministry/Government Departments is responsible for executing payments.

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

N/A - assuming that "Investments" do not include monies paid out under agri-environment schemes (both EU co-financed and approved national state aids).

30. Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	Decrease	Increase	Stable – no changes	Other
Cattle	Hereford British Friesian	 84%	59%		
Sheep	Exmoor Horn Herdwick	63% 87%			
Goats	N/A.				
Horses	Shetland Pony		 51%		
Pigs	N/A.				
Poultry	N/A.				

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

Multiple factors are involved. For example, consumer demand for livestock products from these breeds, changes in 'fashion' amongst keepers of these breeds, availability of financial support through agri-environment schemes, disease risks (especially bovine TB risk in certain areas in England and Wales), costs of keeping these breeds, etc.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Species	Breed	Yearly payment in € per head
Cattle	UK Native Breeds at Risk	Up to €600 per head
Sheep	(ditto)	Up to €100 per head
Goats	(ditto)	Up to €200 per head
Horses/Ponies	(ditto)	Up to €600 per head
Pigs	(ditto)	Up to €400 per head
Poultry	(ditto)	Up to €50 per head

Headage payments per breed need to reflect differences in costs and incomes between keeping native breeds at risk and "normal" commercial livestock, but this type of support is not currently negotiable in the UK.

UKRAINE

22. Do you have the National criteria to evaluate level for livestock breeds species (description and examples)?

Livestock species	Description of criteria	Comments
Cattle (Lebedyn), horse (Hutsul), pigs (Ukrainian Steppe Black-and-White), sheep (Sokil), chicken (Ukrainian Aural), geese (Obroshyn), ducks (Black Whitechest)	Native genofund object, which is going to disappear	I category
Cattle (Ukrainian Black-and-White Dai)	Native improved breeds (or their innerbreed types)	II category
Cattle (Limousin)	Reserve genofund of better foreign improving breeds (or their innerbreed types)	III category

23. Which organisation(s) or body is/are responsible to estimate the level of endangerment evaluation and for which species/breeds?

Institute of Animal Breeding and Genetics

24. Which organisation(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

National Academy of Agrarian Sciences monitor state at the national level and have a net of subordinated institutes to monitor state at the regional level (Institute of Animal Breeding and Genetics as institution-coordinator in the issues of conservation, Institute of animal breeding, Institute of animal breeding of steppe regions and others). Each institute is responsible for certain specios or breed and coordinates work of husbandries, which are located in the region, where this institute is situated.

25. What are the minimal criteria to consider a breed eligible for subsidies?

n.a.

26. Please describe the level of subsidies (€) in year 2010 in your country for specific species and breed, both for males and females, if applicable:

Species	Breed	Subsidies in € for male animals		Subsidies in € for female animals		Started in year
		No. of animals	Per animal, €	No. of animals	Per animal, €	
Cattle	Commercial breeds				186.9	2011
	Local breeds				205.6	
	Endangered breeds				205.6	
Pigs	Large White		43.0		43.0	
	Local breeds		43.0		43.0	
	Endangered breeds		43.0		43.0	
Sheep			37.4		37.4	
Goats			37.4		37.4	
Horses	Breeding ones		373.8		205.6(if keeping in selection centers)/ 93.5 (keeping in breeding plants)	
	Youngsters till 6 months		280.4		280.4	
Ducks	Initial lines				4.7	
	Ancestral herds				3.7	
	Youngsters				1.9	
Hens	Egg-laying and combined breeds				3.7 for initial lines/2.3 for ancestral herds	
	Meat breeds				4.2 for initial lines/2.8 for ancestral herds	
	Youngsters				1.9	
Geese	Initial lines				4.7	
	Ancestral herds				4.2	
	Youngsters				1.9	
Turkey	Initial lines				5.6	
	Ancestral herds				5.1	
	Youngsters				2.8	
Breeding rabbits			2.3		2.3	
Mink			5.6		5.6	
Breeding foxes			16.8		16.8	

Bees	family	12.1	
	nucleus	2.4	
Fish	nest	16.8	

Besides it, Institute of Animal Breeding and Genetics develops needed state subsidies for norm expenses for keeping of animals of different species and gender.

27. Are the subsidies provided both for males and females each year? Are subsidies differ between genders? Is so, indicate the differences!

Yes, these subsidies are given each year, in the case, when owner of the herd gives appropriate documents for the competition for getting of these subsidies.

In some cases subsidies are different between genders, as in case of horses, in some cases are the same, as in case of pigs.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

Ministry of Agrarian Policy and Food of Ukraine

29. Which Investments are possible at the National level for AnGR? (How much money was involved on Country level in year 2010 (by species)?

At the moment we have no exact data!

30 Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below for how many % the size of population change in the period since introduced subsidies for local/autochthonous/ endangerment breeds?)

Species	Breed	Decrease	Increase	Stable – no changes	Other
Cattle	Whiteheaded Ukrainian			The state become to be stable and on some breeds there is increasing trend owing to subsidies	
	Grey Ukrainian				
	Lebedyn				
	Brown Carpathian				
	Native beef breeds				
Sheep	Sokil				
	Ukrainian Mountinous Carpatian				
Goats					
Horses	Hutsul				
Pigs	Ukrainian Steppe White				
	Ukrainian Steppe Black-and-White				
	Myrgorodska				
Poultry					

31. What is the reason that population of local/autochthonous/endangerment breeds increased or decreased in your opinion?

There is a lot of different reasons, including financial.

32. Which level of support or subsidies would stop decreasing the number of animals (population size)? (payment per head in € for different species/breeds?)

Species	Breed	Yearly payment in € per head
Cattle		600 for the cow/1500 for the sire
Sheep		37.5/48.0
Goats		32.5/40.0
Horses		713.1/843.7
Pigs		257.0/543.0

XI. IMPLEMENTATION OF SUBSIDIES AND SUPPORT MEASURES

Questions:

33. Do you have other forms of subsidies related to AnGR – please describe!

34. Beside a direct payment, are these any other measures to support farmers participation in the conservation programme (e.g. financial support for investments/renovations etc)

Country	Other forms of subsidies related to AnGR	Other support measures
Albania	Non	Only in case of projects for in-situ conservation that are financed by different donors, for exp: Small Grande GEF. In these cases the financial support for investment/renovations or for feedstuff is performed
Austria	Depending on the federal counties support for landscaping, buying of approved sires or participation in various marketing programs is given.	n.a.
Azerbaijan	NO	n.a.
Bosnia and Herzegovina	NO	NO
Bulgaria	Main ways (2010): • For endangered breed • National surcharges per animal (cattle, buffaloes, sheep, and goats) • National surcharges per cow with suckling calf (calves) • National surcharges for ewes and mother goats, kept in unfavourable conditions • For supporting cow's milk production in disadvantaged regions • For supporting cow's milk production in nitrogen vulnerable regions • For welfare animals (pigs and poultry)	There are a number of grants but they are not addressed directly to the participation of the farmers in conservation programs as: • Measure 112 – "Establishment of young farmer's husbandry"; • Measure 121 – "Modernisation of agriculture farms"; • Measure 123 – "Value adding to agriculture and forest products"; • Measure 141 – "Support of semimarket husbandry that are in restructuring process"; • Measure 142 – "Establishment of producers' organizations"; • National program for bee keeping till 2013 – for honey bees.
Croatia	For the breed in which Ne <100, the subsidies is increased by 50%.	Breeding organizations for activity receive annual support in amount ~ 2.700 €/year. Develop of programs for traditional products amd technology. Develop of marketing strategy for such products.
Cyprus	NO	
Czech Republic	There are subsidies for endangered breeds only from the National program what represents roughly 0,5 M Euro per year	

Denmark	n.a.	n.a.
Estonia	YES The breeders' and breed organizations can apply animal breeding support of agricultural producers for maintenance of herd book, performance recording and genetic evaluation.	NO
Finland	NO	n.a.
France	NO	subsidies for organizations maintaining books or registers
Germany	n.a.	n.a.
Greece		Despite the programme for the conservation of endangered breeds there is the action for the conservation of genetic resources, where the breeders associations are supported for Herdbook registration, performance recording, parentage testing and promotion activities. The total amount that is planned is: 18,9 million Euros (EU), 6,1 million Euros (national funding) (25 millions total public) plus 3 million (private contribution)
Hungary	n.a.	NO
Iceland	NO	Research projects, artificial insemination support, technical advice
Ireland	n.a.	For Kerry Cattle, €76 per live calf.
Italy	Options are different in different regions and provinces. There are also additional programmes funded by local governments.	There are some support also to some farm investment, to technical extension, to products valosization and to the breeders associations for herd book keeping and for milk and meat recording.
Latvia	In accordance with EU regulations, farm animal breeding organizations receive state subsidies for maintaining the herdbook and for evaluation of genetic quality of animals. Thus, total costs for farm animal breeders' decrease. It concerns all animal breeders, also AnGR breeders.	There are various supports available for farmers from Rural Development programme, but this support is not directed exactly for AnGR.
Lithuania	NO	Investments programs are not associated with conservation programme
FYR Macedonia	Introducing of Agroecological Measures, directed to indegionous sheep and cattle breeds	No specific scheme for rare breeds, farmers can apply for state support measures in the frame of state subsdides paymet activities which are accepting all livestock species in the country.
Montenegro	NO	There is no any specific scheme for rare breeds; however the farmers can participate in investment support schemes (support for construction and reconstruction of the barns, for purchasing of equipment and breeding animals) at equal basis with other farmers, without any constraint if they fulfill required conditions of the calls for investments.

Norway	Some of Norway's 19 counties have established subsidies for endangered local breeds. This is in addition to the national subsidies for endangered native cattle breeds.	The breed societies and breeding associations for endangered breeds can apply for project fundings and operation support.
Poland	NO	Such measures as e.g.: support for young farmers; modernisation of agriculture farms; adding value to agriculture and forest products and support for food product development or establishment of producers' organizations are available for all farmerswithin the Rural Development Programme, but not directly linked to implementation of the conservation programme
Portugal	A smaller subsidy (nearly 20% of the maximum premium) is paid to breeds which do qualify as being at risk, but that have breeding programs approved.	Not under this particular program
Serbia	NO	Yes, but no data. The measures are available within Rural Development Programme
Slovakia	NO	NO
Slovenia	In Rural Development Program	In the 2010 support for the other pure breed male animals of another species and breeds was paid. The proposed de minimis aid in 2009 was paid to most endangered breeds of Istrian sheep, Bela Krajina Sheep, Dreznica goat, Krskopolje pig and Cika cattle. The aid was paid to the breeders once per year.
Spain	Organic livestock subsidies under the framework of the Programs for Rural Development; grants from other levels of different public administration from the state administration.	Some regional subsidies
Sweden	n.a.	NO
Switzerland	NO	NO, not specifically for endangered breeds
The Netherlands	No subsidies per animal of rare breeds Project funding through SZH and CGN programme funding (e.g. gene bank) For nature and landscape management purposes, there is a flow of funding through nature and landscape organisations and/or regional / local authorities	For heath sheep breeds nature and landscape management organisations often provide subsidies to herders for grazing and biodiversity purposes
Turkey	NO	NO

UK	**England:** Up to £70 per hectare per annum in Environmental Stewardship (Higher Level) agri-env. scheme for grazing with native breeds at risk (Cattle, sheep, goats, equines, and pigs); **Wales:** 40 points per Livestock Unit (Cattle, sheep, and equine native breeds at risk) in Glastir agri-env. scheme; **Scotland:** Part of the Scotland RDP, and only for small units (max. 20 hectares) including upland / peatland habitats: Grazing management of one or more of 8 named native cattle breeds (3 mainstream breeds and 5 native breeds at risk) –Keeping such cattle: £185 per hectare per annum. Introducing such cattle: £273 per hectare per annum. **Northern Ireland:** Part of the Countryside Management [agri-env.] Scheme under the heading of "Biodiversity Options". For keeping breeding females of the Irish Moiled breed of cattle: £125 per head per annum.	NO, no other measures are specifically targeted towards FAnGR conservation programmes.
Ukraine	**<u>On cattle of commercial breeds:</u>** subsidized dams should be involved into the scheme of sires proof for the progeny. Productivity of herd should reach for the previous year 130 % and higher breed standard level on milk fat (kg) for the second lactation. Besides it, core herd should be increased for the previous year or the realization of breeding youngsters for the previous year should reach 5 % of available cow number and if there are copies of cattle passports (identification documents). Only if all mentioned above conditions will be satisfied, owner can take part in the competition. **<u>On cattle of local breeds:</u>** Herd should reach for the previous year productivity at the level of the breed standard on milk fat for the second lactation (except two native endangered breeds). Besides it, herd should be increased on the number of cows of core part of herd or the realization of breeding youngsters for the previous year should reach 2 % of available cow number and if there are copies of cattle passports. **<u>On pigs:</u>** under the condition, when the core herd sows at the previous year had not less than 1.8 farrow and 18 piglets. **<u>On horse youngsters:</u>** when horse is taken from breeding horse dam and proven stallion, which are registered in herdbooks.	NO

Question:

35. What are the basic conditions to get subsidies for in situ conservation (for adult animals / young stock)?

36. What are the criteria and conditions for farmers to get subsidies and other forms of support (species and/or breed specific criteria)?

Country	Basic conditions to get subsidies for in situ conservation	The criteria and conditions for farmers to get subsidies and other forms of support (species and/or breed specific criteria)
Albania	Buffalo – young stock (m) and adult animals (m&f) Sheep and goat – adult animals (m&f)	The famers are obliged to implement the in-situ conservation programs
Austria	The following requirements have to be met by the breeders to get subsidies - acknowledged endangered breed - member of breeding organisation in charge - following of the breeding programme for endangered breeds - female: active breeding (that means offspring!) - male: ancestry control and active breeding - highly endangered breeds in addition have to follow the mating recommendations.	n.a.
Azerbaijan	n.a.	n.a.
Bosnia and Herzegovina	There are no special conditions for the realization of subsidies. Observed as well as other breeds of cattle.	No criteria
Bulgaria	Agri-enviromental commitments related to implementation of agri-enviromental activities for preservation and reproduction of the breed. Agri-eviromental engagements are undertaken for a period of minimum 5 years. The animals have to be included in the national database managed by the Bulgarian agency for food safety. Mandatory condition for sudsidising is the animal to be controlled by a breeding organization that will guarantee the breeding appurtenance. The farmers have to receive agri-enviromental training. Keep a register for the conditions and the	They have to be agricultural producers For protection of the breeds – they have to be members of breeding organization also.

	procedure for animal's indetification, the registrtion of the livestock holdings, and the access to the database for identification of the animals and registrated holdings; Present a written breeding organization permition for slaughter or sale of every supported animal; Fulfil the welfare requirements Use permanently grassed areas maintaining animal units' density of 2AU/hectar for all the animal units in the holding.	
Croatia	Basic conditions to get subsidies for local/ autochthonous/ endangerment breeds is adult animals	Farmers must have animals in Herd books. Farmers must be registered as farmers.
Cyprus	Animals are kept and raised legally for at least five years and are managed according to the animal welfare legislation and associated EU directions. The animals must be purebred and breeding should ensure the breeds remain pure. The breeder must have animals of at least 12 months of age at the time of subsidy payment. A contract for five years must be signed between the breeder and the payment agency, stating all the above. The Department of Veterinary Services should be allowed to facilitate oestrous synchronization for cows Cow reproduction shall be achieved either with artificial insemination or natural mating, by using solely sperm from purebred local bulls. All Department of Agriculuture recommendations regarding proper nutrition, housing, reproduction and management of the animals shall be followed, along with record keeping. The breeders shall allow inspections by Officers of the Department of Agriculture and the Veterinaty Services Local sheep breeders must strictly keep Cyprus fat-tailed sheep in separate units than animals of other breeds. Subsidies shall be paid for adult animals on farm at the day of inspection For local sheep, natural mating is preferred but artificial insemination is allowed, in cases when local ram sperm is available.	As described in part Q35

Czech Republic	To follow recommended breeding scheme developed to minimize inbreeding, to produce new generation of purebred descendants, to grant genetic material = semen, embrya, tissue samples for gene-bank	n.a.
Denmark	All animals should be registered in relevant herdbook	n.a.
Estonia	The subsidy for rearing Estonian Native, Estonian Heavy Draught and Tori universal type horse will be paid if the owner has on the May 2, at least 6 month old pure-bred and according to the requirements identified Estonian Native or Estonian Heavy Draught horse entered in the main part of stud book or eligible for entering thereinto or Tori universal type horse entered into Tori horse stud book TA-section or eligible for entering thereinto. The subsidy for rearing Estonian Native Cattle will be paid if the owner has Estonian Native cattle entered into main part of herd book or eligible for entering thereinto and on the May 2, at least 6 months old Estonian Native cattle entered in the animals register, whose parents and grandparents have been entered into main part of herd book.	The subsidy for rearing Estonian Native, Estonian Heavy Draught and Tori universal type horse will be paid if the owner has on the May 2, at least 6 month old pure-bred and according to the requirements identified Estonian Native or Estonian Heavy Draught horse entered in the main part of stud book or eligible for entering thereinto or Tori universal type horse entered into Tori horse stud book TA-section or eligible for entering thereinto. The subsidy for rearing Estonian Native Cattle will be paid if the owner has Estonian Native cattle entered into main part of herd book or eligible for entering thereinto and on the May 2, at least 6 months old Estonian Native cattle entered in the animals register, whose parents and grandparents have been entered into main part of herd book.
Finland	Cattle either > 2 y old (full subsidy) or between 1 and 2 y old (0.6 of the full subsidy Horse, reproducing females, > 2 y old Sheep and cattle, > 1 y old	Farmers should have >3 ha arable land and be of age of between 18 and 65 y. The contract assumes 5 y of keeping reproducing females. The animals have to be registered in the breeding organisation to prove the pure bred status. In sheep, they have to belong also to the performance recording scheme.
France	- people or companies running an agricultural activity, or foundations, NGO, educational and research institutes in the field of agriculture ; - program 1. : to be known by approved breeders organization of the breed ; - program 3. : to be a member of the approved breeders organization of the breed - program 1: to keep a minimum of females of a local breed with small population size (pigs : 3 sows, cattle : 3 cows, sheep or goats : 20 females) - program 2: to keep a minimum of 3 non pure-bred females registered as work-horses	Direct subsidies to farmers according to Commission Regulation (EC) No 1698/2005 and 1974/2006: 1 national programme, 6 regional programmes

	- program 3: to keep at least 1 pure-bred animal (either 1 stallion with at least 1 offspring or 1 mare if older than 6 months)	
Germany	the criteria are as manifold as there are research projects	n.a.
Greece	The animals should be officially counted and included in a register. The density of animal population on the pastures should follow official suggestions.	
Hungary	Animal has to be in a book (register); has to be a female. The animal has to be pure bred. There are some age conditions for getting subsidies as well, which differ at every species.	They have to be registered farmer, have to keep the given animals with specific conditions.
Iceland	Individual identification and recording into the data bank of the Farmers Association of Iceland	Only for individual recorded goats, a maximum payable for 20 in any flocks. 76 flocks in the country.
Ireland	Projects are evaluated by an Evaluation Committee of experts for conformity to the objectives of the scheme and are then forwarded to the National Advisory Committee for approval	n.a.
Italy	The basic conditions to get subsidies are different in different areas of the Country (19 regions and 2 Autonomous Provinces) according to specific regional laws and rural development programmes, but generally regards only adult animals.	It depends from the project and the funding agency, but generally farmers are obliged to implement the in situ conservation programmes and, for mammals, to keep registered animals.
Latvia	Animals must meet the criteria of animal breeding program (Farm animal breeding organisations are recognizing animals), animals must stay in herd 5 years.	Animal breeder can receive support, if he fulfills following conditions: breeder pledges the next 5 years (from the first year of payment) not to sell animal, not to give animal away and not to slaughter animal, breeder contracts separate period of commitment for each animal; breeder each year submits completed application for payment.
Lithuania	Extremely low numbers of animals of endangered breeds, lower their productivity and income compared with animals from modern breeds.	n.a.
FYR Macedonia	Animals must meet the criteria of animal breeding program	The criteria and conditions for farmers to get subsidies and other forms of support, for cattle and sheep are the farm capacity (explained in the question 35).
Montenegro	Basic preconditions are: Farmer has to have heads of the autochthonous breed (purebred according to morphological traits), Depending of flock size, farmer has to	Risk status of the autochthonous breed, and precondition described in the answer to question 35.

	have adequate number of purebred males of autochthonous breed Commitment of the farmer, expressed by signing of the contract, that he/she will strictly practice mating program of purebred males with females.	
Norway	Addult female animals that have had offspring during the last two years. Male animals must be between 1 and 2 years of age.	The farmer must be registered as an entity and be entitled to receive national agricultural subsidies. The animals must be recorded in a national pedigree database.
Poland	**For breeds within species included in agri-environment:** Payment only available for adult females participating in the conservation programme Required minimum number of females kept in a herd/flock Females have to be under recording scheme Cows/mares mated with males included in a special list of recommended sires Other species specific requirements resulting from implementation of the conservation programme Other specific requirements resulting from implementation of the agri-environmental programme within Rural Development Program **For breeds within other species (fur animals, chicken, geese, ducks, fur animals, honey bees and fish) included in conservation program:** Females under recording scheme Other species specific requirements resulting from implementation of the conservation programme	The requirements are species/breed specific; they are resulting from implementation of agri-environmental scheme and animal genetic resources conservation programme
Portugal	Number of animals in the range defined for the different criteria of endangerment, kept in purebred mattings	As explained in the questions before.

Serbia	Regulation on the establishment of programme of the distribution and use of incentive funds for the conservation and sustainable use of genetic resources of domestic animals for 2010. ("Official Gazette of RS", No. 15/10), defines the minimum requirements that users must meet when applying for a subsidies. Article 3. Defined above Regulation, the right to use incentive funds for the conservation and sustainable use of genetic resources of farm animals be able to achieve: • individuals-carriers of the family farm, • Legal entities registered in the Register of companies and • scientific-research organizations.	Farmers must be registered as farmers and also animals must be registered in Herd Book
	Beneficiaries have the right to use the incentive funds provided are: • registered in the Register of agricultural holdings and are in active status, • report type and approximate number of livestock in accordance with the Regulations on the manner and conditions of registration and management of the Registry farms, application for registration and renewal of registration and reports, documents to be attached to the request, conditions to save data, as well as conditions for the standby status of agricultural farms („Official Gazette RS", No. 111/09), • Owners of animals for which applying of request. Article 4. Mentioned Regulation defines that beneficiaries are entitled to use the incentive funds once a year, per head or individuals, for a minimum number, which is different for different breeds.	
Slovakia	Animals have to be purebred, registered in herdbook. In sheep subsidies are paid for females older than 12 months.	Farmers have to be participants in Rural Development Programme of the SR 2007-2013.
Slovenia	The grade of endangerment of breed (on basis FAO+National Criteria) and pedigree	Farmers must have animals in Herd books. Farmers must be registered as farmers In RDP program is important cross-compliance

Spain	1. Beneficiaries are officially recognized organizations and associations of breeders for the management of the genalogical herd books and for the conservation, improvement and promotion of pure breeds of production of livestock, who meet certain conditons of Community law. This is a national support that has been approved by the European Commission. Eligible activities are: education and training in zootchnics; organization of competitions, auctions, national and international exhibitions, and the costs incurrred through participation in such activities; creation and mantenance of gnealogical herd books; tests aimed at determining the genetic, quality of the livestock, through improvement programmes and for breeds in risk of extinction; packges for investment in testing centres, reproduction centres and farms and practices marking innovation in breeding (only until December 31, 2011). Focused on pure breeds, natives or not. Eligible costs must be justified. 2. Beneficiaries are associations or federactions of pure breeds which belong to officially recognized livestock associations or organizations with scope above and beyond an Autonomous Community, for their activities and work. Eligible activities are the same as in the previous case. This is a national support that has been approved by the European Commission. Funds are distributed territorially to Autonomous Communities, giving special priority to indigenous breeds and to breeds in risk of extinction. Eligible costs must be justified. 3. The beneficiaries are the owners of farms who have Spanish native breeding and holdings with land area, with a maximum stocking density of 1.5 LU/ha. The beneficiaries undertake to improve and conserve the environment and the native breed. These are subsidies for the promotion of production systems of native breeds in extensive systems. It is a grant set for a maximum period of five years (2008/2012). This is a national support approved by the European Commission. 4. Beneficiaries are the owners of farms with sufficient land area and a maximum stocking density of 1.5 LU/ha, who are committed for five years agri-environmental commitments. It is a specific subsidy for endangered native breeds registered in genealogical studbook. Farmers must belong to an association whose aims are livestock improvement and conservation of native breeds.These subsidies are co-financed by the European Agricultural Fund for Rural Development EAFRD.	As said in question 35.
Sweden	Adult animals, known pedigree, following a breeding plan	Endangered breeds, known pedigree
Switzerland	Contributions go from FOAG to breeding organizations and from there, if declared so in the project, to breeders acting actively in a program.	Contributions go through breeding organizations
The Netherlands	No subsidies per animal for rare breeds	No subsidies to farmers per animal of rare, native breeds

Turkey	Breeder or a group of breeders should be settled in the village/area of conservation.	Breeder who benefited from conservation subsidies should not rear any cultured breeds or crossbreds. Discontinued breeders are removed from the project with the penalty of repayment the whole subsidy with legal inflation rate.
UK	Native breeds at risk with fewer than X breeding females, where X is as set out in European Commission Regulation 1974/2006, Annex IV.	For the payments received through agri-environment schemes, the farmers have to meet all the particular eligibility, cross-compliance, and other contractual requirements of the relevant scheme for the requisite period of years.
Ukraine	On cattle of commercial breeds: subsidized dams should be involved into the scheme of sires proof for the progeny. Productivity of herd should reach for the previous year 130 % and higher breed standard level on milk fat (kg) for the second lactation. Besides it, core herd should be increased for the previous year or the realization of breeding youngsters for the previous year should reach 5 % of available cow number and if there are copies of cattle passports (identification documents). Only if all mentioned above conditions will be satisfied, owner can take part in the competition. On cattle of local breeds: Herd should reach for the previous year productivity at the level of the breed standard on milk fat for the second lactation (except two native endangered breeds). Besides it, herd should be increased on the number of cows of core part of herd or the realization of breeding youngsters for the previous year should reach 2 % of available cow number and if there are copies of cattle passports. On pigs: under the condition, when the core herd sows at the previous year had not less than 1.8 farrow and 18 piglets. On horse youngsters: when horse is taken from breeding horse dam and proven stallion, which are registered in herdbooks. Poultry youngsters should be in normal condition.	On cattle of commercial breeds: subsidized dams should be involved into the scheme of sires proof for the progeny. Productivity of herd should reach for the previous year 130 % and higher breed standard level on milk fat (kg) for the second lactation. Besides it, core herd should be increased for the previous year or the realization of breeding youngsters for the previous year should reach 5 % of available cow number and if there are copies of cattle passports (identification documents). Only if all mentioned above conditions will be satisfied, owner can take part in the competition. On cattle of local breeds: Herd should reach for the previous year productivity at the level of the breed standard on milk fat for the second lactation (except two native endangered breeds). Besides it, herd should be increased on the number of cows of core part of herd or the realization of breeding youngsters for the previous year should reach 2 % of available cow number and if there are copies of cattle passports. On pigs: under the condition, when the core herd sows at the previous year had not less than 1.8 farrow and 18 piglets. On horse youngsters: when horse is taken from breeding horse dam and proven stallion, which are registered in herdbooks. Poultry youngsters should be in normal condition.

Question:

37. What are the obligations of farmers which get subsidies for in situ conservation?

Country	What are the obligations of farmers which get subsidies for in situ conservation?
Albania	The famers are obliged to cooperate for the implementation of the in-situ conservation programs
Austria	n.a.
Azerbaijan	Farmers have to protect of purebred local / autochthonous / livestock breeds and species
Bosnia and Herzegovina	Farmers have no obligation.
Bulgaria	To maintain animals from the breed for minimum 5 years.
Croatia	Care of animals during the year. Participate in breeding work.
Cyprus	As described in part of question 35
Czech Republic	n.a.
Denmark	n.a.
Estonia	The farmers are obliged to follow the breed conservation programme and keep the animal for at least five year.
Finland	5 y contract
France	- people or companies running an agricultural activity, or foundations, NGO, educational and research institutes in the field of agriculture ; - program 1: to be known by approved breeders organization of the breed ; - program 3.: to be a member of the approved breeders organization of the breed ; - program 1: to keep a minimum of females of a local breed with small population size (pigs: 3 sows, cattle: 3 cows, sheep or goats: 20 females) - program 2: to keep a minimum of 3 non pure-bred females registered as work-horses - program 3: to keep at least 1 pure-bred animal (either 1 stallion with at least 1 offspring or 1 mare if older than 6 months)
Germany	n.a.
Greece	To follow the programme that the beneficiary has submitted, to follow the guidelines and suggestions of the responsible Centre for Genetic Improvement and the Ministry of Rural Development and Food, to facilitate monitoring, to record all data and information etc.
Hungary	He/She has to keep the animal (population) for at least five year. See: Decree of minister of agriculture and rural development on the detailed conditions of the subsidies from the European Agricultural Fund for Rural Development for the protection of the genetic stock of the protected and endangered indigenous farm animals in breeding (38/2010. (IV. 15.) FVM) and decree of minister of rural development on the detailed conditions of the subsidies from the European Agricultural Fund for Rural Development for the protection of the protected and endangered indigenous farm (17/2012. (II. 29.) VM);
Iceland	Send filled-in forms annually to the Farmers Association of Iceland and have a registered goat flock according to the annual livestock census
Ireland	n.a.
Italy	Generally, to implement the in situ conservation programmes.
Latvia	Animals must stay in herd 5 years. From AnGR animal must be received offspring. Support is granted for maximum 550 animals of each breed.

Lithuania	The farmers must keep animals 5 years and breed them pure. The cattle must be controlled by production.
FYR Macedonia	No info
Montenegro	Farmers are obliged to respect all roles defined by the contract which is signed by the Ministry, Biotechnical Faculty and farmer
Norway	They have to be recorded in the national pedigree database and the animals have to at least 87.5% purebred.
Poland	Full implementation of the conservation program Fulfilling all provisions of the Rural Development Program
Portugal	To maintain the animals in a purebreeding program and allow appropriate controls to take place
Serbia	To keep animals in own farm for the year received subsidies.
Slovakia	Farmer has to maintain the number of cattle units above the limit that is approved in his contract with Agricultural Paying Agency for the whole period of support (5 years)
Slovenia	n.a.
Spain	As mentioned in question 35.
Sweden	See question 35 and Cross Compliance requirements such as animal welfare.
Switzerland	Farmers do not get contributions directly, but the breeding organizations and the breeders must be members of them
The Netherlands	No subsidies to farmers per animal of rare breeds
Turkey	Farmers have to sign a project agreement which outlines the breeding rules. If they decided to quit before the project duration, they have to pay all subsidy amount with the legal inflation rate.
UK	Through their agri-env. scheme agreements, they must comply with all of the contractual terms of such agreements – including all elements of cross-compliance (which includes all relevant animal health & welfare regulations, livestock identification, movement records, etc.).
Ukraine	Farmers should give report on made for the money work.

Question:

38. Do you have any specific additional projects / support measures for AnGR financed from national and/ or international sources? If YES, please describe such project and activities

Country	Specific projects/ support measures	Description of such projects / activities
Albania	YES	Small grand project – GEF In-situ conservation of Albanian buffalo In-situ conservation of local sheep breed "Shkodrane" Identification and characterization of the local small ruminant breeds/populations in South region of Albania In-situ conservation of local cattle breed – Busha Identification and characterization of local pig breeds SAVE Foundation Monitoring risk and support of farmers organization for in-situ conservation and economic sustainable use of local cattle breed "Lopa e Prespes" Capacity building to support in-situ conservation and use of local pig breeds
Austria	YES	
Azerbaijan	NO	
Bosnia and Herzegovina	YES	"BushaLive"- Determination of different types and strains of Busha Cattle in the Balkans, financed by the UN-FAO
Bulgaria	NO	
Croatia	NO	
Cyprus	YES	DOMESTIC project, currently funded by ARIMNET call 2011
Czech Republic	YES	
Denmark	NO	
Estonia	NO	
Finland	YES	Genomic projects on determining the relationship between the populations and on assessing the state of current variation within populations EU Agri Gen Res programme on development projects (EURECA, EFABIS-Net)
France	YES	VARUME (research project on evaluation of genealogic, genetic and genomic diversity in ruminants and horses) CRB-Anim (network of genebanks and biological resources centers for farm animals) RGSCOPE (informatic portal of databases on animal genetic resources)
Germany	YES	
Greece	YES	Different research projects
Hungary	YES	Decree of minister of agriculture and rural development on the detailed conditions of the subsidies from the European Agricultural Fund for Rural Development for the protection of the genetic stock of the protected and endangered indigenous farm animals in breeding (38/2010. (IV. 15.) FVM) and decree of minister of rural development on the detailed conditions of the subsidies from the European Agricultural Fund for Rural Development for the protection of the protected and endangered indigenous farm animals (17/2012. (II. 29.) VM).

Iceland	NO	
Ireland	YES	
Italy	YES	The Ministry of Agriculture, Food and Forestry Politics is funding the Breeders Associations for herd book keeping and for milk and meat recording.
Latvia	NO	
Lithuania	YES	National payments for the implementation of the National Program for the Preservation of the Native Farm Animal Genetic Resource: Payments for National Selection nucleus – conservation in-situ, Conservation ex-situ (sperm, DNA and etc.), Animal inventory, identification, characterization and monitoring.
FYR Macedonia	NO	
Montenegro	YES	National research project: Fenotype and genetic characterisation of some local sheep breeds
Norway	YES	The running costs of the AnGR activities at the Norwegian Genetic Resource Centre which is among other activities running the pedigree database for endangered native cattle breeds, giving advise on breeding to the farmers, arranging work shops for the farmers on breeding in small populations, supporting semen production.
Poland	YES	There are some research projects, focusing on characterization of native breeds their profitability etc. financed from budget of the Ministry of Science or the EC
Portugal	NO	
Serbia	YES	These projects are financed by program of national rural development measures. SAVE Foundation
Slovakia	YES	Several AnGR research projects and EU funds for supporting the research activities in AnGR.
Slovenia	YES	**EU Agri Gen Res programme** on development projects (HERITAGESHEEP, EFABIS-Net, ALPINET GHEEP, some National research programe)
Spain	YES	Research legislation.
Sweden	NO	
Switzerland	NO	
The Netherlands	YES	See previous answers. National programme funding for CGN and project funding for Dutch Rare Breeds Society (SZH)
Turkey	YES	Domestic Animal Genetic Resources Conservation Project (ex situ in vivo conservation)
UK	NO	
Ukraine	YES	There is governmental program on “Conservation of farm AnGR”, in which involved more than 13 scientific institutions. They are financed by government and fulfil researches on conservation of AnGR.

Question:

39. Are activities of different organisations as Breeders associations, breeders organizations, farmers groups, NGO which are involved in the area of AnGR, are financed by the Government?

Country	Activities of AnGR related organisations supported by government
Albania	NO
Austria	n.a.
Azerbaijan	n.a.
Bosnia and Herzegovina	NO
Bulgaria	As a specific measure for protection of the genetic resources may be considered the state support of the breeding organizations: For keeping a herd book for every breeding animal (female and male in reproductive age) annually are paid: a/ cattle – 6.60 leva (cca 3.30 Euro); b/ buffalo – 7.00 leva (cca 3.50 Euro); c/ pig – 5.40 leva (cca 2.70 Euro); d/ sheep – 3.30 leva (1.65 Euro); e/ goat – 3.30 leva (1.65 Euro); f/ horse – 33.30 leva (cca 16.65 Euro); royal family – 1.80 leva (0.90 Euro); poultry – 0.04 leva (0.02 Euro). For controlling the production traits of every breeding animal (productive) annually are paid: a/ cattle – 15.60 leva (cca 7.80 Euro); b/ buffalo – 17.70 leva (cca 8.85 Euro); c/ pig – 2.70 leva (cca 1.35 Euro); d/ sheep – 3.90 leva (1.95 Euro); e/ goat – 3.10 leva (1.55 Euro); f/ horse – 14.80 leva (cca 7.40 Euro); royal family – 4.90 leva (2.45 Euro); poultry – 0.05 leva (0.025 Euro). The support is granted to small and middle holdings – stock breeders (registrated agricultural producers) submitting subsidized services by approved breeding organizations according to article 29 of the Animal Breeding Law.
Croatia	Breeding associations/organizations and some NGO for activity receive annual support in amount ≈ 2.700 €/year
Cyprus	n.a.
Czech Republic	n.a.
Denmark	n.a.
Estonia	YES The breeders' and breed organizations can apply breeding support for: 1. Cattle herd book keeping - 11,40 €; 2. Cattle performance recording - 8 €; 3. Estonian Native cattle herd book keeping - 95 €; 4. Pigs herd book or breeding register keeping - 10,30 €; 5. Pigs performance recording - 13 €; 6. Sheep flock book keeping - 9,15 €; 7. Sheep performance recording - 9,15€; 8. Equine stud book keeping - 190,40 €; 9. Estonian Native, Estonian Heavy Draught and Tori universal type horse stud book keeping - 302,10 €; 10. Equine performance recording - 101,50 €; 11. Estonian Quail performance recording - 155,10 €. **Requirements**: Cattle, sheep and pigs – herd book keeping: the number of animals in the herd book (main part and supplementary) on the December 1 previous year. Equine stud book keeping: the number of foals registered in the stud book previous year. Cattle, sheep, pigs and Estonian Quail – performance recording: the number of animals in the performance recording on the December 1 previous year. Equine performance recording: for the horses attended at the performance recording if the data are registered in the electronic stud book. Only one performance test per year will be considered.

Finland	NO
France	YES
Germany	n.a.
Greece	Despite the programme for the conservation of endangered breeds there is the action for the conservation of genetic resources, where the breeders associations are supported for Herdbook registration, performance recording, parentage testing and promotion activities. The total amount that is planned is: 18,9 million euros (EU), 6,1 million euros (national funding) (25 millions total public) plus 3 million (private contribution)
Hungary	Yes. There is a state aid for breeding organizations to help them to do their work (register, performance testing, breeding value estimation)
Iceland	Mainly financed by public funds.
Ireland	n.a.
Italy	YES
Latvia	NO
Lithuania	There are funded breeding organizations according including animals in Stood books
FYR Macedonia	Breeder's organizations are in the very beginning of formation. There are no financed activities until now.
Montenegro	NO
Norway	The breeding associations and breeding societies of the endangered breeds can apply the NGRC for projects and operational costs.
Poland	YES The herdbook keeping is supported from the state aid, costs covered in 100% The performance recording is supported from the state aid, costs covered in 70%
Portugal	YES
Serbia	Yes, but not permanently every years.
Slovakia	YES
Slovenia	YES • The herdbook keeping is payed from the state aid, provided by Public service The performance recording is payed from the state, provided by Public service
Spain	Associations and organizations of breeders of pure breeds as mentioned above.
Sweden	YES, partly
Switzerland	Yes, programs from breeder organizations, see above
The Netherlands	Only project funding to NGO (SZH)
Turkey	NO
UK	NO
Ukraine	NO

Questions:

40. Do you have any private foundations and NGO in your country to support the endangered breeds – including financial support? (please describe)

41. Are there any research or other projects which help to conserve endangered breeds?

42. If YES, please describe which projects? For how many years? For which period?

Country	Do you have any private foundations and NGO	Are there any research or other projects	If YES, please describe
Albania	NO	YES	Study of the DNA –polimorphism and evaluation of Genetic diversity based on different microsatellite markers – local sheep and goat breeds, 2009-2013
Austria	NO	YES	???
Azerbaijan	NO	NO	/
Bosnia and Herzegovina	NO	NO	/
Bulgaria	NO	YES	There are a number of programs of Agrarian Universities and Research Institutes dealing with the characterization of the genetic resources, the monitoring, and the conservation. The projects are for 2-3 years with an option for prolongation. Projects of the Plovdiv Agrarian University for conservation of the Phodopean Short-horn cattle, Kalofer long-hair goat, East Balkan pig. Kostibrod Livestock Institute: 1. Evaluation of the genetic diversity of cattle and sheep breeds with a view to the investigation and conservation of the genetic resources in livestock practice by molecular and economic analysis of Bulgarian Grey cattle (2011 – 2013). 2. Maintenance and improvement of initial lines of the National genetic fund and development of optimal schemes of cross-breeding for production of market poultry (2009-2013). Conservation of genetic heredity of the autochthonous Bulgarian Grey cattle population. Development of a breeding program (2004-2006) Shumen Agricultural Institute. Development of modern programs for conservation and improvement of the genetic fund – buffaloes, cattle, and sheep. Institute of biology and immunology of the reproduction – an experimental cryo bank is established for frozen embryos from native national sheep, goat, and cattle breeds for conservation of thei genetic resources.
Croatia	NO	YES	In Croatia was performed many projects which are related help to conserve endangered breeds.

Cyprus	NO	Don't know	n.a.
Czech Republic	NO	YES	
Denmark	NO	NO	
Estonia	NO	YES	Research project: Genetic diversity and sustainable management of genetic resources of farm animals and fish, 6 years, period 2007 - 2012 Currently two PhD projects are focused on molecular characterization of Estonian breeds – one in dairy cattle, and the other one in horse.
Finland	YES, one prison farm	YES	Genomic projects on determining the relationship between the populations and on assessing the state of current variation within populations EU Agri Gen Res programme on development projects (EURECA, EFABIS-Net)
France	NO	YES	VARUME (research project on evaluation of genealogic, genetic and genomic diversity in ruminants and horses) CRB-Anim (network of genebanks and biological resources centers for farm animals) RGSCOPE (informatic portal of databases on animal genetic resources)
Germany	NO	YES	The criteria are as manifold as there are research projects
Greece	YES They try to promote the breeds by agro-tourism.	YES	In the Agricultural Research Institutions of NAGREF (National Agricultural Research Foundation) have been raised autochthonous sheep and goats breeds, since late '70s. The recent years this action is not supported any more, and now only the Florina sheep breed and the Chios sheep breed are kept.
Hungary	DAGENE. It has no financial support.	YES	The Research Institute of Animal Breeding and Feeding has some research on cryo-conservation. Agricultural universities also have some projects, but I have no specific data on them.
Iceland	Minor support Mainly to Old Icelandic Poultry	YES	Goat population, breeding strategy (2009 - 2013) Leadersheep, breeding strategy (2008 - 2013) Old Icelandic Poultry, origin, breed characterization (2008 – 2013)
Ireland	NO	YES	Projects are evaluated by an Evaluation Committee of experts for conformity to the objectives of the scheme and are then forwarded to the National Advisory Committee for approval
Italy	YES	YES	Pluriannual projects from national (Ministry of Agriculture, Food and Forestry Politics, Ministry of University and Research) and local governments.

Latvia	NO	YES	For the benefit of AnGR in Latvia (2007) a specialized Molecular genetics research laboratory was established. The laboratory functions within the Latvian University of Agriculture. Laboratory saved the accumulated genetic resources as DNA samples a total of 1064 DNA samples: 536 cattle, 182 sheep, 88 pigs, 159 horses and 99 goats. Laboratory created descriptors for basic resource breeds: Latvian Brown and Latvian Blue cows and the Latvian Dark-head sheep breed and started the description of breeds. Current studies: Since 2009 the cow milk protein gene polymorphism genetic study started (studies of α-, β-and κ-casein gene polymorphism) Studies of Latvian horse breed population with DNA microsatellite markers Studies of sheep myostatin gene
Lithuania	NO	YES	Projects from Ministry of Agriculture: from 2008-2010 Conservation "in situ", investigation of farm animal biodiversity (phenotype and genotype, conservation ex-situ);
FYR Macedonia	NO	NO	/
Montenegro	NO	NO	/
Norway	NO	YES	Research on grazing behaviour and on different genetic protein alleles in milk from native dairy breeds in Norway and the Nordic countries. Starting in 2014.
Poland	YES Activities of NGOs are related to promotion, popularization and enhanced utilization of endangered native breeds	YES	Research projects on characterisation of native breeds (especially at the molecular level) and quality of products obtained from native breeds.
Portugal	NO	YES	Different projects aimed at the characterization and conservation of AnGR.
Serbia	NO	n.a.	
Slovakia	NO	YES	Projects for building the centres of excellence, research projects for cryoconservation and molecular characterization, livestock biodiversity research projects
Slovenia	NO	YES	Molecular genetic studies -More projects on determining the relationship between the populations and on assessing the state of current variation within populations (genetic characterisation Cika cattle, sheep breeds, Horse breeds) Breed.
Spain	NO	YES	

Sweden	NO	YES	Characterisation of some breeds dog (Gotlandsstövare) and cattle (Rödkulla). Molecular genetic studies of old poultry breeds.
Switzerland	YES Prospecie Rara and Save	YES	For instance projects on genetic analyses, 1-3 years
The Netherlands	YES	YES	Several scientific research project by Wageningen University and CGN, e.g. chicken/pig/cattle diversity studies, breed differences in milk quality, cryoconservation research, etc.
Turkey	NO	YES	The cryo-conservation project which is named 'In vitro Conservation and Pre-Molecular Identification of Some of the Native Domestic Animal Genetic Resources of Turkey- I' (TURKHAYGEN-I) started in March 2007 and completed in 2012. This project aims to establish gene banks to conserve national animal genetic resources, to characterize our local breeds, to build national researcher capacity in animal genetics and animal biotechnology, and to combine and disseminate knowledge. The Project's live animal material collection and DNA isolation, semen and embryo freezing for most of the breeds are completed.
UK	RBST	NO	/
Ukraine	NO	YES	There is governmental program on "Conservation of farm AnGR" for the period till 2015, in which involved more than 13 scientific institutions. They are financed by government and fulfil researches on conservation of AnGR.

SUMMARY of CHAPTER 11:

IMPLEMENTATION OF SUBSIDIES AND SUPPORT MEASURES

Q 33 and 34

1. In THE frame of BREEDING and genetic improvement program through participation in differently projects (genetic bank, landscape ...)
2. In the frame of participation in organic farming
3. Combine with other sources (organic farming, environmental program ...)
4.extra (additional) money can be given to very small population of breeds
5. Supporting the promotion of special products

Q 35 and 36

1. The breeds should be officially recognized as endangered breeds
2. Participation in conservation program
3. Individual animals should be registered and individually recorded
4. In some cases breeds are simply included in the general frame of identification and registration
5. In some countries could be for all population while in others only for breeding animals
6. In some cases farmer should be a member of breeding organization

Q 37

1. Farmers should follow the mating recommendations

2. In some countries is combined with the size of farms and age of farmers
3. In some countries is combined with stocking rates of animals on pasture (density)
4. In some cases subsidies are limited by minimum or maximum number of animals per herd
5. Minimal level of knowledge and education is relevant to the conservation program
6. In only one country subsidies are related with production traits (Ukraine)

Q 38

1. In some countries there are no obligations
2. In the most of the cases farmers have to keep the appropriate conditions (keeping the register, breeding program, welfare etc.) and either having offspring or general increase of number of animals
3. Keeping animals for 5 years (have many countries)

Q 39

1. Additional support funds are coming from International NGOs and other organizations (FAO), specific international projects (GEF) and several research institutions

2. In some countries breeding organizations receiving annual support from the government

Q 40

1. In the most of the cases international NGOs (SAVE foundation, …) are giving sub-support and also research projects and some minor support from the government. There are some EU and other (National) projects on genetic characterisation of breeds

12. METHODOLOGY FOR CALCULATING SUBSIDIES AND WAY OF PAYMENT

Supports for endangered breeds are intended to preserve the breeds, which are often not competitive with other (more productive) breeds. Support is therefore intended to prevent/replace the loss of income resulting from rearing indigenous breeds.

Question:

43. Describe the procedure and method for calculating the amount of subsidy per head in a given breed:

<table>
<tr><th>Country</th><th>Describe the procedure and method for calculating the amount of subsidy per head in a given breed</th></tr>
<tr><td>Albania</td><td>They don`t have any method of calculating the amount of subsidies. We have to apply the level of subsidies similary with the level applyed in the neighbouring countries or other European countries.</td></tr>
<tr><td>Austria</td><td>The whole budget for the measure „rare breeds“ is known. The amount of money per animal (basic subsidy, endangered) is calculated on the basis of the former program. For highly endangered breeds the subsidy is doubled. For acknowledged sires there are higher subsidies.</td></tr>
<tr><td>Azerbaijan</td><td>n.a.</td></tr>
<tr><td>Bosnia and Herzegovina</td><td>There is no system of calculating among of subsidies.</td></tr>
<tr><td>Bulgaria</td><td>
<table>
<tr><th>Species</th><th>Breed</th><th>Procedure or method of calculating the amount of subsidies or support for individual breed</th></tr>
<tr><td>Cattle</td><td>Rhodopean Shorthorn cattle</td><td>Based on lower milk yield and growing ability in comparison with Bulgarian Rhodopean cattle breed</td></tr>
<tr><td></td><td>Bulgarian Grey cattle</td><td>Based on lower meat yield in comparison with beef breeds</td></tr>
<tr><td>Sheep</td><td></td><td>Based on lower productivity (milk, meat and wool) in comparison with Blach-headed Pleven sheep and Bulgarian Syntetic milk sheep</td></tr>
<tr><td>Goats</td><td></td><td>Based on lower productivity (milk, meat) in comparison with Bulgarian White Milk goat</td></tr>
<tr><td>Horses</td><td>Karakachan horse</td><td>Lower working ability, possibilities for breeding only in mountain conditions, decease in demand of horse working power</td></tr>
<tr><td></td><td>East Bulgarian horse, Danubian horse, Pleven horse</td><td>Lower market price for young horses in comparison with similar commercial breeds and decrease of incomes</td></tr>
<tr><td>Pigs</td><td>East Balkan pig</td><td>Based on lower meat productivety in comparison with Danubian white pig</td></tr>
</table>
</td></tr>
<tr><td>Croatia</td><td>Cattle - Effective population size (Ne)
Sheep - Effective population size (Ne)
Goats - Effective population size (Ne)
Horses - Effective population size (Ne)
Pigs - Effective population size (Ne)
Donkey - Effective population size (Ne)</td></tr>
</table>

Cyprus	Method of Partial Budget (lost income due to keeping a low production breed)
Czech Republic	No fixed method. The base is an estimate of the difference between economical benefit of given breed and of a similar breed mostly used for a commercial purpose (for example the difference between milk production of our cattle and of the european Fleckvieh). But as there is a fixed amount of money, the final tariff rate depends on how many applicatns asks for the support.
Denmark	Once a year Committee for the Management of Farm Animal Genetic Resources decide on a ‚moneyframe' for each species. The exact subsidy for each species is then ‚back-calculated' by dividing the frame bt the number of animals (for each species). Male animals get 2 times subsidy.
Estonia	Cattle – Estonian Native Cattle - The calculations considered loss of income compared to not endangered dairy breeds in Estonia Sheep – Goats – Horses – Estonian Native Horse - The calculations considered horse rearing additional costs Horses - Estonian Heavy Draught horse - The calculations considered horse rearing additional costs Horses - Tori horse universal type - The calculations considered horse rearing additional costs Pigs -
Finland	There have been studies at MTT on the poorer production efficiency and predicted lower income based on yield and performance
France	- programme 1: cattle, sheep, goats and pigs of local and small population size breeds (pure-bred animals): 50 €/LSU/year - programme 2: horses: local and small population size breeds (horses): 107 €/LSU/year - programme 3: horses : local and small population size breeds (pure-bred animals): 153 €/LSU/year
Germany	see answers for GLOBALDIV questionnaire
Greece	
Hungary	Cattle, Sheep, Goats, Horses, Pigs, Poultries - The breeding organizations gave proposals, and the ministry controlled them.
Iceland	Goats: Estimated as roughly the cost of winterfeeding
Ireland	It is calculated as the extra cost for keeping a rare breed as opposed to keeping a „commercial" or „main-stream" breed, in terms of lower expected production per livestock unit and other associated costs.
Italy	Generally the base is the number of animals reared, but the amount can be different in different regions.
Latvia	Cattle – Latvian blue, Latvian brown Sheep – Latvian dark head sheep Goats – Latvian native goats Horses – Draught type of Latvian horses Pigs – Latvian white Only 550 animals from each breed receive state funding. Subsidies are calculated based on the loss of income (not exceeding maximum level of payment prescribed in EU regulations – 200€).
Lithuania	Cattle, Sheep, Goats, Horses, Pigs, Geese - Difference between productivity and income
FYR Macedonia	n.a.

Montenegro	National Program for Agriculture and Rural Development (2008) put only the guidance for Subsidies for endangered breeds, furthermore the Action plan for Conservation and sustainable using AnGR proposed the amounts per species as estimation, without exact calculation.
Norway	In the annual Agricultural Agreement a fix sum is allocated to the subsisy system for the native and endangered dairy cattle breeds. The amount per cow is set by dividing the allocated sum by the cows and bulls applying for the support.
Poland	The calculation of subsidy level is based on methodology accepted by the European Commission and implemented by the Member States. The aim is to evaluate so called "lost income" – means the income a farm could have generated if it had been keeping a commercial breed, commonly used in a given country instead of a native breed of a lower productivity. The calculation uses the data from national statistics and is based on the same principles for each species and each breed.
Portugal	Experience from previous years
Serbia	Official calculations not exist. The base is an estimate of the difference between economical benefit of native breeds and of a similar breeds mostly used for a commercial puropose. There is unofficial proposal/calculation for the next IPARD program: see Annex II
Slovakia	For all breeds the subsidies level is set as compensation of loss of revenue due to reduced production.
Slovenia	Annual support payments are paid per Livestock Unit (LU) and are defined according to the Article 27; Annex V of the (EC) No 1974/2006. Table of conversion is therefore: - Cattle: 1,0 (LU), - Sheep: 0,15 (LU), - Goats: 0,15 (LU), - Horse: 1,0 (LU), - Breeding sows > 50kg: 0,5 (LU), - Other pigs : 0,3 (LU), - Chicken: 0,014 (LU). Breeders can apply for the payments if have minimum of 1 Livestock unit. LU refers to 500 kg of live weight.
Spain	No difference for individual breeds giving priority to native breeds.
Sweden	The conditions for payment state that herds must be affiliated to an official pedigree testing system or gene bank operation, and that flocks of sheep must be included in the sub-measure in order to combat the maedi visna virus. A fixed sum of 88,9 euro per type of livestock is designed to defray the bulk of the stock's fixed costs, the aim being to bring small herds into the programme. Economic comparisons have been made between keeping conventional production breeds and keeping endangered livestock breeds. In case of dairy cows there are differences in income deriving from lower milk yield, lower slaughter value on culled cows, and lower value for calves. Various breeds of sheep have been compared to conventional lamb production. the differences ligh in lower slaughter weight. For goats there are no comparison with conventional breeds as the the breeds found in Sweden are the endangered. There is considerable difference between keeping Lindesrödsgris and manging a conventional pig farm. Only one litter a year and boar keeping make som of the higher costs.
Switzerland	No subsidies, but projects are financed for breeding organizations and farmers can take profit of the contributions depending on the program.
The Netherlands	No subisidies for keeping animals of rare breeds. Support to herders to maintain herds of heath sheep based on providing direct income to herders for their tasks.

Turkey	Aim of the program is to partially meet breeders' expenses in order to encourage them to continue rearing with their breed. At the beginning of the subsidy program feed consumption, rearing expenses (shepherd etc.) and production quantity have been considered. Also personal communications with breeders are evaluated. The amount of subsidy per species has been enhancing according to legal inflation rate in each year.
UK	The payments that are made in the UK's agri-env schemes under approved RDPs (and any approved state aids) are calculated according to the methodology prescribed in the current EU Rural Development Regulation and its Implementing Regulation.
Ukraine	Sum is calculated at the base of general norm expenses (and separately for feeding) for the keeping of one animal of different and gender.

Question:

44. How is payment of subsidies carried out?

Country	How is payment of subsidies carried out?
Albania	Cash to the farmer, by presenting all the necessary documents prepared by the Local Evaluating Commission
Austria	As part of the ÖPUL-program the subsidies are payed directly to the farmers.
Azerbaijan	n.a.
Bosnia and Herzegovina	If at all, then as for the normal calculation of subsidy for milk production.
Bulgaria	n.a.
Croatia	Directly to farmers.
Cyprus	The subsidy is paid a year (at the latest) after the application is made, and following appropriate on-site inspections to verify numbers etc.
Czech Republic	Applicants must be registered member of the National program, They file a money claim every respective year and document that they accomplish defined requirements - mostly reproduction and/or performance testing record which is verified by the breeders association. The national coordinating centre then make a cross-checking of the data through registries and other databases and recommends or rejects the application. A final decision is on the Ministry of agriculture, as the money goes from its budget.
Denmark	Once a year, breeders can apply for subsidies. After approval of the application, money is tranfered to the breeders bank accounts.
Estonia	The applications have to be sent May 2 to May 23 to the Estonian Agricultural Registers and Information Board. Veterinary and Food Board (VFB) is checking the applicants who applied the subsidy for rearing the animal of endangered breed. The decision to pay subsidies will be made after the control by VFB. The applicants have to fulfil the criteria set up. The applications for breeding support will be presented for February 20. VFB will carry out supervision. The decision to pay/not to pay support will be done within 30 working days after presenting the application.
Finland	The Ministry of Agriculture and Forestry is coordinating the subsidy programmes and the monitoring and operations are carried out by regional offices
France	Contract between organization or breeder and FranceAgriMer
Germany	Payment on application by breeders
Greece	n.a.

Hungary	Via the paying agency (MVH – Agricultural and Rural Development Agency)
Iceland	The Farmers Association of Iceland, payment according to individual recording on forms issued annually
Ireland	Payment is made to participants who select the rare breeds option in the Rural Environmental Protection Scheme (REPS) or in the new replacement for REPS, the Agri Environmental Options Scheme (AEOS).
Italy	Directly to the farmers and also to their associations.
Latvia	Farm animal breeding organizations are responsible for recognizing AnGR animals (Native breed animals which fulfill requirements of animal breeding programs). Recognized AnGR animals can receive state subsidies.
Lithuania	Budgetary institution National Paying Agency under the Ministry of Agriculture
FYR Macedonia	No info
Montenegro	Annual payment, according to the annual Report submmeted by after the Department of Livestock Sciences of Biotechnical Faculty, as an institution responsible for implementation of Action plan for AnGR.
Norway	Through production subsidies (national support) or regional support.
Poland	For four species it is carried out as a part of the agri-environmental payments, within the Rural Development Programme For remaining species it is based on reimbursement of actual costs, incurred by the farmer
Portugal	Direct payment to farmers after validation of the number of animals maintained through the official databases
Serbia	The procedure: Every year, when farmers apply for subsidies, inspectors of the Ministry of Agriculture, Forestry and Water Management of strength tests of animals on the farms. The requirement for submission of applications is that the zootechnical services carried out annually inspect and register all youth in the Herd-Book. When the inspector reports coming at the Ministry, farmers receive the contract and money for that year.
Slovakia	Based on filled Request of payment
Slovenia	Payments are carried out directly to farmers under the supervision of Agency of the Republic of Slovenia for Agricultural Markets and Rural Development.
Spain	The legislation sets priority criteria
Sweden	Paid yearly to farmers. Paid after achieved task to associations.
Switzerland	Yearly to breeding organizations according to the contracts established and based on the submitted program
The Netherlands	No subsidies, see also previous questions
Turkey	General Directorates of Agricultural Research and Policy approves application forms according to concurrences of the research institutes and the Ministry's provincial directorates. After that the progress payment is sent to the relevant bank to forward the breeder's bank account.
UK	Through agri-environment agreements under EU rural development program legislation.
Ukraine	At the results of competition, held by Ministry of Agrarian Policy and Food. Competition is held each year. Husbandries give demanded documents to take part in the competition and Ministry decides which one deserves money.

Question:

45. Who provides the payment of the subsidies?

Country	Who provides the payment of the subsidies
Albania	Thourgh the Public Agency of Payment
Austria	n.a.
Azerbaijan	n.a.
Bosnia and Herzegovina	Through the normal system of subsidies to agriculture, Federation of Bosnia and Herzegovina, Ministry of Agriculture, Water Management and Forestry. Without differences between indigenous and highly productive animals. Agency for agricultural payments of the Republic Srpska.
Bulgaria	State fund "Agriculture" – Payment agency
Croatia	Ministry of Agriculture, Fisheries and Rural Development
Cyprus	Organisation of Agricultural Payment
Czech Republic	n.a.
Denmark	n.a.
Estonia	Estonian Agricultural Registers and Information Board
Finland	Regional offices
France	FranceAgriMer
Germany	n.a.
Greece	n.a.
Hungary	MVH – Agricultural and Rural Development Agency
Iceland	Ministry of Finance, annual budget, total goat subsidy allowance determined annually by the Agricultural Genetic Resources Committee
Ireland	n.a.
Italy	Regional or Provincial Agencies for payments in Agriculture (to farmers) and Ministry of Agriculture, Food and Forestry Politics (Breeders Associations).
Latvia	Payment of the subsidies is allocated from State budget. The Rural Support service provides payment.
Lithuania	Budgetary institution National Paying Agency under the Ministry of Agriculture
FYR Macedonia	No info
Montenegro	Ministry of Agriculture and Rural Development
Norway	Norwegian Agricultural Authority is responsible for the payment of national subsidies provided by the state.
Poland	The Agency for Restructuring and Modernisation of Agriculture (ARMA) for breeders participating in agri-environmental scheme within the Rural Development Programme
Portugal	Ministry of Agriculture
Serbia	Ministry of Agriculture, Forestry and Water Management (annual budget).
Slovak	Agricultural Paying Agency
Slovenia	Ministry of Agriculture, Forestry and Food
Spain	There are national or autonomous communities support, or co-financed by the European Agricultural Fund for Rural Development EAFRD, as mentioned above in the question 35.
Sweden	SBA
Switzerland	FOAG

The Netherlands	No subsidies per animal of rare breeds. Subsidies to herders of heath sheep paid by nature and landscape organisations or regional governments.
Turkey	Ministry of Food Agriculture and Livestock General Directorates of Agricultural Research and Policy
UK	Defra and the DAs through EU co-financed RDPs in the UK (via EU-accredited paying agencies).
Ukraine	Ministry of Agrarian Policy and Food

Question:

46. What would happen without subsidies for in situ conservation?

Country	What would happen without subsidies?
Albania	The subsidies are necessary for support all the efforts in frame of conservation of FAnGR. Without it the conservation of the local breeds would be in serious risk. Example: Subsidies for Albanian Buffalo Period 2003 - 2007 subsidies 400€/buffalo growth rate 20% per year Period 2008 – 2010 subsidies 200€/buffalo growth rate 10% per year
Austria	n.a.
Azerbaijan	Farmers decrease productivity without subsidies. Livestock products price will increase. It cause to loss of endangered breeds.
Bosnia and Herzegovina	Decrease number of animal and breeders.
Bulgaria	The breeding organizations will cease to exist Considerable part of the native breeds animals will be replaced by commercial.
Croatia	It is difficult to estimate – I gees that would be the number of animals reduce.
Cyprus	The number of breeders keeping low-production local breeds would probably decrease.
Czech Republic	n.a.
Denmark	n.a.
Estonia	Based on the questionnaire carried out among Estonian Native cattle breeders (n=30) if the payment of subsidies will be stopped then 26.7% of farmers would stop farming, 13.3% would continue, however, they would diminish the number of animals, 56.7% of farmers would continue in the same way and 3.3% do not know what they will do.
Finland	Most likely the rare breed populations would start shrinking
France	It is difficult to answer; that‘s why it is better to encourage local breeds through an economic valorisation to make them less dependent on subsidies
Germany	n.a.
Greece	The majority of the farmers would cease raising the specific breeds.
Hungary	The farmers could be in a very serious situation to keep their animals, and the population of these animals would decrease.
Iceland	Lower goat numbers, greater risk
Ireland	n.a.
Italy	Generally, the number of animals of the endangered breeds will decrease and some of them risk the extinction.
Latvia	It will have large impact on all native breeds, populations of native breeds will decrease or disappear.
Lithuania	Some breeds will disappear, other will get out from control and stood book
FYR Macedonia	The local breeds will disappear.

Montenegro	Buša and Zetska žuja would be extinct completely.
Norway	The populations would decrease rapidly.
Poland	At the current level of profitability of livestock production subsidies play a very important role in enhancing or maintaining size of conserved populations. If subsidies are abolished, many breeds will substantially decrease their population size, as some farmers will turn into mainstream breeds or even withdraw from livestock production. At present, many native breeds will not be sustainable without external support. Lower population size means that breeds will be prone to inbreeding and may loose their characteristics due to genetic drift.
Portugal	All the endangered breeds would be lost in a short period of time
Serbia	The number of animals will decreasing and disappear.
Slovakia	Most of breeds would go extinct.
Slovenia	All the local breeds would be decrease in animals and perhaps many of them lost in a short period of time (crossing and introgression with other breeds)
Spain	It is possible breeds disappear.
Sweden	A decrease in animals, less awareness, less activity
Switzerland	The number might decrease
The Netherlands	Dutch policy is based on general belief that subsidies per animal of rare breed is administratively complicated and may not have a positive impact in the long run on maintenance of breeds.
Turkey	For some breeds, this means return of the cross-breeding's among exotic and other breeds. Moreover some of the breeders may give up rearing their local breeds.
UK	Very likely that many breeds would not be able to be sustained – would probably lead to much greater introgression of genetics from other native breeds, and especially exotic breeds, which can eventually lead to loss of most of the original breed characteristics. Increased risks of inbreeding within declining populations with reducing genetic diversity within them. More geographic concentration of declining breeds which increases potential losses during disease outbreaks. Increased numbers of, and proportion of all, breeds classified as 'at risk' with associated continuing population declines. Accelerated losses of national livestock heritage, combined with further reductions in mixed and rotational farming systems.
Ukraine	Breeds will be crossed with imported improving breeds.

SUMMARY of Chapter 12

Q43

- There are many different methods for calculation
- In some countries have "total budget" for all breeds or in some cases the "total budget" is declared by species

Q 44 and 45

- Most of payments provided via ministries or agency directly to the farmers, who must apply for it

Q46

- Without subsidies will decrease the population size and relevant breeding organizations and also local products
- In some country will lost very quick the local breeds
- Subsidies per head is one of the very important tool for preservation the local breed
- Some endangered breed become to crossing with more productive breeds
- In developed countries the subsidies are not playing so important tool, while the local breeds are included in programs and are less dependent on subsidies

13. PROPOSALS FOR IMPROVEMENT OF THE CURRENT SITUATION

Question:

47. What in your opinion (as a NC) would be the instruments - legal or other tools for the improvement of the current situation regarding implementation of AnGR conservation programme in your country?

Country	The instruments - legal or other tools for the improvement of the current situation regarding implementation of AnGR conservation programme in your country
Albania	It is necessary to update the National Strategy and National Action Plan in light of Interlaken Declaration, September 2007. The improvement of the legal frame it is necessary, also.
Austria	Funding should be more flexible - support for marketing programs or product development is not possible in the current program.
Azerbaijan	Setup National criteria for evaluation of level for livestock breeds species and establish especial farms or cooperatives for local, autochthonous and endangered breeds. Strengthen monitoring and inventory system. Give subsidies for farmers per breeds and species.
Bosnia and Herzegovina	For improve the situation of animal resources in B&H, primarily, it is necessary to establish a Ministry of Agriculture at the state level, and than National coordinating body for the preservation of indigenous breeds that will design a National programme for Animal Genetic Resources and implement it on the field.
Bulgaria	The Bulgarian legislation is good. A change is necessary in one aspect – the payments for preservation of breeds should be bounded with another conditions – size of the pastures, pasture maintainace, land availability etc. EU guarantee is necessary for sustainale payments in the corse of time. Annual payment update is necessary considering the appreciation of life and herd expences
Croatia	Develop of model of financial support - subsidies Stronger involvement of local communities Development of markets for local products Develop of breeding associations
Cyprus	Establishment and implementation of a National Plan for AnGR Development of market for local products Establishment of Breeder organisations for endangered breeds Subsidies to be targeted not just toward conservation but alos toward improvement of the breed, within the conservation framework.
Czech Republic	political decisions
Denmark	A strong umbrella NGO organisation - how can help all the small organisations and the breeders with all the stuff an authority (ministry) cant deal with.
Estonia	The National program should foresee the sum of money for in-situ and ex-situ conservation (collecting of DNA samples, semen and embryos, cryo-conservation), periodical molecular genetic characterization of breeds and monitoring of trends and risks.
Finland	EU programme for rural areas should be continued with the inclusion of subsidies for local breeds Probably the subsidy programme should be more strongly contain development aspects, i.e. compulsory participation in recording and improvement schemes
France	Set a body in charge of coordination of all stakeholders for implementation under control of MAAF

Germany	n.a.
Greece	1. establishment of the national plan for AnGR 2. enhance the role of the breeders Associations, improve the technical support to farmers 3. improve the organizational framework at territorial level 4. organize the regular updating of the national data base 5. develop the national cryo bank
Hungary	More programs for promoting the products of endangered animals. More possibilities for giving a subsidy from national budget.
Iceland	Threats from live animal imports if Iceland becomes an EU member state (applied for membership in 2009). Then need conservation subsidies for all native breeds, irrespective of population size.
Ireland	Ensure that adequate funding is secured to continue the current programme. Put in place a national action plan and also a national emergency plan in the event of natural disaster or disease outbreak. Establish a national animal genetic resources genebank.
Italy	There is a need for more coordination among different Regions and Autonomous Provinces and more flexibility in the subsidies. To set some help and coordination with NGOs. To give more importance to research and to product valorization.
Latvia	There must be higher funding for owners of AnGR animals. It is important to establish state farms for AnGR. In such farms GR animals of one breed are kept in groups and this would facilitate research. Such state farms must receive financial support.
Lithuania	Do not remove subsidies
FYR Macedonia	A proper national policy of support and good organization of activities in that area.
Montenegro	On the national level it has to be allocated much more money for subsidies and for other aspects of conservation and sustainable use of AnGR. Promotion and affirmation of traditional products from the local breeds.
Norway	Better economical conditions for the farmers with the endangered breeds, exept for this, the implementation of AnGR program is satisfactory.
Poland	The situation is quite satisfactory – but there is a need to maintain these measures for 2014-2020 period. There is also a need to enhance efforts to make some of native breeds more sustainable – through development of specific products and services.
Portugal	The current program has been in place since 2007, but financial support to endangered breeds has been in place in Portugal since 1990.
Serbia	1.To continue with subsidies. It is very important for farmers to receive subsidies every year. 2.To increase support measures within rural development programme
Slovakia	In our case the approvement of National Programme and legislation would help a lot.
Slovenia	Continue with subsidies and other funding -should be more flexible - support for marketing programs, support for development of specific products and services, development and research is necessary. Necessary to increase the products from local breeds.
Spain	Harmonize definitions, criteria for endangered breeds and indicators for the management AnGR; continue with economic aid to preserve the census of certain breeds that may disappear in favor of other more productive.
Sweden	More flexibility in the system is needed. Today a farmer is obliged to sign up for 5 years to get the subsidy.

Switzerland	Have more active breeding organizations
The Netherlands	Subsidize the functions, roles or typical products of the breed where necessary and temporarily. Direct funding to farmers is not the best solution if they provide no other values/functions than producing ordinary animal products. Second pillar of new CAP is very important.
Turkey	Other species such as poultry or horse should be added, niche markets should be established for local products.
UK	In addition to area grazing payments for grazing with suitable native breeds, headage payments per breed need to be available to reflect differences in costs and incomes between keeping native breeds at risk and "normal" commercial livestock, but this is not negotiable in the UK. Please see several examples in answers to Q48 below. FAnGR needs to be given clear and specific priority in EU CAP and, especially, Pillar 2 (Rural Development) measures. It also needs equal status with [cultivated] Plant Genetic Resources in all policy and program respects. Agricultural Biodiversity (including FAnGR) needs equal status internationally and nationally with 'wild' biodiversity. FAnGR needs to be recognized as part of: Biodiversity, natural resources, natural capital, natural assets, nature, the environment, ecosystems, ecological networks, sustainability, food/fibre/environmental securities, and agricultural resources. The Zootechnical regulations need to take account of the small and micro keepers of breeds at risk. Development of effective bTB cattle vaccine is a priority.
Ukraine	Proper legislative base.

Question:

48. What in your opinion can be done to improve AnGR conservation in European region?

Country	What about the improvements in European regions
Albania	• Proposals for improvement in the existing legislation;WE can use the possibility of TAIEX for organizing workshops that aims: the experience sharing in the process of improvement of the legislation in light of EU regulation and other international documents. • Establishment and providing equipment for the international molecular genetics and other laboratories; The level of lab equipment, knowledge and scientific qualification are different in EU and non EU countries. Establishing a permanent cooperation may reduce these differences. The financial support, using the EU funds could be an effective way for implement this cooperation • Completion of the database EFABIS (reduce the number of information for the breeds – only those data that are reliable and directly measurable ...). Each countries can use the database EFABIS to inform about the current status of their FAnGR and to get the information for other countries. The update of this database it is necessary.
Austria	International exchange of breeding animals/material should be easier for highly endangered breeds (legislation)
Azerbaijan	International cooperation in the conservation farm Animal Genetic Resources; Make regular meeting on situation of AnGR

Bosnia and Herzegovina	Proposals for improvement in the existing legislation; To establish a Ministry of Agriculture or any other body responsible for agriculture at the national level. International cooperation in the conservation farm Animal Genetic Resources; One of the most important segments of conservation of genetic resources is an international cooperation and exchange of knowledge.
	Establishment and providing equipment for the international molecular genetics and other laboratories; For successful work in the field of conservation of genetic resources is necessary among other things, laboratory and laboratory equipment. Faculty for Agriculture and Food Science in Sarajevo has basic laboratory equipment, but for more advanced work is necessary the laboratory for molecular biology equipped with additional missing equipment.
Bulgaria	Proposals for improvement in the existing legislation; The Bulgarian Law states that for the organization and management of the genetic resources in animal breeding is responsible a state body – the EASRAB. The Executive director of this institution is a National Coordinator for genetic resources. To the National coordinator is established a National council for genetic resources in which participate all breeding organizations' Chairs. This form gives very good results – considering the activities of the organizations, consistency of actions, information for genetic resources, and acceptance of management measures and so on. Adoption of exact rules concerning AnGR; The breeding activity is legislatively regulated. The functions of the state, the state bodies, NGOs are defined. The rules for obtaining animal breeding licence, the monitoring, the sanctions, etc are regulated International cooperation in the conservation farm Animal Genetic Resources; Establishment and providing equipment for the international molecular genetics and other laboratories; A project is won for laboratory building in EASRAB, in cooperation with Switzerland which is in realize. Investment in the equipment necessary for the ex situ conservation; The ex situ conservation is excusively national priority. An in vivo conservation reserve and two state stations for AI for in vitro conservation are maintained. The National Genetic Bank is maintained by EASRAB. Investment in the equipment necessary for the in situ conservation; The breeding organizations use the supporting funds for investing in different equipment, necessary for in situ conservation – vehicles, measuring devices. Completion of the database EFABIS (reduce the number of information for the breeds – only those data that are reliable and directly measurable ...). Only checked data provided by breeding organizations are submitted. The data are inputed by the EASRAB personel.
Croatia	Develop of common AnGR strategy. Improoving of breeding associations' cooperation. Develop of model of financial support
Cyprus	It would be extremely helpful for European countries to share experiences and details on conservation paradigms and strategies that have been successful in a particular region. It is also of utmost benefit to share regional educational and training resources for European breeders.

Czech Republic	Investments in research to reveal more information on breeds and their utilitiy possibilities (on the gene level) to have information which breeds should have priority in conservation - no one is able to conserve everything To develop methods of ex situ conservation for more species (poultry…) and create back-up kryoconserves for as much as possible breeds To find a proper model of ABS arrangements supporting cooperation in conservation To refine current EFABIS system (less data, reliability, affiliation utility traits to production environment)
Denmark	Adoption of exact rules for FAnGR
Estonia	Continuation of payments to the owners of endangered breeds and to the organizations maintaining the herd books and carrying out performance recording. Proposals for improvement in the existing legislation; Especially for dairy cattle having the status of endangered breed, the subsidy paid should be increased to compensate the loss of income resulting from rearing indigenous breeds. To promote the endangered breeds support should be given to special animal shows organised to school children's, the rearing of endangered breeds could be supported in the agricultural museums, agricultural schools, institutes and universities, animal parks and zoos. Adoption of exact rules concerning AnGR; The exact rules concerning AnGR have to be agreed, as this will help to manage AnGR. International cooperation in the conservation Farm Animal Genetic Resources; Trainings and meetings in the field of AnGR, joint research projects. Establishment and providing equipment for the international molecular genetics and other laboratories; There could be fund to apply money to establish national molecular genetics and other laboratories. The local competence has to be strengthened. Investment in the equipment necessary for the ex situ conservation; There could be fund to apply money for obtaining the equipment necessary for the ex situ conservation. Investment in the equipment necessary for the in situ conservation; There could be fund to apply money for obtaining the equipment necessary for the in situ conservation. Completion of the database EFABIS (reduce the number of information for the breeds – only those data that are reliable and directly measurable ...). The EFABIS databases like the other databases are informative only in case if the information is up to date and there is person (persons) who will do these updates regularly.
Finland	EU Agri Gen Res programme should also be continued
France	Proposals for improvement in the existing legislation; Awareness of European commission on AnGR in recasting of European legislation on breeding animal Completion of the database EFABIS (reduce the number of information for the breeds – only those data that are reliable and directly measurable ...). Develop an early warning system tool based on the ERFP task force „indicators" and on the ERFP project „georeferencement of data" and implementation with European subsidies
Germany	unknown situation
Greece	n.a.
Hungary	n.a.

Iceland	Iceland could benefit from improvements in other European regions (now an EEA country), e.g. from transfer of knowledge, participation in conservation programmes and co-operation of scientists. In situ conservation of all native breed in Iceland is highly important. Iceland is fully operational in EFABISNet and Cryo WEB since October 2010.
Ireland	Ensure the current funding/subsidy schemes are maintained and improved. Ensure that genetic resources are protected by law.
Italy	To promote and facilitate the exchange of experience. To invest in research. To promote the typical products or the gastronomy specialties related to endangered breeds. Adoption of exact rules concerning AnGR; It is important to increase flexibility linking the funding on results more than on rules.
	International cooperation in the conservation farm Animal Genetic Resources; International cooperation should be stimulated. Establishment and providing equipment for the international molecular genetics and other laboratories; There is no need for new laboratories, but for funding research and control of animals. Investment in the equipment necessary for the ex situ conservation; There is need to finance coordination among existing organizations. Investment in the equipment necessary for the in situ conservation; There is a need to finance processing and valorization of typical food and gastronomic preparations related to local breeds. Completion of the database EFABIS (reduce the number of information for the breeds – only those data that are reliable and directly measurable ...). Simplification is welcome.
Latvia	Proposals for improvement in the existing legislation; EU regulation must me more flexible regarding AnGR subsidies. There must be higher upper limits for payment for GR animals. Current amount of support does not compensate loss of income resulting from the lower productivity of GR animals.
Lithuania	n.a.
FYR Macedonia	There are different conditions and different policies according to the programs. International cooperation in the conservation farm Animal Genetic Resources; Yes, we need international cooperation and experience from the other countries which has several years working activities. Establishment and providing equipment for the international molecular genetics and other laboratories; We are at the beginning of the national conservation program, so we need equipment for laboratories for molecular genetics. Otherwise, the other option is to use the foreign laboratories, but to provide financial tools for that purpose. Investment in the equipment necessary for the ex situ conservation; Yes Investment in the equipment necessary for the in situ conservation; Yes
Montenegro	Inchance regional cooperation and application for EU found for research in the foeld AnGR. Addopt exact and same roles for whole region that has to be accepted by the Ministry of all countries in the Region.
Norway	Not relevant for Norway as a none-EU member.

Poland	• Strenghtening collaboration within the ERFP framework, to undertake jointly new initiatives, to share experiences and to build capacity • Strenghtening collaboration in development of proposals for resarch projects • Better communictaion with the European Commission on issues related to AnGR (development of and implementation of legislation, research agenda and so on) • Stronger involvement in EFABIS development and update, thus contibuting to DAD-IS • Enhancing technical cooperation on transboubary breeds • Enhancing technical cooperation on ex-situ conservation
Portugal	It is crucial that the EU maintains in the future the programs which have provided support for breeds at risk Proposals for improvement in the existing legislation; Define criteria to establish levels of risk of extinction common for all EU countries, even though other criteria may be taken into consideration (herd size, distribution, etc.) Adoption of exact rules concerning AnGR; Define ABS rules, as applied to AnGR International cooperation in the conservation farm Animal Genetic Resources; Increased cooperation at the regional and international on the characterization and management of AnGR Establishment and providing equipment for the international molecular genetics and other laboratories; Further cooperation among laboratories and countries should facilitate these activities
	Investment in the equipment necessary for the ex situ conservation; Again, a better articulation and cooperation among groups/countries should facilitate ex situ conservation Investment in the equipment necessary for the in situ conservation; Here the major aspect is an exchange of experiences among the different countries on the success (or not) of their programs Completion of the database EFABIS (reduce the number of information for the breeds – only those data that are reliable and directly measurable ...). The EFABIS data base is too complex for most situations. It should have a light version, easier to fill and access.
Serbia	- Increase collaboration on molecular-genetics quaracterisation - Completion of the database-EFABIS - International exchange of breeding animals/materials
Slovakia	n.a.
Slovenia	Adoption of exact rules concerning AnGR; We suppose the new rules extra concerning the AnGR International cooperation in the conservation farm Animal Genetic Resources; It will be very welcome Establishment and providing equipment for the international molecular genetics and other laboratories; Yes it will be good Good also for research and comparison of AnGR Investment in the equipment necessary for the ex situ conservation; Yes it will be good (urgently) and possible to restore the EU legislation Investment in the equipment necessary for the in situ conservation; Yes Completion of the database EFABIS (reduce the number of information for the breeds – only those data that are reliable and directly measurable ...). Yes

Spain	n.a.
Sweden	International cooperation in the conservation farm Animal Genetic Resources; Promotion of cooperation when a breed is found in different countries. In Sweden the horse people have put this forward. Could be on a Nordic base. Investment in the equipment necessary for the in situ conservation; Strategies for gene banking.
Switzerland	Not member of EU
The Netherlands	Improvement in the existing legislation, e.g. zootechnical legislation to meet different objectives International cooperation in the conservation farm Animal Genetic Resources;
Turkey	n.a.
UK	We do have some regional autonomy already through the separate RDP in England and the DAs. This works satisfactorily provided that the overall CAP and RDR frameworks establish a sufficiently flexible arena to permit substantial subsidiarity at local levels. Proposals for improvement in the existing legislation Examples include: The EU's CAP (the Common Strategic Framework, and all 'Pillars') needs to specifically elevate FAnGR conservation and sustainable use to a consistently high priority with equal status to [cultivated] Plant Genetic Resources (PGR); Criteria for determining 'breeds at risk' status must be broadened beyond numerical scarcity to include geographic concentration, low effective population, excessive

	inbreeding, excessive introgression, lack of genetic variability, poor breed structure and management; Recognition of FAnGR as a core part of international/national/ local Biodiversity and Ecosystems (essential for food security and much environmental management); FAnGR needs to be at the heart of all support for traditional year-round extensive livestock and mixed farming systems; Legislation needs to be flexible, proportionate and involving minimum administration; Recognition that many keepers of 'at risk' FAnGR breeds are not necessarily 'farmers' and they often keep only very small numbers of animals/birds; Aim for the long term 'self sustainability' of all FAnGR breeds; Encourage conservation of both Native and Exotic breeds at risk in all countries; Encourage the sustainable use of all local breeds even when they are not [yet] at risk; Ensure that international legislation does not unnecessarily prevent or delay the development and use of vaccines, etc to control exotic and endemic diseases in any country; Ensure that 'Agricultural Biodiversity' (which includes FAnGR) has equal status with 'wild' biodiversity; etc. Adoption of exact rules concerning AnGR; Examples include: Incentivisation of wise breeding of FAnGR breeds at risk – not only the rearing of them and the marketing of their products; Balance in situ and ex situ conservation programmes; Promote efficient electronic unique individual identification systems linked to pedigree registrations in herd/flockbooks; Ensure that criteria for calculating support payments are based on the 'reasonable costs' applicable in the relevant locality and not solely on estimated 'income foregone'; Encourage and support the development of conservation strategies for all breeds at risk; Promote the development and use of DNA verification technologies to provide fully traceable breeding records for all FAnGR breeds and fully traceable animal products from named FAnGR breeds; etc. • International cooperation in the conservation farm Animal Genetic Resources; Through UN-FAO, EFABIS, ERFP, EAAP, EU, national and regional governments and institutions, academic and independent research bodies, (inter-)national and local charities/NGOs, CBD, Biodiversity action/monitoring/ recording programs and strategies, Natural capital assessment and initiatives, Ecosystems assessments (part of 'provisioning services'), TEEB assessments, etc. • Establishment and providing equipment for the international molecular genetics and other laboratories; This needs to be co-ordinated and supported at the EU/EEA and other international (e.g. UN-FAO) levels, with implementation potentially including through academic and other independent research institutions. • Investment in the equipment necessary for the ex situ conservation; The ex situ conservation of FAnGR requires high priority integrated mainstreaming into all aspects of the EU's Common Agricultural Policy and its associated Rural Development programmes (including, but not limited to, agri-environment measures). Investment in necessary equipment should include, for example: geographically-dispersed genebanks / biobanks for the safe storage of viable eggs, sperm, and embryos for all FAnGR species and breeds; facilities and training for the collection of genetic materials; etc. • Investment in the equipment necessary for the in situ conservation; The in situ conservation of FAnGR requires high priority integrated mainstreaming into all aspects of the EU's Common Agricultural Policy and its associated Rural Development programs (including, but not limited, to agri-environment measures). Investment in necessary 'equipment' should include, for example: Facilities for the keeping and management of core herds/flocks of pedigree-registered breeding livestock throughout the year in high animal welfare systems; Electronic and other unique individual identification systems that are linked to pedigree herd/flock books; Establishing and upgrading pedigree registration systems; Support for equipment in veterinary practices engaged with caring for FAnGR species and breeds at risk; Establishing and upgrading national FAnGR monitoring systems (including the spatial

	distribution of breeds at risk); etc. Completion of the database EFABIS (reduce the number of information for the breeds – only those data that are reliable and directly measurable ...). We are aware that, for the UK, this database is now out of date regarding the lists of breeds and species. The breed data shown on the database for many breeds is also out of date and incomplete, and the maintenance of the database is sporadic due to its voluntary status. In the UK, there are currently no funding resources available to encourage the necessary updating and comprehensive ongoing maintenance of this database.
Ukraine	Improvement and unification of legislative base. Proposals for improvement in the existing legislation; Unification of European legislation. Adoption of exact rules concerning AnGR; Implementation of Global Plan of Action at all levels. International cooperation in the conservation farm Animal Genetic Resources; International projects, that involve breeds, which have similar root (f.e. Podolian) Establishment and providing equipment for the international molecular genetics and other laboratories; International cooperation in such researches. Investment in the equipment necessary for the ex situ conservation; Establishment of National Centers of Molecular Genetic and Biotechnological Researches Investment in the equipment necessary for the in situ conservation; Establishment of National Centers of Molecular Genetic and Biotechnological Researches. Besides that, supporting of Associations of Owner of Rare Autochthonous Breeds Completion of the database EFABIS (reduce the number of information for the breeds – only those data that are reliable and directly measurable ...). Reduce repeated fields, which describe the same information, so that completeness of completion will be increased.

SUMMARY of CHAPTER 13

- Improving the organisational framework. Ministry (legislation, control of activities), breeding organisations, farmers. In some countries weak of not existing links. Efforts to this. First the legal framework had to be done. Improving / supporting of breeding associations cooperation. Legislation needs to be flexible, proportionate and involving minimum administration.
- EU zootechnical legislation on studbook/herdbook/flockbook keeping is old. For poultry breeding nothing. Special rules for native breeds, sometime against EU rules (A.I. centres).
- Development of National programmes on national genetic resources and implement this (for the countries Cyprus, Greece, Hungary, Estonia .....)
- There should be continuous funding of national animal genetic resource programmes and the funding should be more flexible: Austria,..... Payment of subsidies should be continued. Current amount of support does not compensate loss of income resulting from the lower productivity of GR animals. The subsidy paid should be increased to compensate the loss of income resulting from rearing indigenous breeds. In contrary: some NC say subsidies are not giving a sustainable system. You can subsidize for a period, but not for always. Aim for the long term 'self-sustainability' of all FAnGR breeds. Some countries say: Subsidies are not giving a sustainable system. You can subsidize for a period, but not for always. Others do not agree with that.
- Joint research projects, development of regional and international molecular genetics and other laboratories, international cooperation in such research, training and meetings. Transfer of knowledge, participation in conservation programmes and co-operation of scientists. develop methods of *in situ and ex situ* conser-

vation (new guidelines).

- Breeds can be assisted/supported by collecting an spreading semen by a gene bank. And support in breeding management by university/ministry/research institute.
- To promote the endangered breeds support should be given to special animal shows organised to school children's, the rearing of endangered breeds could be supported in the agricultural museums, agricultural schools, institutes and universities, animal parks and zoos. Farm AnGR needs to be at the heart of all support for traditional year-round extensive livestock and mixed farming systems. More possibilities for national aid/ support for maintaining a rare breed or a breed in a special farming system.
- Define ABS rules, as applied to AnGR

14. RECOMMENDATIONS

Ch. 5: Recommendation - Legal elements

- The national breeding legislation provides an important framework for national programmes on AnGR management. It is most helpful if national legislation addresses directly the conservation and sustainable use of AnGR. The legislation should be regularly assessed and revised if necessary;
- Stakeholders, especially breeders organisations, should be more actively involved in the policy setting process;
- Implementation of the policy and AnGR management responsibilities where it is directly under ministries should be shared with other relevant institutions and stakeholders
- The NGOs concerned with conservation of native breeds should be established and/or strengthened to support national AnGR conservation and sustainable utilization programmes.
- National legislation should include protection of products from native breeds through measures such as PDO/PGI/TSG and other branded products...)

Ch. 6: Recommendation - National programmes

- Countries that have not yet prepared NSAP or any other National Programme to implement GPA (23.6%), should consider preparation of such a strategic document.
- Increasing public awareness is very important. A number of different ways, such as workshops, seminars, exhibitions, animal shows, publications (booklets, brochures, articles, journals), media, promotional campaigns, etc were identified.
- The most efficient measures include:
    - Education of the young generation (underlining heritage value of native breeds, diversity and quality of products, and their role in maintaining landscape and traditional production systems)
    - Education of consumers and promotion of high quality products at the farm gate to shorten the food chain and support local economy
    - Providing possibilities for a direct contact with farm animals
    - Promotion materials for everyday use
- Strengthening research capacity to support AnGR conservation and sustainable utilization goals
- Strengthening collaboration between policy makers and research institutions in implementation of the GPA

Ch. 7: Recommendation - Definition of breeds

1. Diversity of definitions of breeds doesn't give problems – it is national responsibility

Ch. 8., 9. and 10:

See Country Reports

Ch. 11: Recommendation – Implementation

- Implementation depends very much from national circumstance. Farmers appreciate transparent and simple procedure.
- Extension service involved to support farmers
- Farmers/breeders organisations should be more involved in implementation of subsidy payments

Ch. 12: Recommendation - Methodology

- Subsidies are very important tool for endangered breed's that are not competitive but have to be preserved
- In the future they might be possibilities for more effective conservation and use of native breeds including other support measures e.g. through Rural Development programmes (development of products, LFA, organic, modernisation plus investment, non-agricultural activities, ...)

Ch. 13: Recommendation – Way forward

- Regulations which work in some countries do not fit to other countries. You can't give recommendations fitting all countries.
- Native breeds are mostly used in extensive systems that require a lot of labour (need for compensation)
- Importance of hobby farmers - More love than money.

ANNEX I: QUESTIONNAIRE

QUESTIONNAIRE FOR THE "SUBSIBREED" PROJECT

State / Country: …….

I. CONTACTS DATA:

Name of the National Coordinator (NC):

Institution, agency, others -please describe in the national (NL) and in English (EN) languages):

NL (National language):

EN: (English):

Official address of the NC:

Phone and fax:

E-mail:

Website:

V. LEGAL ARRANGEMENTS RELEVANT TO ANIMAL GENETIC RESOURCES (AnGR)

1. Is there any legal arrangement relevant to Animal Genetic Resources (AnGR) in your country?

☐ Yes ☐ No ☐ Don't know

2. If YES, which regulation, law or any other legal instruments for the management of the farm Animal Genetic Resources at the national level?

NL:

EN:

3. Where are the regulation(s), law or other legal instrument accessible or published?

NL:

EN:

4. Which service/institution is responsible for the overall management of farm Animal Genetic Resources (public service, Ministry, Non-governmental organization, etc.)?

5. Which institution/services are responsible for policy setting?

6. Which Institution/Services are responsible for implementation of AnGR policies?

7. Provide the list of Stakeholders involved in the management of AnGR and describe their roles and responsibilities?

8. Do you have a specialized NGO for AnGR conservation and if so, what are its roles / responsibilities?

VI. COUNTRY PROGRAMME (ACTION PLAN) FOR THE CONSERVATION OF "ANIMAL GENETIC RESOURCES"

9. Does your country have the National programme for Animal Genetic Resources conservations?

☐ Yes ☐ No

10. On what level your national programme for the conservation of AnGR is implemented??

☐ State ☐ Regional ☐ Local……. levels

11. What is the time frame for your National AnFR conservation programme?

☐ Years ☐ On-going ☐ No time limit

12. Is your national programme formally adopted by the Ministry?

13. Who is responsible for the progress evaluation and possible revisions of the programme?

14. Who supervises the implementation of AnGR in situ conservation programme and how is the supervision undertaken?

15. Are the Strategic Priorities of Action for the Global Plan of Action included in the National programme?

☐ Yes ☐ No ☐ Partly

16. Which organization or body is responsible for implementation and carrying out of the National programme for the conservation of farm Animal Genetic Resources?

17. Are there any specific awareness raising or promotion plans/activities in your country?

☐ Yes ☐ No ☐ Partly

17a. If you have any specific awareness raising or promotion plans/activities in your country, please describe them!

18. What is in your opinion "a **knowledge level**" of the wider public in your country about conservation of the Animal Genetic Resources and particularly conservation of autochthonous breeds?

19. What activities take place to build public awareness and promote conservation of farm Animal Genetic Resources – especially the conservation of autochthonous and endangered breeds?

VII. DEFINITION OF BREEDS

20. Could you provide definitions of breeds that are used in your country?

21. Do you have a national system to define a specific breeds (e.g. locally adapted, rare, etc.: - please, provide the definitions that are used in your country)

VIII. THE LEVEL OF THE ENDANGERMENT: CRITERIA AND ASSESSMENT

IX. THE LEVE OF SUBSIDIES

X. BUDGET ALLOCATED FOR AnGR CONSERVATION AT THE NATIONAL LEVEL

22. Do you have the national criteria to evaluate level of endangerment for livestock breeds species? (description and examples)

Livestock species	Description of criteria	Comments
…		…

23. Which organization(s) or body is/are responsible to estimate the level of endangerment and for which species/breeds?

24. Which organization(s) or body is/are monitoring the state of the AnGR at the national or regional level? What is the procedure for monitoring?

25. What are minimal criteria to consider a breed eligible for subsidies?

Species	Breed	Minimal criteria consider a breed eligible for subsidies
Cattle		
Sheep		
Goats		
Horses		
Pigs		
….		

26. Please describe the level of subsidies (€) for in situ conservation in your country for different species / breeds, both for males and females, if applicable:

Species	Breed	Subsidies in € for male animals		Subsidies in € for female animals		Started in year
		No. of animals	Per animal, €	No. of animals	Per animal, €	
Cattle	Breed 1					
	Breed 2					
	Breed 3					
Sheep	Breed 1					
	Breed 2					
…….						

27. Are there subsidies provided both for males and females each year? Are subsidies differ between genders? If so, indicate the differences. If you have different options for subsidies, describe the options.

28. If there is a subsidy for AnGR conservation, what institution is responsible for executing payments?

29. What budget was allocated at the National level for AnGR conservation?

Species	Total amount of money in € - invested by species in 2010	Total amount of money in € - invested last 5 years
Cattle		
Sheep		
Goats		
Horses		
Pigs		
….		

30. What are the trends in the population size of local/autochthonous/ endangerment breeds? Did population of local/autochthonous/ endangerment breeds increase or decrease? (please can you describe in table below

Species	Breed	Decrease	Increase	Stable – no changes	Other
Cattle					
Sheep					
Goats					
Horses					
Pigs					
….					

31. What is the reason that population of local/autochthonous/ endangerment breeds increased or decreased in your opinion?

32. Which level of subsidies would stop a decrease in population size of endangered breed? (payment per head in € for different species/breeds?)

Species	Breed	Yearly payment in € per head
Cattle		
Sheep		
Goats		
Horses		
Pigs		
….		

XI. IMPLEMENTATION OF SUBSIDIES AND SUPPORT MEASURES

33. Do you have other forms of subsidies related to AnGR –please describe?

34. Beside a direct payment, are these any other measures to support farmers participation in the conservation programe (e.g. financial support for investments/renovations etc.)?

35. What are the basic conditions to get subsidies for in situ conservation (foradult animals/young stock)?

36. What are the criteria and conditions for farmers to get subsidies and other forms of support (species and/or breed specific criteria)?

37. What are the obligations of farmers which get subsidies for in situ conservation?

38. Do you have any specific additional projects/support measures for AnGR financed from national and/or international sources?

☐ Yes ☐ No ☐ Don't know

If YES, please describe such project and activities:……..

39. Are activities of different organizations as Breeders associations, breeders organizations, farmers groups, NGO which are involved in the area of AnGR, are financed by the government?

40. Do you have any private foundations and NGO in your country to support the endangered breeds - including financial support? (please describe!)

41. Are there any research or other projects which help to conserve endangered breeds?

☐ Yes ☐ No ☐ Don't know

42. If YES, please describe which projects? For how many years? For which period?

XII. METHODOLOGY FOR CALCULATING SUBSIDIES AND WAY OF PAYMENT

Supports for endangered breeds are intended to preserve the breeds, which are often not competitive with other (more productive) breeds. Support is therefore intended to prevent/replace the loss of income resulting from rearing indigenous breeds.

43. Describe the procedure and method for calculating the amount of subsidy per head in a given breed:

Species	**Breed**	**Procedure or method of calculating the amount of subsidy per head in a given breed**
Cattle		
Sheep		
Goats		
Horses		
Pigs		
….		

44. How is payment of subsidies carried out?36a. Who provides the payment of the subsidies?

45. Who provides the payment of the subsidies?

46. What would happen without subsidies for in situ conservation?

XIII. PROPOSALS FOR IMPROVEMENT OF THE CURRENT SITUATION

47. What in your opinion (as a NC) would be the instruments - legal or other tools for the improvement of the current situation regarding implementation of AnGR conservation programme in your country?

48. What in your opinion can be done to improve AnGR conservation in European regions?

We kindly ask you to describe and propose useful examples for:

- Proposals for improvement in the existing legislation;
- Adoption of exact rules concerning AnGR;
- International cooperation in the conservation farm Animal Genetic Resources;
- Establishment and providing equipment for the international molecular genetics and other laboratories;
- Investment in the equipment necessary for the *ex situ* conservation;
- Investment in the equipment necessary for the *in situ* conservation;
- Completion of the database EFABIS (reduce the number of information for the breeds – only those data that are reliable and directly measurable ...).

Date: _____ **Signature:** _____

ANNEX II:

1. Autochthonous endangered breeds of farm animals – calculated for Serbia (by Srdjan Stojanović)

1.1 Podolian cattle

Simmental cattle				**Podolian cattle (Gray cattle)**				**Difference in costs and incomes**
Costs per cow		**Incomes per cow**		**Costs per cow**		**Incomes per cow**		
		Milk 4.500kg*0,245€ Meat 250kg*2,4€	1102€ 600€			Meat 180kg*2€	360€	-1342€
Fodder - total	1255			Fodder - total	754			
Cow fodder	1005			Cow fodder	613			392
Hey 2.070 kg x 0,113€	234			Hey 1.460 kg x 0,113€	165			
Silage 8.825 kg x 0,033€	291			Silage 3.650 kg x 0,033€	120			
Concentrated fodder – 2.132,5 kg x 0,225€	480			Concentrated fodder – 1.460 kg x 0,225€	328			
Calf fodder	250			Calf fodder	141			109
Hey 233 kg x 0,113€	26			Hey 155 kg x 0,113€	17			
Silage 367 kg x 0,033€	12			Silage 160 kg x 0,033€	5			
Starter 18% proteine 200 kg x 0,283€	57			Starter 18% proteine 253 kg x 0,283€	72			
Starter 16% proteine 367 kg x 0,236€	87			Starter 16% proteine 200 kg x 0,236€	47			
Milk substitution 50 kg x 1,18€	59			Milk substitution	/			
Milk 35 kg x 0,245€	9			Milk	/			
Labor, etc.,.	313			Labor, etc.	247			66
Total / €	1568		1702	Total	1001		360	
Income foregone	- 775 €							
Proposed payment	350 Euro /LU							

Assumptions:

Simmental cattle:

- average weight of cow – 600 kg.;
- average milk productivity – 4.500 kg.;
- average fats of milk - 4 %
- average weight of live calf / 6 months – 250 kg.;

Podolian cattle:

- average weight of live animal – 500 kg.;
- average milk productivity – no milking;
- average fats of milk - no milking;
- average weight of live calf / 6 months – 180 kg.

1.2 Busha cattle

Simmental cattle				**Busha cattle**				**Difference in costs and incomes**
Costs per cow		**Incomes per cow**		**Costs per cow**		**Incomes per cow**		
		Milk 4.500kg*0,245€ Meat 250kg*2,4€	1102€ 600€			Meat 120kg*2,0€	240€	-1462€
Fodder - total	1255			Fodder - total	390			
Cow fodder	1005			Cow fodder	266			739
Hey 2.070 kg x 0,113€	234			Hey 2.000 kg x 0,113€	226			
Silage 8.825 kg x 0,033€	291			Silage	/			
Concentrated fodder – 2.132,5 kg x 0,225€	480			Concentrated fodder – 180 kg x 0,225€	40			
Calf fodder	250			Calf fodder	124			126
Hey 233 kg x 0,113€	26			Hey 1.100 kg x 0,113€	124			
Silage 367 kg x 0,033€	12			Silage	/			
Starter 18% proteine 200 kg x 0,283€	57			Starter 18% proteine	/			
Starter 16% proteine 367 kg x 0,236€	87			Starter 16% proteine 200 kg x 0,236€	/			
Milk substitution 50 kg x 1,18€	59			Milk substitution	/			

Milk 35 kg x 0,245€	9			Milk	/			
Labor, etc.,.	313			Labor, etc.	161			152
Total / €	1568		1702	Total	551		240	
Income foregone	- 445 €							
Proposed payment	**250 Euro /LU**							

Assumptions:

Simmental cattle:

- average weight of cow – 600 kg.;
- average milk productivity – 4.500 kg.;
- average fats of milk - 4 %
- average weight of live calf / 6 months – 250 kg.;

Busha cattle:

- average weight of live animal – 280 kg.;
- average milk productivity – no milking;
- average fats of milk - no milking;
- average weight of live calf / 6 months – 120 kg.

1.3 Domestic buffalo

Simmental cattle				**Domestic Buffalo**				**Difference in costs and incomes**
Costs per cow		**Incomes per cow**		**Costs per cow**		**Incomes per cow**		
		Milk 4.500kg*0,245€ Meat 250kg*2,4€	1102€ 600€			Milk 800kg*0,245€ Meat 200kg*1,7€	196€ 340€	-1166€
Fodder - total	1255			Fodder - total	390			
Cow fodder	1005			Buffulo fodder	266			739
Hey 2.070 kg x 0,113€	234			Hey 2.000 kg x 0,113€	226			
Silage 8.825 kg x 0,033€	291			Silage	/			
Concentrated fodder – 2.132,5 kg x 0,225€	480			Concentrated fodder – 180 kg x 0,225€	40			
Calf fodder	250			Calf-buffalo fodder	124			126
Hey 233 kg x 0,113€	26			Hey 1.100 kg x 0,113€	124			
Silage 367 kg x 0,033€	12			Silage	/			

Starter 18% proteine 200 kg x 0,283€	57			Starter 18% proteine	/			
Starter 16% proteine 367 kg x 0,236€	87			Starter 16% proteine 200 kg x 0,236€	/			
Milk substitution 50 kg x 1,18€	59			Milk substitution	/			
Milk 35 kg x 0,245€	9			Milk	/			
Labor, etc.,.	313			Labor, etc.	160			151
Total / €	1568		1702	Total	551		536	
Income foregone	- 150 €							
Proposed payment	**150 Euro /LU**							

Assumptions:

Simmental cattle:

- average weight of cow – 600 kg.;
- average milk productivity – 4.500 kg.;
- average fats of milk - 4 %
- average weight of live calf / 6 months – 250 kg.;

Domestic buffalo:

- average weight of live animal – 500 kg.;
- average milk productivity – 800 kg;
- average fats of milk - 6,7 %;
- average weight of live calf / 6 months – 200 kg.

2.4.Equine

Thoroughbred				**Nonius, Domestic-Mountain pony, Donkey**				**Difference in costs and incomes between breeding of exotic and rare local breeds**
Costs per mare		**Incomes per mare**		**Costs per mare**		**Incomes per mare**		
		Live foal 1500€	1500€			Meat 220 kgx0,8€	176€	1324
Fodder - total	1110			Fodder - total	643			467
Mare fodder	1002			Mare fodder	557			
Alfaalfa hey 1.500 kg x 0.169€	253			Alfaalfa hey 1.100 kg x 0.169€	186			67

Meadow hey 1.600 kg x 0.113€	181			Hey 1.200 kg x 0,113€	136			45
Oats 1.460 kg x 0,188€	275			Oats 730 kg x 0.188€	138			137
Premix	200			Premix	50			150
Straw 1.100 kg x 0.085€	93			Straw 550 kg x 0.085€	47			46
Foal fodder	108			Foal fodder	86			22
Alfaalfa hey 250 kg x 0.169€	42			Alfaalfa hey 200 kg x 0.169€	34			
Meadow hey 250 kg x 0.113€	28			Meadow hey 200 kg x 0.113€	22			
Oats 200 kg x 0,188€	38			Oats 160 kg x 0,188€	30			
Milk	/			Milk	/			
Labor, etc.,.	900			Labor, etc.	478			422
Total / €	1910		1500	Total	1121		120	
Incomes fore-gone	- 435 €							
Proposed pay-ment	**Nonius: 350 Euro /LU** **Domestic-Mountain pony : 250/LU** **Donkey : 100LU/LU**							

Assumption:

Thoroughbred:

- average weight of mare – 500 kg.;
- average weight of live foal / 6 months – 200 kg.;

Nonius:

- average weight of mare – 500 kg.;
- average weight of live foal / 6 months – 220 kg.

Domestic-Mountain pony:

- average weight of mare – 330 kg.;
- average weight of live foal / 6 months – 150 kg.

Balkan donkey:

- average weight of mare – 200 kg
- average weight of live foal/6 months – 70 kg

2.5. Autochthonous sheep

Sheep breeding, combined direction of production				Breeding of local autochthonous sheep breed				Difference in costs and incomes
Costs per sheep		**Incomes per sheep**		**Costs per sheep**		**Incomes per sheep**		
	€	Milk 100kg*0,80€ Meat 35kg*2€ Wool 3kg*0,2€	80 70 0,6		€	Milk 60kg*0,8€ Meat 20kg*2€ Wool 1,5kg*0,2€	48 40 0,3	-31.8
Fodder	**83,8**			*Fodder*	**53,2**			
Hey 360 kg x 0,08	28,8			Hey 360 kg x 0,08	28q8			5
Concentrated fodder -220 kg x 0,25	55			Concentrated fodder -150 kg x 0,20	24			9
Labor etc.	30			Labor etc.	30			
Total	113,8		150,6		83,3		88,3	
Income foregone	- 32 Euro / per head							
Proposed payment	30 Euro / per head							

2.6 Domestic-Balkan goat

Exotic goat breeding (Alpina)				Breeding of Domestic-Balkan goat				Difference in costs and income
Costs per goat		**Incomes per goat**		**Costs per goat**		**Incomes per goat**		
	€	Milk 530kg*0,245€ Meat 27kg*1,9€	130 51.3		€	Milk 200kg*0,245€ Meat 20kg*1,9€	49 38	-45
Fodder	**96**			*Fodder*	**48.8**			
Hey 460 kg x 0,10	46			Hey 360 kg x 0,08	28,8			10
Concentrated fodder -250 kg x 0,20	50			Concentrated fodder 100 kg x 0,20 EURO	20			6
Labor, veterinary treatments etc.	50			Labor etc.	40			
Total	146		181.3		88.8		87	
Income foregone	- 34,2 Euro / per goat							
Proposed payment	30 Euro / per goat							

Landras								Mangalitsa, Moravka, Resavka							
Keeping costs per sow							**Euro / 1€=106 RSD**	**Keeping costs per sow**		**Extensive production system**					**Euro / 1€=106 RSD**
	Price feed / kg	dailly allowance	head	days	Price per head / total	Price per year			Price feed / kg	daily allowance	head	days	Price per head / total	Price per year	
Price feed / kg during gestation and service period	20	2,8	1	140	7840	16464		Price feed / kg during gestation and service period	17	1,8	1	285	8721	13954	
Prices in the breastfeeding period	24	6	1	30	4320	9072		Prices in the breastfeeding period	18	4	1	50	3600	5760	
Food prices suckling piglets to 15 kg body mass	30	0,4	10,5	30	3780	7938		Food prices suckling piglets to 15 kg body mass	17	0,2	5	60	1020	1632	
Food prices from 15 to 30 kg	27	0,8	9	45	8748	18371		Food prices from 15 to 30 kg	17	0,5	5	60	2550	4080	
Food prices from 30 to 60 kg	15,5	2,2	8,5	60	17391	36521		Food prices from 30 to 60 kg	17	1,5	4	90	9180	14688	
Food prices from 60 to 100 kg	15	2,7	8	60	19440	40824		Food prices from 60 to 100 kg	17	1,5	4	90	9180	14688	
Prolonged fattening food prices	14,5	3	8	30	10440	21924		Prolonged fattening food prices	17	1,5	4	50	5100	8160	
Boars	24	3	1	365	26280	26280		Boars	18	2	1	365	13140	13140	
Labor, etc.,.					18000	38000		**Labor, etc.,.**					18000	36000	
Total expenses per sow					116239	215394	1096,6	Total expenses per sow					70491	112102	665,009
Fatling sow /1 farrow	8	100 kg		800 kg x150 din	120000			**Fatling sow /1 farrow**	4	100 kg		400 kg x180 din	72000		679,245
Fatling sow /1 year	17	**100 kg**		**1700 kg x150 din**		255000	2405,7	Fatling sow /1 year	6,4	**100 kg**		**640 kg x180 din**		115200	1086,79
Income per farrow					3761		35,481	Income per farrow					1509		14,2358
Income per sow per year						39606	373,64	**Income per sow per year**						3098,4	29,2302
Incomes foregone															
Proposed payment												100 € /head			

2.8 Poultry – Sombor Crested, Svrljig Hen and Banatski Naked Neck

Intensive breeds of poultry in small scale farming			**Domestic poultry**			**Difference in costs and incomes**
Costs per laying hen		**Incomes per hen**	**Domestic poultry**		**Incomes hen**	
		260 eggs x 0.08 € = **20.8 €**			120 eggs x 0.08 € = **9.6 €**	11.2€
Fodder - total	**45.62 kg x 0.25€ = 11.405 €**		*Fodder - total*	**36.0 kg x 0.2€ = 7.2 €**		1.924
Additives, veterinary treatments	**1.50€**		Additives, veterinary treatments	**0.4 €**		0.8
Labor, etc.,.	**0.30€**		*Labor, etc.*	0.20€		0
Total / €	**13.205 €**		**Total**	**7.8€**		12.624
Income foregone	**5.795** €					
Proposed payment	**5 Euro /head**					

ANNEX III: SLOVENIA

Draft calculation (case by CIKA breed)

Les income by “local breed” in comparison with “standard” breed

MILK	standard cattle b.	Local Cika breed
INCOME		
Milk yield, kg	4.200	3.000
Milk price	0,30 €	0,30 €
Value of milk	1.260,00 €	900,00 €
difference		-360,00 €
COSTS		
Body weight, kg	600	450
Value of food (fodder)	756,00 €	555,95 €
Rest cost per cow	504,00 €	504,00 €
Total	1.260,00 €	1.059,95 €
LOSS of income (by milk)		-159,95 €

MEAT		
INCOMME		
Wight of fattening animals	540	405
Dressing %	56	53
Value 1 kg meat	2,95 €	2,75 €
Value of 1 animal	892,08 €	590,29 €
difference		-301,79 €
COST		
Fodder value (share)	75%	69%
Cost for fodder	669,06 €	501,80 €
Rest of cost	223,02 €	223,02 €
Total	892,08 €	724,82 €
Difference		-167,27 €
Cost of fodder per 1 kg body weight	1,24 €	1,24 €
Rest of cost per 1 kg body weight	0,41 €	0,55 €
Total cost per 1 kg body weight	1,65 €	1,79 €
Difference cost per 1 kg body weight		0,14 €
LOSS of income by meat		-134,53 €
TOTAL LOSS per cow per year		-294,48 €

Difference for farmer with Cika cattle is approx. 200 € per cow per year (90 % cows by Cika cattle is reared like suckler cows.

Reference level (proposal to Ministry) of support for rearing indigenous breeds of farm animals for farmer's in Slovenia

Breed	Product	Subsidies per animal	Subsidies per LU
Cika cattle	milk	200,00 €	200,00 €
Cika cattle – for meat prod.	meat	80,00 €	80,00 €
Bovec sheep	milk	30,00 €	200,00 €
Istrian pramenka	milk	60,00 €	400,00 €
Drežnica goat – milk direction	milk	60,00 €	400,00 €
Drežnica goat – meet direction	meat	50,00 €	333,33 €
Jezersko-solčava sheep	meat	15,00 €	100,00 €
Bela Krajina pramenka sheep	meat	50,00 €	333,33 €
Krškopolje pig /sow	meat	100,00 €	200,00 €
Posavje horse	meat	120,00 €	120,00 €
Slovenian Cold-Blooded horse	meat	80,00 €	80,00 €
Styrian hen	eggs	2,80 €	200,00 €

Acknowledgements

We would like to thank the organization ERFP and ERFP Secretariat that it has approved, funded and supported this project SUBSIBREED

Special thanks to all national coordinators and their colleagues for obtaining a number of data

Special thanks to Elzbieta MARTYNIUK for her great contribution

Great big thank to Marija KLOPČIČ, who has done a tremendous job in creating this publication

Project coordinator

Drago KOMPAN