



Country report

supporting the preparation of

The Second Report on the State of the World's Animal Genetic Resources for Food and Agriculture,

including sector-specific data contributing to

The State of the World's Biodiversity for Food and Agriculture

- 2013 -

Country: Albania

I. EXECUTIVE SUMMARY

Please provide an executive summary (not more than two pages) that will allow national and international stakeholders to gain a quick overview of the content of the country report.

The executive summary should contain information on:

- key trends and driving forces affecting animal genetic resources management in your country;
- strengths, weaknesses and gaps in capacity to manage animal genetic resources in your country;
- key constraints and challenges with respect to animal genetic resources management in your country;
- priorities and strategic directions for future action (focusing particularly on the next ten years).

The first Albanian *Status Report for Animal Genetic Resources*, 2002, documented the country's existing animal genetic resources and identified the principal challenges, demands, needs, trends and national capacity building requirements related to conservation and use of the country's declining AnGR. According to this Report Albania was one of the few countries that:

1. has not prepared and do not have effective policies, institutions and tools for conservation and economic sustainable use of AnGR.
2. has not established the identification, recording and performance control systems
3. the necessary infrastructures and financial support for the implementation of breeding programs, in-situ conservation and/or genetic improvement programs are very low
4. has not established a National Database and National *Ex-situ* conservation Gene Bank

Albania was among the countries where:

1. the awareness level of farmers community and political makers, towards AnGR is low and insufficient,
2. the level of knowledge and capacities for techniques and technologies transfer, in order to conserve and use animal genetic resources is among the lowest in the region
3. cooperation among farmers does not exist
4. market for traditional food does not exist

Evaluating this situation and with the aiming at improving it, FAO has supported a Technical Cooperation Project "Capacity Building to support in-situ conservation and use of animal genetic resources", September, 2004-December 2005. The main outputs of this project were: (i) development of a National Strategy for conservation, management and sustainable use of AnGR; (ii) strengthen the professional and technical capacities among key stakeholders to implement Strategy and National Action Plan; (iii) establish National Network to support implementation of NAP; (iv) recommendations for designing an appropriate legislative framework relevant to AnGR.

During the last ten years and especially after adoption of GAP, Ministry of Agriculture has led the work to implement the National Action Plan for AnGR.

The main achievements carried out during this period can be listed as follows:

1. Establish a National Survey System for the identification, characterization, monitoring trend and associated risks for native/indigenous breeds. Compiling the Albanian Catalog of AnGR and Red Book for breeds at risk of extinction.
2. Implementation of Animals Identification System (ear tags)
3. Compiling and implementing programs and project at national and local level for sustainable use of AnGR and support the farmers and other operators to develop and strength the capacities following the needs of different production systems-intensive, semi intensive, extensive and traditional system of production:
 - 3.1 Support to strengthen the capacities of Public Extension Service, Public Veterinarian Service and research institutions.
 - 3.2 Capacity building to support collaboration among farmers in order to implement breeding programmes and *in-situ* conservation programmes.
 - 3.3 Organizing and carrying out training process at national and local levels
 - 3.4 Organizing and developing campaigns to raise awareness among decision makers, farmers and other stakeholders.
4. Implementation of *in-situ* conservation programmes for the Albanian Buffalo, three strains of native pig breeds, Ilyrian Dwarf cattle "Albanian Prespa Cattle", Busha cattle, "Caporre e Mokrres" and "Velipoja" goat breeds, "Shkodrane" and "Lara e Polisit" sheep breeds.
5. Establish the Subsidy System for native/indigenous breeds at risk of extinction.
6. The national and local policies for management and sustainable use of AnGR were developed in the framework of the Rural Development Strategy.
 - 6.1. support revitalization and development of traditional production system,
 - 6.2. revitalization of the traditional processing methods,
 - 6.3. increase farmer`s access to local market
 - 6.4. capacity building to support development of eco-agro tourism.
7. Strengthen the institutional capacities:
 - 7.1. establish the NCC and their ToR development.
 - 7.2. support to strengthen capacities of National Network for AnGR.
8. Development the legislative framework relevant to AnGR in light of international legal framework and EU-legislation:
 - 8.1. amendment of "On Animal breeding" Act
 - 8.2. compiling a set of bylaw, sub ordinary acts and regulations in field of conservation and use of AnGR.
9. Develop the international, regional and cross border collaboration:
 - 9.1. participation in different regional projects, financed by ERFP, FAO
 - 9.2. participation in international workshops and scientific events
 - 9.3. work coordination in order to compile the common strategy and conservation programs for trans-boundary breeds.

Although the above mentioned achievements are positive developments, the expectations are not fully exhaustive. The main obstacles and problems faced by the conservation, management, development and sustainable use of AnGR may be listed as follows:

1. The identification system/matriculation of the animals is not complete and is not fully functional.
2. The system of recording and performance control is not established yet.
3. The farmers are not organized in effective breeding associations.
4. The farmers and other stakeholders awareness about the value of AnGR, as key factor for rural development, is low.
5. The level of development of different public service as Extension and Veterinarian services and development of the capacities of private services, are low.
6. Lack of financial support for identification and characterization of native/indigenous/local breeds, and for developing the capacities for the implementation of a periodic census system and establish the National Data.
7. Lack of support to develop the national and local capacities, in-situ conservation programmes, breeding programmes, sustainable economic use of AnGR, private initiative for establish the new breeding technologies and develop the intensive production system, farmers` initiative for revitalization of tradition production system and traditional processing methods,
8. Lack of a realistic vision about the future development of AnGR and lack of a clear policy for the import of exotic breeds.
9. Low level of public funds for research activities.
10. Sufficient development of legal framework.

11. Sufficient level of international, regional and cross-border collaboration.

Development of capacities for the management of AnGR, their conservation and sustainable use is one the priorities of the new Albanian Government. The most important developments foreseen to be implemented during next ten years are as follows:

1. Update of National Strategy and National Action Plan to approximate them with GPA.
2. Implement the National Program for sustainable development of Identification System (earmarking and registration) (I&RS)
3. Strengthen the national capacities for implement the identification, characterization, monitoring trend of associated risks, development and sustainable use of AnGR:
 - 3.1 prepare the methodology and implement the national census and develop the National DataBase of AnGR,
 - 3.2 develop the national protocols for phenotypic and molecular characterization, and strengthen research capacities,
 - 3.3 capacity building to support setting up and development of Productive Performance Recording System (PPRS).
 - 3.4 capacity building to support farmer`s collaboration for implement breeding programs and in-situ conservation programs - establish the breeding associations, herd books and breed books
4. Strengthen the capacities of National Network of AnGR
5. Strengthen the capacities of local market, enhance the interaction between local genetic resources and quality products, development the infrastructures for enhance the eco-agro tourism.
6. Establish the National Cyo conservation gene bank and National *Ex-situ in vivo* gene bank, National Network of Rescue Stations and Arks Farms.
7. Establish the National Agency for AnGR
8. Development of the institutional capacities and skills for implementing the Nagoya Protocol
9. Development of the legal framework relevant to AnGR in light of International legal framework and EU legislations
10. Strengthen the capacities to support development of international, regional and cross border collaborations.

II. DATA FOR UPDATING THE PARTS AND SECTIONS OF *THE STATE OF THE WORLD'S ANIMAL GENETIC RESOURCES FOR FOOD AND AGRICULTURE*

FLOWS OF ANIMAL GENETIC RESOURCES

1. Studies of gene flow in animal genetic resources have generally concluded that most gene flow occurs either between developed countries or from developed countries to developing countries. Does this correspond to the pattern of gene flow into and out of your country?

For developed countries, exceptions to the usual pattern would include significant imports of genetic resources from developing countries. For developing countries, exceptions would include significant exports of genetic resources to developed countries, and/or significant imports and/or exports of genetic resources to/from other developing countries.

- yes
 no
 yes but with some significant exceptions

1.1. If you answer "no" or "yes but with some significant exceptions", please provide further details. Please include information on: which species are exceptions and which regions of the world are the sources and/or destinations of the respective genetic material.

2. Have there been any significant changes in patterns of geneflow in and out of your country in the last ten years?

- yes
 no

2.1. If yes, please indicate whether this view is based on quantified data (e.g. import and export statistics collected by the government).

- yes

no

2.2. If yes, please provide references (preferably including web links) (if relevant, indicate which types of animal genetic resources are covered).

<http://www.bujqesia.gov.al/Statistical.yearbook>

During the last ten years the import was done as follows

Cattle - all the biological material for A.I. (bull semens) are imported.

Sheep - Import of "Ile de France" sheep breed, is increased during last ten years. This exotic breed used for cross-breeding, only.

Goat - Import of "Alpine" goat breed, is increased during last ten years. This breed breeding as pure breed under the intensive production system and for cross-breeding with local breeds. The cross-breeding under the semi intensive or extensive production system.

Pig - only exotic imported breeds breeding under the intensive production system. The rest of pig population is crossed with the local breed farmed under the small scale family farm system.

Albania does not export live animals or other type of biological materials, part of their (native, indigenous) farm animal genetic resources.

2.3. Please also describe the changes, indicating the species involved, the direction of the changes, and the regions of the world to and from which the patterns of imports and exports have changed.

To improve the production performances of dairy cattle live animals were imported - Holsten breed from Netherlands and Germany, Jersey form Danimark, Taranteze from France and Simental from Austria. After 2005 the National Bull station was closed. The bull semens are imported from different European countries and USA.

The natural matting is frequent in mountainous regions. A regressive process to native breeds has started.

"Alpine" goat breed are imported from France

"Ile de France" sheep breed are imported from France

Exotic pig breeds are imported from European countries, like Italy, Hungaria etc.

3. Please describe how the patterns of geneflow described under Questions 1 and 2 affect animal genetic resources and their management in your country.

Note: Please answer this question even if the pattern of geneflow into and out of your country corresponds to the "usual" pattern described in the first sentence of Question 1 and/or has not changed significantly in the last ten years.

As a consequence of import, not only during last ten years, but the import that was done during last 60 years, the local cattle breeds almost disappeared.

Import of exotic breed of cattle have as a consequences increased the number of farms breeding animals under the intensive and semi intensive production system. Number of family farms farming up to 5 - 10 cows has been increasing during the last ten years, also.

The intensive cross- breeds of local sheep breeds with exotic sheep breeds, during 40 last years, particularly in lowland and hilly areas has been due to the extinction of native breeds. The purpose of production system has changed during the years. Up to `70 years increase of the wool production was dominant. During 1970-1990 the objective of genetic improvement programs were to increase milk and meat production. After `90 and actually, increasing of meat production was/is the objective. These changes have affected the export of exotic breeds. Years ago the Merinos or Tsigai breeds importet form Bulgaria, Rusia etc dominate. Actually "Il de Frace" form France and "Kois" from Greece dominate.

The process of replacement of local pig breeds with exotic breeds has been due to the extinction of native breeds.

LIVESTOCK SECTOR TRENDS

4. Please indicate the extent to which the following trends or drivers of change have affected or are predicted to affect animal genetic resources and their management in your country and describe these effects.

*Note: Relevant impacts on animal genetic resources and their management might include, for example, changes in the type of animal genetic resources kept (e.g. different breeds or species), changes in the uses to which animal genetic resources are put, changes in the geographical distribution of different types of animal genetic resources, increases or decreases in the number of breeds at risk of extinction, changes in the objectives of breeding programmes, changes in the number or type of conservation programmes being implemented, etc. In the text sections, please briefly describe the changes. If possible, provide some concrete examples of the challenges or opportunities presented by the respective drivers and the actions taken to address these challenges or opportunities. If relevant, you may also indicate why a given driver is not affecting animal genetic resources and their management in your country. For a general discussion of drivers of change, please see *The State of the World's Animal Genetic Resources for Food and Agriculture (Part 2, Section A)* (<http://www.fao.org/docrep/010/a1250e/a1250e00.htm>).*

Drivers of change	Impact on animal genetic resources and their management over last ten years	Future impact on animal genetic resources and their management (predicted for the next ten years)	Describe the effects on animal genetic resources and their management
Changing demand for livestock products (quantity)	low	medium	Increasing the import of exotic breeds has/will affect to increase of the number of native/ autochthonous/ local breeds at risk of extinction
Changing demand for livestock products (quality)	none	none	
Changes in marketing infrastructure and access	none	low	Planned development of road infrastructures and increased the access of farmers to the local market will affect the growth of add value of production of native/autochthonous/local breeds and will increase interest of farmers for their breeding
Changes in retailing	none	none	Market in Albania is in development stage. Differences between the organized market as supermarkets and the unorganized trade have no impact on FAnGR
Changes in international trade in animal products (imports)	low	medium	Albania is among the countries that have high level of the import of animals of exotic breeds / per habitant. This has affected and will affect the genetic structure of the animal genetic fund, reducing the weight of native breeds
Changes in international trade in animal products (exports)	none	none	Albania not export of genetic material
Climatic changes	none	none	There are no studies or assessments to measure the impact of climate change in farms animal genetic resources

Drivers of change	Impact on animal genetic resources and their management over last ten years	Future impact on animal genetic resources and their management (predicted for the next ten years)	Describe the effects on animal genetic resources and their management
Degradation or improvement of grazing land	low	low	Although the ownership of pastures and meadows is different, such as private, municipal and state property, the adequate implementation of technologies that would make possible their maintenance and effective and sustainable use almost does not apply of these cases. Grazing land is mostly considered only as a source of profit. Lack of investment for their maintenance and intensive exploitation are among the main factors for their degradation. Initiatives for improvement are weak. These initiative mainly belong to communal pastures and meadows, for which overgrazing is a frequent phenomenon, which leads at the highest rate of degradation. Farmers awareness toward the negative consequences of this phenomenon and their inability to invest in pastures, are among the main factors encouraging these initiatives. Farmer's cooperation on using the pasture and meadows, stands at the base of these initiatives. Pasture / meadow are divided into plots and grazing is done based on the principle of circulation run of the plots. According to farmers, this way of using communal pasture / meadow increases the amount of animals farmed in small scale family farms.
Loss of, or loss of access to, grazing land and other natural resources	low	low	Access to grazing land or other natural resources carried following the traditional rules. In the communal pastures overgrazing is frequent. The regulations for using the pastures and other natural resources are not clear and well defined. Deforestation has increased erosion. These have contributed to reducing the food supply for animals, especially for the small ruminant and, consequently, their size population decreasing.
Economic, livelihood or lifestyle factors affecting the popularity of livestock keeping	medium	medium	The migration of population to urban areas has reduced the size population of animals in mountainous and hilly areas. Lack of interest of young people to work and live in rural areas affects the decreasing of size population of animals breeding in this areas.
Replacement of livestock functions	none	none	
Changing cultural roles of livestock	none	none	
Changes in technology	low	low	The process of implementation of the new technologies in animal production system is very slow. The extensive and low input production system is most frequently. Consequently, the need for new technologies is low and their impact in animal genetic resources is not significant.

Drivers of change	Impact on animal genetic resources and their management over last ten years	Future impact on animal genetic resources and their management (predicted for the next ten years)	Describe the effects on animal genetic resources and their management
Policy factors	low	medium	Policies that affect the livestock sector are developed into the Crosscutting Strategy for Rural development and Agricultural and Food Sectoral Strategy, 2007-2013. The part of these policies and related Action Plans in above strategies and national action plans are small and their impact were small. The update of these Strategies for 2014- 2020 period, will be started soon. Development of policies and programs for protected areas, in which attention is paid to monitoring the relationship between flora - forests, meadows, pastures and animals, goats and sheep in particular, is a welcomed actual development.
Disease epidemics	none	none	During last ten years not outbreaks of animal diseases. A national network of rescue station to preserve the native animal breeds has started to be establish.

OVERVIEW OF ANIMAL GENETIC RESOURCES

5. Please provide the number of locally adapted and exotic breeds kept in your country.

Data on the number of breeds is needed in order to calculate the percentage of breeds subject to the various management activities that are covered in this questionnaire. In line with the request of the Commission on Genetic Resources for Food and Agriculture at its Fourteenth Regular Session (CGRFA-14/13/Report, paragraph 31), FAO will implement the "locally adapted" vs. "exotic breed" classification system in the Domestic Animal Diversity Information System (DAD-IS). Once countries have fully updated their breed lists and classified all breeds in DAD-IS, it will be possible to use these data to obtain the numbers of breeds in each category.

Species	Locally adapted breeds	Exotic breeds
Cattle (specialized dairy)	2	4
Cattle (specialized beef)	0	0
Cattle (multipurpose)	0	1
Sheep	7	3
Goats	8	2
Pigs	1	1
Chickens	1	2
Asses	2	0
Buffaloes	1	0
Rabbits	1	0
Turkeys	2	0

CHARACTERIZATION

To provide further details of your country's activities in the field of characterization, surveying and monitoring, please go to Strategic Priority Area 1 of the "Progress report on the implementation of the Global Plan of Action for Animal Genetic Resources 2007–2013" (below).

6. Please provide an overview of the current state of characterization in your country by indicating the extent to which the activities shown in the following table have been carried out.

Note: Please focus on characterization studies that have been conducted within the last ten years (baseline surveys of population size may have been conducted in the more distant past). Recall that some types of characterization study on your country's breeds may have been conducted outside your country. For the first two columns, please insert the number of breeds; for columns 3 to 8 please choose one of the following categories: none; low (approximately <33%); medium (approximately 33–67%); high (approximately >67%).

Species	Baseline survey of population size	Regular monitoring of population size	Phenotypic characterization	Molecular genetic diversity studies – within breed	Genetic diversity studies based on pedigree	Molecular genetic diversity studies – between breed	Genetic variance component estimation	Molecular genetic evaluation
Cattle (specialized dairy)	2	1	medium	medium	none	medium	none	none
Cattle (specialized beef)	0	0	none	none	none	none	none	none
Cattle (multipurpose)	0	0	none	none	none	none	none	none
Sheep	4	3	medium	medium	none	medium	none	none
Goats	5	2	medium	medium	none	medium	none	none
Pigs	1	1	low	none	none	none	none	none
Chickens	0	0	low	low	none	low	none	none
Asses	1	0	low	none	none	none	none	none
Buffaloes	1	0	medium	medium	none	medium	none	none
Rabbits	1	0	low	none	none	none	none	none
Turkeys	1	0	medium	none	none	none	none	none

INSTITUTIONS AND STAKEHOLDERS

To provide further details of your country's activities in the field of institutions and stakeholders, please go to Strategic Priority Area 4 of the "Progress report on the implementation of the Global Plan of Action for Animal Genetic Resources 2007–2013" (below).

7. Please indicate the state of your country's capacities and provisions in the following areas of animal genetic resources management.

	Score
Education	low

	Score
Research	low
Knowledge	low
Awareness	medium
Infrastructure	medium
Stakeholder participation	low
Policies	medium
Policy implementation	low
Laws	medium
Implementation of laws	low

8. Please provide further information regarding your country's capacities in each of the above-mentioned areas of management. If relevant, please indicate what obstacles or constraints your country faces in each of these areas and what needs to be done to address these constraints. You may also provide information on any particular successes achieved in your country in any of these areas and on the reasons for these successes.

	Description
Education	Agricultural university is the most important public institution that offer the tertiary education in field of animal production. Part of students that attend study in this field is small, 8-12% only. In addition, at national level are 4 agricultural high schools, only. The interest of young people to study in this field is low.
Research	After the reform in field of scientific research, that was made during the period 2005-2008, the agricultural university is the public institution in-charged to carry out the research in field of animal genetic resources. Low level of human capacities and lab infrastructures, not enough public funds, and lack of experiences to collaboration in frame of PF7 and other international scientific programs could be listed as the obstacles. The system of non public research centre/institutes not exist.
Knowledge	The public extension service is responsible to organize and disseminate knowledge. Their capacities are limited. Centre for Agricultural Technologies Transfer in Fushe Kruja and Korca are the most important public institution that has as the targets the disseminate of the knowledge in field of conservation, management and sustainable use of animal genetic resources, but their financial possibilities are low.
Awareness	Organizing and development of the awareness campaign as effective, permanent and sustainable activity is very harsh work. The public fund to support this activities are limited. NGO-s and/or other non public institution has not interest to support, as a sustainable activity, the awareness campaign in field of animal genetic resources.
Infrastructure	Investments made during the last ten years of road infrastructure, with the objective - connecting rural areas to urban areas and in particular, connection with the coastal regions that have opportunities for development the tourism activities, have a good impact on animal genetic resources, in general and to realize the add value in animal products of native/ local breeds, in particular. Poor road infrastructure in hill, mountainous and isolated areas have a negative impact to animal genetic resources. The farmers has the limited possibility to profit by the public service like as veterinary and extension service. Their access to the local market is not good.
Stakeholder participation	Lack of the collaboration between the farmers, low farmers interest to establish the breeding association, lack of policies to support the capacity building of the NGO-s that exist and working in field of animal genetic resources can be listed as the most important negative factors.

	Description
Policies	In frame of Crosscutting Strategy for Rural Development and Agricultural and Food Sectoral Strategy, 2007-2013, during last ten years, in national and local levels, have developed a number of policies in field of animal genetic resources. Support of initiative for investment in livestock, policies to reduction of the taxes, as example, import taxes for agricultural machineries or other input, subsidies for native/local breeds that are at risk of extinction, subsidies for farmers that establish the commercial farms with more that 50 cows or more 100 sheep/goat, policies for subsidies of animal production processing center etc. have a positive impact to animal genetic resources.
Policy implementation	Between the policies and their implementation an important gap is evident. Among the reasons could be listed: (i) lack of the necessary budgetary funds, (ii) lack of institutional infrastructure and human capacities for monitor the situation and evaluate fulfillment of the conditions to benefit from the subsidiaries system and/or taxes policies, (iii) low level of public information, (iv) low level of transparency etc.
Laws	The development of legal framework relevant to animal genetic resources in light of international and EU legislations was one of the most important process carried out during last ten years. The acts "For animal breeding", "For veterinarian Service", "For animal food", etc, different bylaw and decisions of Council of ministers, regulations etc. was developed. The actual legal framework is a good support for development and sustainable use of farm animal genetic resources. Despite this the new development are necessary.
Implementation of laws	The experiences underline that the development of the legal framework is a necessary factor, only. Their implementation is more important. The important gap exist.

9. What steps have been taken in your country to engage or empower the various stakeholders in animal genetic resources management (e.g. establishment of livestock keepers' organizations, development of biocultural community protocols)?

Note: Biocultural community protocol: a document that is developed after a community undertakes a consultative process to outline their core cultural and spiritual values and customary laws relating to their traditional knowledge and resources. For a discussion of the potential role of biocultural community protocols in the conservation of animal genetic resources, please see the guidelines In vivo conservation of animal genetic resources (<http://www.fao.org/docrep/018/i3327e/i3327e.pdf>).

The legal framework to support the farmers organizations exist. The law "Support of farmers` cooperatives" was approved three years ago, despite this only one cooperative is established. It is necessary to elaborate new tools and instruments that should be more effective. The bio-cultural community protocols have not elaborated yet.

BREEDING PROGRAMMES

Note: Breeding programmes: systematic and structured programmes for changing the genetic composition of a population towards a defined breeding goal (objective) to realize genetic gain (response to selection), based on objective performance criteria. Breeding programmes typically contain the following elements: definition of breeding goal; identification of animals; performance testing; estimation of breeding values; selection; mating; genetic gain and transfer of genetic gain. Breeding programmes are usually operated either by a group of livestock breeders organized in a breeders' association, community-based entity or other collective body; by a large commercial breeding company; or by the government.

To provide further details of your country's activities in the field of breeding programmes, please go to Strategic Priority Area 2 of the "Progress report on the implementation of the Global Plan of Action for Animal Genetic Resources 2007–2013" (below).

10. Who operates breeding programmes in your country?

Note: the objective of this question is to identify which stakeholders lead or organize the breeding programmes that exist in your country. Stakeholder participation in the implementation of the various elements of breeding programmes is covered under Question 15. If you wish to provide further information on the activities of the various stakeholder groups (including collaborative activities on an international scale), please provide it in the text section of Question 15.

Species	Government	Livestock keepers organized at community level	Breeders' associations or cooperatives	National commercial companies	External commercial companies	Non-governmental organizations	Others
Cattle (specialized dairy)	no	no	no	no	no	no	no
Cattle (specialized beef)	no	no	no	no	no	no	no
Cattle (multipurpose)	no	no	no	no	no	no	no
Sheep	no	yes	no	no	no	no	no
Goats	no	yes	no	no	no	no	no
Pigs	no	no	no	yes	no	no	no
Chickens	no	no	no	yes	no	no	no
Asses	no	no	no	no	no	no	no
Buffaloes	no	yes	no	no	no	no	no
Rabbits	no	no	no	no	no	no	no
Turkeys	no	yes	no	no	no	no	no

10.1. If you choose the option "others", please indicate what kind of operator(s) this refers to.

The breeding program for dairy cattle, in the real sens of the word, is not implemented. The identification of animal (ear tags) was established but not use for breeding programs aims. The performance control is not established, neither has the progeny test and the bull stations. To produce the next generation, about 65 percent of cattle population, is under the AI, using the imported biologic materials. The rest of population uses the natural mating with uncontrolled bulls. The selection of foreign bulls is done by those operators that are importing the semen. The mating is done by the operator of AI with the farmers agreement.

Breeding programs for sheep and goat is implemented by farmers themselves. Such programs should be understood in the terms of the selection of male reproductive, rams or bucks, using the empiric informations and the organization and implementation of their turnover scheme in village`s farms.

The breeding program implemented into the commercial pig farms and in industrial complex farming the fattening pigs, is based on imported breeds. A national commercial company produce the sows and boars for the needs of farms that producing pig meat, also.

The industrial complex that produce eggs or poultry meat, broilers, use only the imported genetic material.

In the family farms or in small commercial poultry farms the breeding programs is not implemented.

The breeding programs for native /autochthonous/local cattle, pig, sheep, goat, buffalo and turkey breeds are being implemented only in farms that are under in-situ conservation programs, as part of these programs. The performance control implemented, selection of reproductive animals, compiling and implementing mating scheme with the objective to reduce the level of inbreeding are part of the activities of these breeding and in-situ conservation programs.

11. For how many breeds in your country are the following activities undertaken?

Note: Please do not include activities that are only undertaken for experimental purposes, i.e. include only activities that directly serve or involve livestock keepers. However, please include activities even if they do not at present form part of a breeding programme. The intention is to obtain an indication of whether the “building blocks” of a breeding programme are available or being developed in your country. Loc = Locally adapted breeds; Ex = Exotic breeds.

Species	Tools																
	Animal identification		Breeding goal defined		Performance recording		Pedigree recording		Genetic evaluation (classic approach)		Genetic evaluation including genomic information		Management of genetic variation (by maximizing effective population size or minimizing rate of inbreeding)		Artificial insemination		
	Loc	Ex	Loc	Ex	Loc	Ex	Loc	Ex	Loc	Ex	Loc	Ex	Loc	Ex	Loc	Ex	
Cattle (specialized dairy)	2	3	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3
Cattle (multipurpose)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Sheep	6	3	2	1	2	1	0	0	0	0	0	0	0	0	0	0	0
Goats	6	2	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
Pigs	1	1	0	1	0	1	0	1	0	1	0	0	0	0	0	0	1
Asses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buffaloes	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rabbits	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkeys	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

12. Please indicate how many of the breeds in your country are subject to breeding programmes applying the following breeding methods.

Note: Loc = Locally adapted breeds; Ex = Exotic breeds.

Species	Breeding method			
	Straight/pure-breeding only		Straight/pure-breeding and cross-breeding	
	Loc	Ex	Loc	Ex
Cattle (specialized dairy)	2	3	0	0
Cattle (specialized beef)	0	0	0	0
Sheep	6	1	1	2
Goats	5	2	2	2
Pigs	1	1	0	0
Asses	0	0	0	0
Buffaloes	1	0	0	0
Rabbits	0	0	0	0
Turkeys	1	0	0	0

13. Please indicate the state of research and training in the field of animal breeding in your country.

Species	Training	Research
Cattle (specialized dairy)	low	low
Cattle (specialized beef)	none	none
Cattle (multipurpose)	none	none
Sheep	low	medium
Goats	low	medium
Pigs	low	none
Chickens	none	low
Asses	none	none
Buffaloes	none	low
Rabbits	none	low
Turkeys	none	low

14. Please indicate the extent to which livestock keepers in your country are organized for the purposes of animal breeding.

Species	Organization of livestock keepers
Cattle (specialized dairy)	low
Cattle (specialized beef)	none
Cattle (multipurpose)	none
Sheep	low
Goats	low
Pigs	none
Chickens	none
Asses	none
Buffaloes	low

Species	Organization of livestock keepers
Rabbits	none
Turkeys	low

15. Please indicate the level of stakeholder involvement in the various elements of breeding programmes in your country.

Note: If your country has different types of breeding programme, the level of involvement of the various stakeholders may vary from one type of programme to another. In answering this question please try to indicate the overall degree of involvement of the various stakeholder groups.

Cattle (specialized dairy)	Government	Research organizations	Breeders' associations or cooperatives	Individual breeders/livestock keepers	National commercial companies	External commercial companies	Non-governmental organizations	Others
Setting breeding goals	none	none	none	low	none	none	none	none
Animal identification	high	none	none	medium	none	none	none	none
Recording	none	low	none	low	none	none	low	none
Provision of artificial insemination services	none	none	none	medium	medium	none	none	none
Genetic evaluation	none	none	none	none	none	none	none	none

Cattle (multipurpose)	Government	Research organizations	Breeders' associations or cooperatives	Individual breeders/livestock keepers	National commercial companies	External commercial companies	Non-governmental organizations	Others
Setting breeding goals	none	none	none	none	none	none	none	none
Animal identification	high	none	none	low	none	none	none	none
Recording	none	none	none	none	none	none	none	none
Provision of artificial insemination services	none	none	none	low	none	none	none	none
Genetic evaluation	none	none	none	none	none	none	none	none

Sheep	Government	Research organizations	Breeders' associations or cooperatives	Individual breeders/livestock keepers	National commercial companies	External commercial companies	Non-governmental organizations	Others
Setting breeding goals	none	none	none	low	none	none	none	none
Animal identification	high	none	none	medium	none	none	none	none
Recording	none	low	none	none	none	none	none	none
Provision of artificial insemination services	none	none	none	none	none	none	none	none
Genetic evaluation	none	none	none	none	none	none	none	none

Goats	Government	Research organizations	Breeders' associations or cooperatives	Individual breeders/livestock keepers	National commercial companies	External commercial companies	Non-governmental organizations	Others
Setting breeding goals	none	none	none	none	none	none	none	none
Animal identification	high	none	none	low	none	none	none	none
Recording	none	low	none	none	none	none	none	none
Provision of artificial insemination services	none	none	none	none	none	none	none	none
Genetic evaluation	none	none	none	none	none	none	none	none

Pigs	Government	Research organizations	Breeders' associations or cooperatives	Individual breeders/livestock keepers	National commercial companies	External commercial companies	Non-governmental organizations	Others
Setting breeding goals	none	none	none	low	medium	none	none	none
Animal identification	high	none	none	low	medium	none	low	none
Recording	none	low	none	low	medium	none	low	none
Provision of artificial insemination services	none	none	none	none	none	none	none	none
Genetic evaluation	none	none	none	none	none	none	none	none

15.1. If you choose the option "others", please indicate what kind of operator(s) this refers to.

Operators that import the biologic material (bull semen) and operators that provide the service of Artificial insemination.

15.2. Please provide further information on the roles that the stakeholders identified in the table play in the implementation of the various activities. If relevant, please also provide further information on the organizational roles played by the stakeholders identified in Question 10.

Government is responsible to implement the system of animal identification for cattle, sheep, goat and pig. Ministry of Agriculture and their regional and local offices of Veterinary service, in collaboration with farmers organize and implement the animal identification. Actually, under this service are about 75 % of cattle population, 55% of sheep population, 45% of goat population and only 15% of pig population. Monitoring the epizootic situation and implement the veterinarian protocols, are the most important goals of this system.

The recording system is not implemented yet. Recording system and organizational structures for their implementation are partially in place. Only in farms that are under in-situ conservation programs, this system is establish by the research organizations/ NGO in collaboration with the farmers. This system is implement in Ex-situ in vivo conservation Bank, also.

16. Does your country implement any policies or programmes aimed at supporting breeding programmes or influencing their objectives?

Species	Policies or programmes
Cattle (specialized dairy)	yes
Cattle (specialized beef)	no
Cattle (multipurpose)	no
Sheep	yes
Goats	yes
Pigs	yes
Chickens	no
Asses	no
Buffaloes	yes
Rabbits	no
Turkeys	no

16.1. Please describe these policies or programmes, indicating whether or not they include any measures specifically aimed at supporting breeding programmes for locally adapted breeds or any measures specifically aimed at supporting breeding programmes for exotic breeds (including breed-replacement programmes). Please indicate whether different types of programme are promoted in different production systems (and describe the differences).

Species	Description of policies or programmes
Cattle (specialized dairy)	The genetic improvement of dairy cattle, exotic breeds, achieved using the imported biologic materials. The policies like, reduction of the import taxes, subsidies for farmers that establish the commercial farms with more that 50 cow etc. have the indirect impact to genetic improvement of dairy cattle. The policies and programs that have as their target native/ local cattle breeds, in case of in-situ conservation program have direct impact to the breeding programs. Policies of subsidies and support farmers for implement in-situ conservation programs, programs for management and sustainable use of local cattle breeds, policies and programs that have as their objective capacity building to support the traditional system of production and/or traditional processing methods, affect the achievement of breeding programs` objectives.
Cattle (specialized beef)	
Cattle (multipurpose)	The policies like, reduction of the import taxes, subsidies for farmers that establish the commercial farms with more that 50 cows etc. have the indirect impact to genetic improvement of multipurpose cattle.

Species	Description of policies or programmes
Sheep	<p>Only in a few cases the sheep exotic breeds are being breed as pure breed. In these cases the breeding programs uses the imported rams and ewes. The crossbreeds with local breeds is the most important objective. Public policies aims to support implementation of the crossbreeding schemes. The Small Ruminant Station (Public institution) have the responsibilities to organize and implement these schemes. Public extension service provide advises for farmers.</p> <p>The public policies and programs have an impact to native/local sheep breeds only through implementation of the in-situ conservation program and /or through support of programs for sustainable use. Policies of subsidiaries have a positive impact to the breeding programs.</p>
Goats	<p>During the last ten years, the import of goat exotic breeds, Saanne and Alpine breeds, has increased. The importers have imported the breeding programs, too. The crucial point of these programs is the permanent importation of the buck.</p> <p>Crossbreeds of native/local goat breeds with Alpine goat breed has started. The policies to support this process intended to orient the farmers to define clear breeding objectives in accordance with their capacities and future market development.</p> <p>The public policies and programs have impacted the native/local goat breeds only through implementation of the in-situ conservation program and /or through support of the programs for sustainable use. Policies of subsidiaries have a positive impact to the breeding programs.</p>
Pigs	
Chickens	
Asses	
Buffaloes	<p>A successful in-situ conservation program was implemented during the last 10 years. The financial support of farmers farming buffaloes, the subsidiaries policy, was implemented for the first time. The breeding program was compiled by the public institution. The implementation was done in collaboration with a group of farmers.</p>
Rabbits	
Turkeys	

17. Please describe the consequences of your country's breeding policies and programmes, or lack of breeding policies and programmes, for your country's animal genetic resources and their management.

Species	Description of consequences
Cattle (specialized dairy)	<p>Lack of information due to the lack of performance control and recording system, makes it difficult to assess the consequences of breeding policies and programmes. A breeding program to which their genetic improvement part based on imported biologic material, only. In general terms can affirm that, in middle terms development, the phenomena of interaction genotype-mileux, will be a serious problems.</p>
Cattle (specialized beef)	
Cattle (multipurpose)	
Sheep	<p>Without a breeding program it is difficult to evaluate the development of genetic capacities of the breeds, trend and effects of improvement genetic or crossbreeding programs. Lack of breeding programs makes it difficult to monitor the inbreeding coefficient. An effective management of the breeds it is difficult. Despite this, given that extensive system or small scale family farm system of production are dominants, effects of these shortages are not significant in the final output of farming of animal genetic resources. Lack of breeding programs makes it difficult the evaluation of the effect of crossbreeding schemes and, consequently in which stage should be stopped it is difficult to decide.</p>

Species	Description of consequences
Goats	<p>Lack of breeding policies and programs reduce the opportunities to realize the add values in native/local goat breeds.</p> <p>Without breeding policies and programs it will be very difficult to evaluate the effects of crossbreeding and to give the decision about the stage of this genetic improvement process of local breeds with exotic goat breeds.</p> <p>Without breeding programs and the corresponding policies, the investments that have been done in the intensive goat sector, where breeding the imported exotic breeds will not be effective.</p> <p>Notwithstanding this, it is important to underline that, in a situation when extensive system or small scale family farm system of production with low input, are dominants, the negative consequences of lack of policies and programs in the management of both exotic and local goat breed is difficult to evaluated.</p>
Pigs	
Chickens	

18. Please describe the main constraints to the implementation of breeding programmes in your country and what needs to be done to address these constraints. You may also provide information on any particular successes achieved in your country with respect to the establishment and operation of breeding programmes and on the factors that have contributed to these successes.

<p>The main constraints are the following:</p> <ul style="list-style-type: none"> - Insufficient capacities of public and other institutions, like research centers, public extension service, NGO etc. to compile the realistic breeding policies and programs. - Lack of financial support. - Low levels of collaboration between the farmers. - Low level of knowledge about the new breeding technologies, - Low level of awareness in farmers community about the importance of breeding program - Lack or insufficient technical support to implement the breeding programs, - Low economic levels of farmers, weak financial system in rural areas and difficulties in finding funds, necessary for implementation of breeding program - Opinion of the farmers - extensive or small scale family farm system of production with low input that are dominants in goat farming sector not require the breeding program as necessary tool.

19. Please describe future objectives, priorities and plans for the establishment or further development of breeding programmes in your country.

Species	Description of future objectives, priorities and plans
Cattle (specialized dairy)	<p>Elaboration of policies to support the breeding programs, following the characteristics of the production systems, intensive, extensive and small scale family farm system with low input and in accordance with the features of exotic and native/local cattle breeds.</p> <p>Identification (ear tags) of total cattle population and establish the "Inventory book" at each farm with more 10 cows.</p> <p>Capacity building to support regular monitoring of population size and phenotypic characterization</p> <p>Capacity building to support implementation of performance control and recording system in farm under the intensive production system.</p> <p>Establish the breeder's associations and herd books at local and national levels</p> <p>Capacity building to support monitoring of the natural matting</p> <p>Increase the financial support and development of the service's capacities of the financial institutions in rural areas.</p> <p>Strengthen the capacities of the public extension service and center for agricultural technologies transfer.</p> <p>Support the private and communitaries initiatives in field of conservation and sustainable use of native/local cattle breeds.</p> <p>Elaboration the new tools to support implementation of the breeding programs</p> <p>Strengthen the capacities of the research institution necessary for carried out the molecular genetic diversity studies etc..</p>

Species	Description of future objectives, priorities and plans
Cattle (specialized beef)	
Cattle (multipurpose)	Establish the breeder`s association and herd books at local and national levels
Sheep	Elaboration of policies to support the breeding programs, following the characteristics of the production systems, intensive, semi intensive and extensive and in accordance with the features of native/local sheep breeds and their crosses with exotic breed like as Ilde France, Tsigaiia, Kios and Merinos. Identification (ear tags) of total sheep population and establish the "Inventory book" at each farm with more 50 milked sheep. Capacity building to support the implementation of performance control and recording system in farm under the intensive production system. Establish the breeder's associations at local and national levels Capacity building to support monitoring of the natural matting at village levels
Goats	Capacity building to support renovation and development of traditional production system and traditional processing method of goat productions. Increasing investment in road infrastructure in hill and mountainous regions. Support the collaboration between the farmers for establish the goat breeder`s associations at local and national levels. Policies elaboration to support the breeding programs, following the characteristics of the production systems, intensive, semi intensive and extensive and in accordance with the features of native/local goat breeds and their crosses with exotic breed like Saanne and Alpine goat breeds Identification (ear tags) of total goat population and establish the "Inventory book" at each farm with more 50 milked goats. Capacity building to support implementation of performance control and recording system in farm under the intensive production system. Capacity building to support monitoring of the natural matting at village levels
Pigs	
Chickens	
Buffaloes	Elaboration of the breeding program and support of farmer's community to implement it. Establish the herd book and pedigree book

CONSERVATION

To provide further details of your country's activities in the field of conservation, please go to Strategic Priority Area 3 of the "Progress report on the implementation of the Global Plan of Action for Animal Genetic Resources 2007–2013" (below).

20. Please provide an indication of the extent to which your country's breeds are covered by conservation programmes.

Please focus on at-risk breeds and breeds for which there are serious grounds for concern about their potential to fall into the at-risk category in the near future. Countries should not reduce their scores because of a lack of conservation programmes for breeds that are clearly not at risk. The main purpose of this question is to obtain an indication of the extent to which your country's conservation programmes meet the objective of protecting breeds from extinction. If your country has no official national criteria for classifying breed risk status or lacks the relevant data for identifying which breeds are at risk, please base your answers on estimations. Please also note that Question 8 of the "Progress report on the implementation of the Global Plan of Action for Animal Genetic Resources – 2007 to 2013" (below) requests countries to provide information on the criteria they use to assess the risk status of animal genetic resources.

Note: n/a = no programmes implemented because all breeds of this species present in the country are secure.

Species	In situ conservation	Ex situ in vivo conservation	Ex situ in vitro conservation
Cattle (specialized dairy)	medium	low	none
Cattle (specialized beef)	none	none	none
Cattle (multipurpose)	none	none	none
Sheep	medium	low	none

Species	In situ conservation	Ex situ in vivo conservation	Ex situ in vitro conservation
Goats	low	none	none
Pigs	medium	none	none
Chickens	none	none	none
Asses	none	none	none
Buffaloes	high	none	none
Rabbits	none	none	none
Turkeys	low	none	none

21. Does your country use formal approaches to prioritize breeds for conservation?

- yes
 no

21.1. If so, which of the following factors are considered?

Note: See Sections 2 and 3 of the FAO guidelines In vivo conservation of animal genetic resources (<http://www.fao.org/docrep/018/i3327e/i3327e.pdf>).

	Considered in formal prioritization approaches
Risk of extinction	yes
Genetic uniqueness	no
Genetic variation within the breed	no
Production traits	no
Non-production traits	no
Cultural or historical importance	no
Probability of success	no

22. Please indicate which of the following methods are used as elements of in situ conservation programmes in your country and which operators are managing them.

Note: Operators: the sector(s) that initiate(s) and manage(s) the respective activities. If both sectors undertake the respective activity, please answer "yes" in both rows. Please answer "yes" if the respective sector only works with some of the species targeted. If necessary, details of which sector addresses which species can be provided in the textual response. Information on what kinds of public- or private-sector organizations undertake the activities can also be provided, if necessary, in the textual response. Species targeted: Please answer "yes" if there are any such activities targeting the respective species, whether they are undertaken by the public sector, private sector or both.

Operators / Species targeted	Promotion of niche marketing or other market differentiation	Community-based conservation programmes	Incentive or subsidy payment schemes for keeping at-risk breeds	Development of biocultural community protocols	Recognition/award programmes for breeders	Conservation breeding programmes	Selection programmes for increased production or productivity in at-risk breeds	Promotion of at-risk breeds as tourist attractions	Use of at-risk breeds in the management of wildlife habitats and landscapes	Promotion of breed-related cultural activities	Extension programmes to improve the management of at-risk breeds	Awareness-raising activities providing information on the potential of specific at-risk breeds
Public sector	no	no	yes	no	no	yes	no	no	no	no	yes	yes
Private sector	yes	yes	no	no	yes	yes	yes	yes	no	yes	no	yes
Cattle (specialized dairy)	yes	yes	yes	no	no	yes	no	yes	no	no	yes	yes
Cattle (specialized beef)	no	no	no	no	no	no	no	no	no	no	no	no
Cattle (multipurpose)	no	no	no	no	no	no	no	no	no	no	no	no
Sheep	yes	yes	yes	no	yes	yes	yes	yes	no	yes	yes	yes
Goats	yes	yes	yes	no	yes	yes	yes	yes	no	yes	yes	yes
Pigs	yes	yes	no	no	yes	yes	yes	no	no	yes	yes	yes
Chickens	no	no	no	no	no	no	no	no	no	no	no	no
Asses	no	no	no	no	no	no	no	no	no	no	no	no
Buffaloes	no	yes	yes	no	yes	yes	yes	no	no	no	yes	yes
Rabbits	no	no	no	no	no	no	no	no	no	no	no	no
Turkeys	no	no	no	no	no	no	no	no	no	yes	no	yes

22.1. Please provide further details of the activities recorded in the table and any other in situ conservation activities or programmes being implemented in your country.

23. Does your country have an operational in vitro gene bank for animal genetic resources?

In vitro gene bank: a collection of documented cryoconserved genetic material, primarily stored for the purpose of medium- to long-term conservation, with agreed protocols and procedures for acquisition and use of the genetic material.

- yes
 no

23.1. If your country has no in vitro gene bank for animal genetic resources, does it have plans to develop one?

- yes
 no

23.2. If yes, please describe the plans.

Actually the in vitro gene bank exist but it is not operational. After the finish of the activity of National Bull Station, the equipments and stored biologic material was transfered to Center for Agricultural Technology Transfer, Fushe -Kruja. The biologic materials that are stored in this in vitro gene bank (semen) belong to bulls of different exotic breeds that was used for Artificial Insemination during the last twenty years. Process for establish the operational in vitro gene bank have started. The first action is the work for preparing the legal framework in order to establish the National Gene Bank for Somatic cells conservation. The list of native/local breeds at risk of extinction was compiled. The collection of blood samples and skin or tissues samples will start soon.

24. If your country has an in vitro gene bank for animal genetic resources, please indicate what kind of material is stored there.

	Stored in national genebank
Semen	yes
Embryos	no
Oocytes	no
Somatic cells (tissue or cultured cells)	no
Isolated DNA	no

25. If your country has an in vitro gene bank for animal genetic resources, please complete the following table.

Species	Number of breeds for which material is stored	Number of breeds for which sufficient material is stored	Does the collection include material from not-at-risk breeds?	Have any extinct populations been reconstituted using material from the gene bank?	Have the gene bank collections been used to introduce genetic variability into an in situ population?	Have the gene bank collections been used to introduce genetic variability into an ex situ population?	Do livestock keepers or breeders' associations participate in the planning of the gene banking activities?
Cattle (specialized dairy)	5	5	yes	no	no	no	no
Cattle (specialized beef)	4	4	no	no	no	no	no
Cattle (multipurpose)	1	1	no	no	no	no	no
Sheep	0	0	no	no	no	no	no
Goats	0	0	no	no	no	no	no
Pigs	0	0	no	no	no	no	no
Chickens	0	0	no	no	no	no	no

25.1. Please provide further details of the activities recorded in the table (including any examples of the use of gene bank material to reconstitute populations or introduce genetic variability) and any other in vitro conservation activities or programmes being implemented in your country.

Have stored the semens of bulls of "Black and White" and "Jersey" breeds, that was breed ten years ago in National Bull Station. The semens of imported bulls "Holsten" "Jersey", "Simental", "Taranteze" and bulls of meat breeds "Limuzine", "Charole", "Blu Belg", "Piemonteze" have been stored, too.

26. Does your country have plans to enter into collaboration with other countries to set up a regional or subregional in vitro gene bank for animal genetic resources?

- yes
- no

26.1. If yes, please describe the plans, including a list of the countries involved.

In frame of the EUGENA - European Genebank Network for AnGR project, the opportunity to to establish collaboration with other countries with the objective to set up a regional in vitro gene bank for AnGR, shall be taken in consideration. The Ministry of Agriculture has agreed to start the discussion with the neighboring countries to set up the Balkan in vitro gene bank for AnGR

27. If there have been any cases in your country in which breeds that were formerly classified as at risk of extinction have recovered to a position in which they are no longer at risk, please list the breeds and describe how the recovery was achieved.

Ten years ago Albanian buffaloes was classified at risk of extinction. The size population was 56 animals. An in-situ conservation programme, with the financial support of Ministry of Agriculture and GEF Small grants, was implemented. The subsidies, also. Actually, the population size is about 325 cows and 21 bull, that breeding in three different regions. Six year ago, in Velipoja region, have started implementation of in-situ conservation program for conservation of three strains of native pigs at risk of extinction. The program was financed by public fund, GEF Small grants and SAVE Foundation. Actually, an ark farm and a rescues station is established. The size population is increase. With the pubic fund, GEF-Small grants and SAVE foundation financial support was implemented the in-situ conservation program for native cattle breed " Lopa e Prespes". The breeder`s association and two nukleus herds was established.

REPRODUCTIVE AND MOLECULAR BIOTECHNOLOGIES

28. Please indicate the level of availability of reproductive and molecular biotechnologies for use in livestock production in your country.

Note: low = at experimental level only; medium = available to livestock keepers in some locations or production systems; high = widely available to livestock keepers.

Species	Biotechnologies								
	Artificial insemination	Embryo transfer	Multiple ovulation and embryo transfer	Semen sexing	In vitro fertilization	Cloning	Genetic modification	Molecular genetic or genomic information	Transplantation of gonadal tissue
Cattle (specialized dairy)	high	none	none	none	none	none	none	none	none
Cattle (multipurpose)	high	none	none	none	none	none	none	none	none

28.1. Please provide additional information on the use of these biotechnologies in your country.

About 65% of dairy cattle population is under the Artificial Insemination. Under AI are all populations of exotic breeds like as Holstein, Jersey, Taranteze that breeding as pure breed. The AI applies to about 50-55 % of their crosses with the local breed. Natural mating is used in native/local cattle populations. Simental is the multipurpose cattle breed that breeding in Albania. The animals are improted and the all population is under AI, using the imported seemen. Albania import about 150.000 - 200.000 doses semen/ years, from different European countries and USA. AI used for crosses (industrial crosses) the dairy cattle breeds with meat cattle breeds, like as Limousine, Charole, Pimonteze etc., to produce F1 beef calves. Semen importation evaluate to about 30.000 - 35.000 doses/year.

29. If the reproductive and/or molecular technologies are available for use by livestock keepers in your country, please indicate which stakeholders are involved in providing the respective services to the livestock keepers.

	Stakeholders					
	Public sector	Breeders' associations or cooperatives	National non-governmental organizations	Donors and development agencies	National commercial companies	External commercial companies
Artificial insemination	no	no	yes	no	yes	no
Embryo transfer	no	no	no	no	no	no

29.1. Please provide additional information on the roles that the providers identified in the table play in the provision of biotechnology services in your country.

The AI is organized and implemented like a private activity. Different operators are in place. Importation of the biological material is an activity that should obtain a license by the Ministry of Agriculture and Licences Public Office. The semen qualities are evaluated by the Public National Lab. of semen evaluation. Actually, some national commercial companies and NGOs have license to import sperm. The A.I service is done by private operators, that are distributed in almost all regions of the country. In coastal lowland regions A.I. service covers almost all cattle population. This service is not well organized in hill and mountainous areas. In these regions natural mating is frequent.

30. Please indicate which biotechnologies your country is undertaking research on.

Biotechnologies	Public or private research at national level	Research undertaken as part of international collaboration
Artificial insemination	no	no
Embryo transfer or MOET	no	no
Semen sexing	no	no
<i>In vitro</i> fertilization	no	no
Cloning	no	no
Genetic modification	no	no

Biotechnologies	Public or private research at national level	Research undertaken as part of international collaboration
Use of molecular genetic or genomic information for estimation of genetic diversity	no	no
Use of molecular genetic or genomic information for prediction of breeding values	no	no
Research on adaptedness based on molecular genetic or genomic information	no	no

30.1. Please briefly describe the research.

No research in biotechnology.

31. Please estimate the extent to which artificial insemination (using semen from exotic and/or locally adapted breeds) and/or natural mating is used in your country's various production systems.

Note: low = approximately <33% of matings; medium = approximately 33–67% of matings; high = approximately >67% of mating; n/a = production system not present in this country.

Cattle (specialized dairy)	Ranching or similar grassland-based production systems	Pastoralist systems	Mixed farming systems (rural areas)	Industrial systems	Small-scale urban or peri-urban systems
Artificial insemination using semen from locally adapted breeds	n/a	n/a	none	none	none
Artificial insemination using nationally produced semen from exotic breeds	n/a	n/a	none	none	none
Artificial insemination using imported semen from exotic breeds	n/a	n/a	medium	high	medium
Natural mating	n/a	n/a	low	none	low

Cattle (multipurpose)	Ranching or similar grassland -based production systems	Pastoralist systems	Mixed farming systems (rural areas)	Industrial systems	Small-scale urban or peri-urban systems
Artificial insemination using semen from locally adapted breeds	n/a	n/a	none	none	none
Artificial insemination using nationally produced semen from exotic breeds	n/a	n/a	none	none	none
Artificial insemination using imported semen from exotic breeds	n/a	n/a	high	high	high
Natural mating	n/a	n/a	none	none	none
Sheep	Ranching or similar grassland -based production systems	Pastoralist systems	Mixed farming systems (rural areas)	Industrial systems	Small-scale urban or peri-urban systems
Artificial insemination using semen from locally adapted breeds	none	none	none	n/a	none
Artificial insemination using nationally produced semen from exotic breeds	none	none	none	n/a	none
Artificial insemination using imported semen from exotic breeds	none	none	none	n/a	none
Natural mating	high	high	high	n/a	high

Goats	Ranching or similar grassland -based production systems	Pastoralist systems	Mixed farming systems (rural areas)	Industrial systems	Small-scale urban or peri-urban systems
Artificial insemination using semen from locally adapted breeds	none	none	none	none	none
Artificial insemination using nationally produced semen from exotic breeds	none	none	none	none	none
Artificial insemination using imported semen from exotic breeds	none	none	none	none	none
Natural mating	high	high	high	high	high
Pigs	Ranching or similar grassland -based production systems	Pastoralist systems	Mixed farming systems (rural areas)	Industrial systems	Small-scale urban or peri-urban systems
Artificial insemination using semen from locally adapted breeds	n/a	n/a	none	none	none
Artificial insemination using nationally produced semen from exotic breeds	n/a	n/a	none	none	none
Artificial insemination using imported semen from exotic breeds	n/a	n/a	none	low	none
Natural mating	n/a	n/a	high	high	high

Buffaloes	Ranching or similar grassland -based production systems	Pastoralist systems	Mixed farming systems (rural areas)	Industrial systems	Small-scale urban or peri-urban systems
Artificial insemination using semen from locally adapted breeds	n/a	n/a	none	n/a	none
Artificial insemination using nationally produced semen from exotic breeds	n/a	n/a	none	n/a	none
Artificial insemination using imported semen from exotic breeds	n/a	n/a	none	n/a	none
Natural mating	n/a	n/a	high	n/a	high

32. Please provide further details on the use of reproductive and molecular biotechnologies in animal genetic resources management in your country. Please note any particular constraints to implementing these activities and any problems associated with their use. Please indicate what needs to be done to address these constraints and/or problems. You may also provide information on any particular successes achieved in your country in the use of biotechnologies in animal genetic resources management and on the factors that have contributed to these successes.

A.I is applied to specie of cattle, only. To use this biotechnology to other species like sheep, goat or pig, it needs for:

- human resources
- equipments
- support for carried out the technologies transfer
- financial support

III. DATA CONTRIBUTING TO THE PREPARATION OF *THE STATE OF THE WORLD'S BIODIVERSITY FOR FOOD AND AGRICULTURE*

INTEGRATION OF THE MANAGEMENT OF ANIMAL GENETIC RESOURCES WITH THE MANAGEMENT OF PLANT, FORESTRY AND AQUATIC GENETIC RESOURCES

1. Please indicate the extent to which the management of animal genetic resources in your country is integrated with the management of plant, forestry and aquatic genetic resources. Please describe the collaboration, including, if relevant, a description of the benefits gained by pursuing a collaborative approach.

	Extent of collaboration	Description
Development of joint national strategies or action plans	none	The National Action Plans related to National Strategies of conservation and sustainable use of Plant and Forestry and Strategy of AnGR, does not foresee common activities. Discussion about the need and possibilities for development of joint strategies and action plans between Ministry of Agriculture and Ministry of Environment, has started. The Strategy and Action Plan of aquatic resources is not compiled yet
Collaboration in the characterization, surveying or monitoring of genetic resources, production environments or ecosystems	none	
Collaboration related to genetic improvement	none	
Collaboration related to product development and/or marketing	none	
Collaboration in conservation strategies, programmes or projects	limited	In projects that have as objectives conservation and management of protected areas are foreseen activities of conservation and sustainable use of animal genetic resources too. For example in the project for the protection of the natural park and ecosystem of Prespa Lake, conservation and sustainable use of native cattle breed "Illyric Dwarf Cattle - Prespa Cattle" is one of their objective.
Collaboration in awareness-raising on the roles and values of genetic resources	limited	In frame of awareness campaign that have as objective the sensibilization of decision-makers, farmers communities and other stakeholders about the role and values of biological diversity in sustainable rural development, in some cases were realized common activities between NGO-s that implement projects of plant and forestry preservation and sustainable use and those working for conservation of AnGR.
Training activities and/or educational curricula that address genetic resources in an integrated manner	none	
Collaboration in the mobilization of resources for the management of genetic resources	limited	In some cases the collaboration in the mobilization of resources for the management of genetic resources are implemented as initiatives of different local NGO-s

2. Please describe any other types of collaboration.

<p>Collaboration in awareness campaign:</p> <ul style="list-style-type: none"> - promote both the traditional plant and animal productions in local and national fairs - organizing the field open days in forestry region and/or in farms that farming and cultivate native breed/varieties plants <p>Organizing the joint scientific activities, or awareness activities, for example:</p> <ul style="list-style-type: none"> - National Symposium on Biodiversity as crucial factor for rural sustainable development. - European Biodiversity Day (EAD) - 29 September
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3. If relevant, please describe the benefits that could be achieved by strengthening collaboration in the management of genetic resources in the animal, plant, forest and aquatic sectors in your country. If specific plans to increase collaboration are in place, please describe them and the benefits foreseen

The level of collaboration in the management of genetic resources in the animal, plant, forest and aquatic sectors is low or inexistent and it is impossible to evaluate the benefits.
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4. Please describe any factors that facilitate or constrain collaborative approaches to the management of genetic resources in your country.

It is important to increase the sensitivity of decision -makers about the necessities for capacity building in order to support the collaboration between different stakeholders - Ministry of Agriculture, Rural Development and Water Management, Ministry of Environment and Forestry, Ministry of Tourism, Ministry of Education, Agricultural University and other national actors like National NGOs.
Start of a consultation process to develop a common document where are clearly defined priority areas of cooperation and strategic action plan priorities, is needed.

5. If there are constraints, please indicate what needs to be done to overcome them.

Capacity building to support drafting of National Strategy on Biodiversity - joint strategy for conservation and use of plant, forestry, aquatic, animal genetic resources, domesticated and wild, is needed.

ANIMAL GENETIC RESOURCES MANAGEMENT AND THE PROVISION OF REGULATING AND SUPPORTING ECOSYSTEM SERVICES

6. Do your country's policies, plans or strategies for animal genetic resources management include measures specifically addressing the roles of livestock in the provision of regulating ecosystem services and/or supporting ecosystem services?

Regulating ecosystem services: "Benefits obtained from the regulation of ecosystem processes" – Millennium Ecosystem Assessment. 2005. Ecosystems and human well-being: synthesis. Washington D.C., Island Press (available at <http://millenniumassessment.org/documents/document.356.aspx.pdf>), page 40. Supporting ecosystem services: "Services necessary for the production of all other ecosystem services" – Millennium Ecosystem Assessment. 2005. Ecosystems and human well-being: synthesis. Washington D.C., Island Press (available at <http://millenniumassessment.org/documents/document.356.aspx.pdf>), page 40.

yes

no

6.1. If yes, please describe these measures and indicate which supporting and/or regulating ecosystem services are targeted, and in which production systems.

Examples of supporting and regulatory ecosystem services provided by livestock might include the following: provision or maintenance of wildlife habitats (e.g. via grazing); seed dispersal (e.g. in dung or on animals' coats); promoting plant growth (e.g. stimulating growth via grazing or browsing); soil formation (e.g. via the supply of manure); soil nutrient cycling (e.g. via supply of manure); soil quality regulation (e.g. affecting soil structure and water-holding capacity via trampling or dunging); control of weeds and invasive species (e.g. via grazing or browsing invasive plants); climate regulation (e.g. by promoting carbon sequestration through dunging); enhancing pollination levels (e.g. by creating habitats for pollinators); fire control (e.g. by removal of biomass that may fuel fires); avalanche control (e.g. grazing to keep vegetation short to reduce the probability that snow will slide); erosion regulation (e.g. indirect via fire control services); maintenance of water quality and quantity (e.g. indirect effect via erosion control); management of crop residues (e.g. consumption of unwanted crop residues by animals); pest regulation (e.g. by destruction of pests or pest habitats); disease regulation (e.g. by destruction of disease vectors or their habitats); buffering of water quantities – flood regulation (e.g. indirect effect via fire and erosion control).

6.1.1 Please describe what the outcome of these measures has been in terms of the supply of the respective ecosystem services (including an indication of the scale on which these outcomes have been obtained).

6.1.2 Please describe what the outcome of these measures has been in terms of the state of animal genetic resources and their management (including an indication of the scale on which these outcomes have been obtained).

7. Do your country's policies, plans or strategies for animal genetic resources management include measures specifically addressing environmental problems associated with livestock production?

Examples might include choosing to use particular species or breeds because they are less environmentally damaging in a given ecosystem or adapting breeding goals to produce animals that have some characteristic that makes them more environmentally friendly.

- yes
 no

7.1. If yes, please describe these measures and indicate the environmental problems that are targeted, and in which production systems.

7.1.1 Please describe what the outcome of these measures has been in terms of the reduction of the respective environmental problem (including an indication of the scale on which these outcomes have been obtained).

7.1.2 Please describe what the outcome of these measures has been in terms of the state of animal genetic resources and their management (including an indication of the scale on which these outcomes have been obtained).

8. Please describe any constraints or problems encountered or foreseen in the implementation of measures in your country aimed at promoting the provision of regulating and supporting ecosystem services or reducing environmental problems.

9. Please provide examples of cases in which the role of livestock or specific animal genetic resources is particularly important in the provision of regulating and/or supporting ecosystem services in your country. Please also describe any examples in which diverse animal genetic resources are important in terms of reducing the adverse environmental effects of livestock production.

10. Please describe the potential steps that could be taken in your country to further expand or strengthen positive links between animal genetic resources management and the provision of regulating and/or supporting ecosystem services or the reduction of environmental problems. If your country has specific plans to take further action in this field, please describe them.

With the support of GEF-UNDP, the Ministry of Environment has started the up-date process of the National Strategy on Biodiversity. In frame of this process the issues regarding the links between animal genetic resources management and ecosystem services are foreseen to be discussed.

11. Please provide any further information on the links between animal genetic resources management in your country and the provision of supporting and/or regulating ecosystem services and/or the reduction of environmental problems.

IV. PROGRESS REPORT ON THE IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION FOR ANIMAL GENETIC RESOURCES – 2007 TO 2013

Note: Please provide further details in the text boxes below each question, including, if relevant, information on why no action has been taken.

STRATEGIC PRIORITY AREA 1: CHARACTERIZATION, INVENTORY AND MONITORING OF TRENDS AND ASSOCIATED RISKS

- The state of inventory and characterization of animal genetic resources
- The state of monitoring programmes and country-based early warning and response systems
- The state of international technical standards and protocols for characterization, inventory, and monitoring

1. Which of the following options best describes your country's progress in building an inventory of its animal genetic resources covering all livestock species of economic importance (SP 1, Action 1)?

Glossary: An inventory is a complete list of all the different breeds present in a country.

- a. Completed before the adoption of the GPA
- b. Completed after the adoption of the GPA
- c. Partially completed (further progress since the adoption of the GPA)
- d. Partially completed (no further progress since the adoption of the GPA)

Please provide further details:

The inventory for most livestock species have been done before the adoption of the GPA. After 2007, three local cattle populations, three local sheep breeds, four local poultry populations, local rabbit, three local pig populations and two strains of donkey have been identified.

2. Which of the following options best describes your country's progress in implementing phenotypic characterization studies covering morphology, performance, location, production environments and specific features in all livestock species of economic importance (SP 1, Actions 1 and 2)?

- a. Comprehensive studies were undertaken before the adoption of the GPA
- b. Sufficient information has been generated because of progress made since the adoption of the GPA
- c. Some information has been generated (further progress since the adoption of the GPA)
- d. Some information has been generated (no further progress since the adoption of the GPA)
- e. None, but action is planned and funding identified
- f. None, but action is planned and funding is sought
- g. None

Please provide further details:

Morphological and phenotypic characterization started before the adoption of the GPA and it is an ongoing process. The human and financial capacities at local and national level are limited. Since the adoption of the GPA the phenotypic characterization-morphologic traits, production and reproduction features, was done for Alpine breed and their crosses with local goat breeds, Jersey cattle breed farming under the small scale family production system, native cattle breed "Busha", two strains of local donkey, local rabbits.

3. Which of the following options best describes your country's progress in molecular characterization of its animal genetic resources covering all livestock species of economic importance (SP 1)?

- a. Comprehensive studies were undertaken before the adoption of the GPA

- b. Sufficient information has been generated because of progress made since the adoption of the GPA
- c. Some information has been generated (further progress since the adoption of the GPA)
- d. Some information has been generated (no further progress since the adoption of the GPA)
- e. None, but action is planned and funding identified
- f. None, but action is planned and funding is sought
- g. None

Please provide further details:

Studies on molecular characterization are done only in the framework of international collaboration. The main achievements after 2007:
 Cattle: Albanian Prespa cattle, 46 samples; "Busha" Cattle, 55 samples, Illyrian Dwarf cattle " Red of Scutary", 14 samples
 Sheep: "Ruda" breed, 135 samples; "Bardhoke" breed, 210 samples; "Recka" local sheep breed, 86 samples; "Shkodrane"- breed, 65 samples;
 Poultry: one local population, 50 samples;
 Pigs: three local breeds, 30 samples.
 Three years ago a comprehensive laboratory was established at the Agriculture University. Five molecular characterization studies for four local breeds of small ruminants and one native breed "Koran", fish has started.

4. Has your country conducted a baseline survey of the population status of its animal genetic resources for all livestock species of economic importance (SP 1, Action 1)?

Glossary: A baseline provides a reference point for monitoring population trends. Population status refers to the total size of a national breed population (ideally, also the proportion that is actively used for breeding and the number of male and female breeding animals).

- a. Yes, a baseline survey was undertaken before the adoption of the GPA
- b. Yes, a baseline survey has been undertaken or has commenced after the adoption of the GPA
- c. Yes, a baseline survey has been undertaken for some species (coverage increased since the adoption of the GPA)
- d. Yes, a baseline survey has been undertaken for some species (coverage not increased since the adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

The survey of population status is being developed only for species at risk of extinction. Local structures of the National Farm Animal Genetic Resources Network are responsible for performing this work.

5. Have institutional responsibilities for monitoring the status of animal genetic resources in your country been established (SP 1, Action 3)?

Glossary: Monitoring is a systematic set of activities undertaken to document changes in the population size and structure of animal genetic resources over time.

- a. Yes, responsibilities established before the adoption of the GPA
- b. Yes, responsibilities established after the adoption of the GPA
- c. No, but action is planned and funding identified
- d. No, but action is planned and funding is sought
- e. No

Please provide further details:

The National Network for Farm Animal Genetic Resources, one of the most important outputs of the project TCP/ALB/3001(A) FAO, is the responsible institution for monitoring the status of animal genetic resources in Albania.

6. Have protocols (details of schedules, objectives and methods) been established for a programme to monitor the status of animal genetic resources in your country (SP 2)?

- a. Yes, protocols established before the adoption of the GPA
- b. Yes, protocols established after the adoption of the GPA
- c. No, but action is planned and funding identified
- d. No, but action is planned and funding is sought
- e. No

Please provide further details:

The protocols that are implemented in Albania provide data on population size, effective population size, number and size of farms, and geographical distribution of local breeds. At the end of each year a technical report is compiled.

7. Are the population status and trends of your country's animal genetic resources being monitored regularly for all livestock species of economic importance (SP 1, Action 2)?

- a. Yes, regular monitoring commenced before the adoption of the GPA
- b. Yes, regular monitoring commenced after the adoption of the GPA
- c. Yes, regular monitoring is being undertaken for some species (coverage increased since the adoption of the GPA)
- d. Yes, regular monitoring is being undertaken for some species (coverage not increased since the adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

Only breeds declared at risk of extinction are monitored regularly.

8. Which criteria does your country use for assessing the risk status of its animal genetic resources (SP 1, Action 7)?

Glossary: FAO has developed criteria that it uses to allocate breeds to risk-status categories based on the size and structure of their populations (<http://www.fao.org/docrep/010/a1250e/a1250e00.htm>).

- a. FAO criteria
- b. National criteria that differ from the FAO criteria
- c. Other criteria (e.g. defined by international body such as European Union)
- d. None

Please provide further details. If applicable, please describe (or provide a link to a web site that describes) your national criteria or those of the respective international body:

If the criteria is the "effective population size" for estimating the level of risk of extinction:

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 is "the number of breeding females" estimation of the level of "risk of extinction":

Level of the risk	Cattle	Equines	Sheep & goats	Pigs	Rabbits	Poultry
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

9. Has your country established an operational emergency response system (<http://www.fao.org/docrep/meeting/021/K3812e.pdf>) that provides for immediate action to safeguard breeds at risk in all important livestock species (SP 1, Action 7)?

- a. Yes, a comprehensive system was established before the adoption of the GPA
- b. Yes, a comprehensive system has been established since the adoption of the GPA
- c. For some species and breeds (coverage expanded since the adoption of the GPA)
- d. For some species and breeds (coverage not expanded since the adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

10. Is your country conducting research to develop methods, technical standards or protocols for phenotypic or molecular characterization, or breed evaluation, valuation or comparison? (SP 2, Action 2)

- a. Yes, research commenced before the adoption of the GPA
- b. Yes, research commenced after the adoption of the GPA
- c. No, but action is planned and funding identified
- d. No, but action is planned and funding is sought
- e. No

Please provide further details:

11. Has your country identified the major barriers and obstacles to enhancing its inventory, characterization and monitoring programmes?

- a. Yes
- b. No
- c. No major barriers and obstacles exist. Comprehensive inventory, characterization and monitoring programmes are in place.

Please provide further details. If barriers and obstacles have been identified, please list them:

- Lack of financial means and sufficient human resources.
- The funding of programs for the identification and characterization of local breeds/populations of animals is not enough
- Insufficient funds for the scientific research work should be done by academic institutions and especially for the Agriculture University, that has as main objective phenotypic characterization of local populations of animals.
- Lack of human capacities in Centers of Agricultural Technology Transfer and Public Extension Service that should monitoring the programs
- There have neither public institutions nor private facilities nor farmers' groups or associations that could carried out the work for phenotypic characterization or for implementing and monitoring breeding programs.
- The level of public awareness about the values of the native/local animal genetic resources genetic, is low, in general and among the farming community, in particular.
- Low level of economic development.
- Lack of knowledge and lack of the necessary infrastructure for inventory, characterization and monitoring programs.

12. If applicable, please list and describe the measures that need to be taken to address these barriers and obstacles and to enhance your country's inventory, characterization and monitoring programmes:

We are trying to use other programs, operating in agriculture and rural development, to overcome some of these obstacles and to enhance our country inventory and characterization programs of animal genetic resources.

13. Please provide further comments on your country's activities related to Strategic Priority Area 1: Characterization, inventory and monitoring of trends and associated risks (including regional and international cooperation)

Note: It is not necessary to duplicate information provided in previous sections. Where relevant, please provide cross-references.

Albanian representatives have participated in various international workshops intended to improve capacities in order to better perform the country's inventory and monitoring of trends and associated risks. In the framework of the European Regional Focal Point for Animal Genetic Resources (ERFP) project, we have shared and exchanged experiences with other Balkan countries.

STRATEGIC PRIORITY AREA 2: SUSTAINABLE USE AND DEVELOPMENT

- The state of national sustainable use policies for animal genetic resources
- The state of national species and breed development strategies and programmes
- The state of efforts to promote agro-ecosystem approaches

14. Does your country have adequate national policies in place to promote the sustainable use of animal genetic resources (see also questions 46 and 54)?

- a. Yes, since before the adoption of the GPA
- b. Yes, policies put in place or updated after the adoption of the GPA
- c. No, but action is planned and funding identified
- d. No, but action is planned and funding is sought
- e. No

Please provide further details. If available, please provide the text of the policies or a web link to the text:

After the GPA adoption, we are updating our national policies.

15. Do these policies address the integration of agro-ecosystem approaches into the management of animal genetic resources in your country (SP5) (see also questions 46 and 54)?

Glossary: The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way (for further information see <http://www.cbd.int/ecosystem/description.shtml>).

- a. Yes
- b. No, but a policy update is planned and funding identified
- c. No, but action is planned and funding is sought
- d. No

Please provide further details:

This work will be done as part of update of Agricultural and Food Sector Strategy and Crosscutting Rural Development Strategy. The Ministry of Environment has started the update process of the National Strategy on Biodiversity. In frame of this process the issues regarding the links between animal genetic resources management and ecosystem services are foreseen to be discussed and will be included as part of the new Strategy and National Action Plan.

16. Do breeding programmes exist in your country for all major species and breeds, and are these programmes regularly reviewed, and if necessary revised, with the aim of meeting foreseeable economic and social needs and market demands (SP4, Action 2)?

- a. Yes, since before the adoption of the GPA
- b. Yes, put in place after the adoption of the GPA
- c. For some species and breeds (coverage has increased since the adoption of the GPA)

- d. For some species and breeds (coverage has not increased since the adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

The breeding programs, in the real sense of the word, for exotic and/or local animal breeds, it is very difficult to be identified. For some breeds, mainly local breed at risk of extinction, the breeding programs are part of in-situ conservation program. In frame of these programs, are foreseen the revitalization of traditional production system and traditional processing methods, as a way that will enable the realization of add value to local animal breeds. Support of farmers to marketing their local products is an objective. To achieve this objective the necessary adoptions in breeding programs are foreseen to implement. For example, strengthen the collaboration between farmers for:

- well implement the natural mating scheme through using the new tools and community rules
- sustainable and effective use of environment resources like as communal pastures
- establish the common rules in collecting and processing the animal products, meeting the requirements for the quality and food safety.

17. Is long-term sustainable use planning – including, if appropriate, strategic breeding programmes – in place for all major livestock species and breeds (SP4, Action 1)?

- a. Yes, since before the adoption of the GPA
- b. Yes, put in place after the adoption of the GPA
- c. For some species and breeds (further progress made since the adoption of the GPA)
- d. For some species and breeds (no further progress made since the adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

18. Have the major barriers and obstacles to enhancing the sustainable use and development of animal genetic resources in your country been identified?

- a. Yes
- b. No
- c. No major barriers and obstacles exist. Comprehensive sustainable use and development measures are in place.

Please provide further details. If barriers and obstacles have been identified, please list them:

- Lack of farmer organization in breeding associations.
- Lack of a complete animal identification system (matriculation).
- Lack of capacities to implement animal recording and performance controls
- Lack of financial and technical support to enhance the farmers capacities for implement the traditional breeding system of production, traditional processing methods, new breeding technologies and their access to local markets.
- Not enough level of public awareness
- Low level of economic development and in rout infrastructures in rural areas
- Lack of knowledge and insufficient infrastructures necessary to implement the conservation, management and sustainable economic use of native/local/exotic breeds/populations
- Not enough capacities for development the International, cross border and regional collaborations to support the development of biodiversity protection and sustainable economic use of AnGR, *in general* , and native/local/ autochthonous/transboundary breeds, *in particular*.

19. Have the long-term impacts of the use of exotic breeds on locally adapted breeds (e.g. economic, environmental or genetic impacts) and on food security been assessed in your country (SP4, Action 1)?

Glossary:

Exotic breeds are breeds that are maintained in a different area from the one in which they were developed. Exotic breeds comprise both recently introduced breeds and continually imported breeds.

Locally adapted breeds are breeds that have been in the country for a sufficient time to be genetically adapted to one or more of traditional production systems or environments in the country. The phrase "sufficient time" refers to time present in one or more of the country's traditional production systems or environments. Taking cultural, social and genetic aspects into account, a period of 40 years and six generations of the respective species might be considered as a guiding value for "sufficient time", subject to specific national circumstances.

b. Yes, assessments were introduced before the adoption of the GPA.

Please provide further details:

Cattle

The long process of importation of animals of exotic breeds, Back and White, Jersey, Holstein, Simental, Taranteze, Norwegian Red etc.. and their use in grading-up crosses with local populations have resulted in the fact that local cattle almost disappeared. Some isolated populations in remote mountain areas can still be found. A local adapted cattle, Jersey, that was imported 50-60 years ago, actually can be found in the small scale family farms in hill regions. The animals are phenotypically similar with Illyrian Dwarf Cattle

Pig

Importation of exotic breed like as Large White, Landras, Kahyb (Hungarian hybrid that was farmed in Industrial complex) etc. have replaced Albanian local pig breed. The crossbreed was done intensively. Actually a small population of native pig breed was identified.

Sheep

All sheep populations in lowland and hilly areas are crossed with exotic breeds (mainly with different types of Merinos, Tsigaja, Ile de France and recently with Kios). In lowland regions a local breed, named " Desiderable type" can identified. The animals are product of a multibreed crosses process. The economic impact of this genetic improvement process has been positive. The environmental impact is not identified yet. In hill regions a very well adapted Tsigaja sheep breed could be identified. It is "Albanian Tsigaja". Native/Local sheep breeds are located in mountain areas, in north regions of Albania.

Goat

Only a small number of Alpine and Saanne breeds has been imported, during last 20 years. Actually, more than 95 percent of goat population belong to native goat breeds.

Poultry

Farms that applied the intensive production system farming the exotic breeds, only. The local breeds are farmed in small scale family farms.

Rabbit

Only the local breed can be identified.

20. Have recording systems and organizational structures for breeding programmes been established or strengthened (SP4, Action 3)?

- a. Yes, sufficient recording systems and organizational structures for breeding programmes have existed since before the adoption of the GPA
- b. Yes, sufficient recording systems and organizational structures for breeding programmes exist because of progress made since the adoption of the GPA
- c. Yes, recording systems and organizational structures for breeding programmes are partially in place (and were established or strengthened after the adoption of the GPA)
- d. Yes, recording systems and organizational structures for breeding programmes are partially in place (but no progress has been made since the adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

Recording system was implemented in farms that are under the in-situ conservation programs, only. This system was established before the adoption of GPA in Small Ruminant Station (public station) where farming;

- Nukleus herd of "Taranteze" cattle breed
- Nukleus herd of " Ile de France" sheep breed

- Nukleus heard of "Alpine" goat breed

In this Station was established the National Ex-situ in vivo gene bank. Actually, two sheep breeds at risk of extinction "Shkodrane" and "Lara e Polisit" sheep breeds, breeding as part of this bank. The recording and performance control systems are implemented.

21. Are mechanisms in place in your country to facilitate interactions among stakeholders, scientific disciplines and sectors as part of sustainable use development planning (SP5, Action 3)?

- a. Yes, comprehensive mechanisms have existed since before the adoption of the GPA
- b. Yes, comprehensive mechanisms exist because of progress made since the adoption of the GPA
- c. Yes, mechanisms are partially in place (and were established or strengthened after the adoption of the GPA)
- d. Yes, mechanisms are partially in place (but no progress has been made since the adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

One of the main important mechanism that was implemented, maybe partially, is related to the rules for applied to get the financial support for implementation the programs/projects in field of AnGR. Involvement in these programs/projects of all stakeholders that can affect its success is addressed as an obligation.

According the new policies, the compilation of the action plan for sustainable use of AnGR should be done after a intensive process of consultation between the different stakeholders. Part of this consultation should be the conception of the new and effective mechanisms and their implementation to facilitate interactions among stakeholders. The academic staff of Agricultural University and Centre of Research and Agricultural technologies transfer are invited to be part of this consultation.

22. Have measures been implemented in your country to provide farmers and livestock keepers with information that facilitates their access to animal genetic resources (SP 4, Action 7)?

- a. Yes, comprehensive measures have existed since before the adoption of the GPA
- b. Yes, comprehensive measures exist because of progress made since the adoption of the GPA
- c. Yes, measures partially implemented (and were established or strengthened after the adoption of the GPA)
- d. Yes, measures partially implemented (but no progress has been made since the adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

Two different approaches were implemented:

1) Awareness campaign to explain the right and duties that farmers have as owner of the animals

2) Before implementation of In-situ conservation program, the farmers were always informed about the objectives of the program and their access to animal that will be under the in-situ conservation program.

After ratification of the Nagoya Protocol in February 2013, the process of the development of the legal framework in light of this Protocol has started. The issues related to access of farmers to animal genetic resources will be developed.

23. Has your country developed a national policy or entered specific contractual agreements for access to and the equitable sharing of benefits resulting from the use and development of animal genetic resources and associated traditional knowledge (SP3, Action 2)?

- a. Yes, sufficient measures (policy and/or agreements) have been in place since before the adoption of the GPA
- b. Yes, sufficient measures (policy and/or agreements) are in place because of progress made since the adoption of the GPA
- c. Yes, some measures (policy and/or agreements) are in place (progress has been made since the adoption of the GPA)
- d. Yes, some measures (policy and/or agreements) are in place (but no progress has been made since the adoption of the GPA)
- e. No, but a policy and/or agreements are in preparation

- f. No, but a policy and/or agreements are planned
- g. No

Please provide further details:

Albania has signed the Nagoya Protocol in 18 February 2013. The Ministry of Environment, as the Focal Point, has organized the consultation for starting the development of the legal framework and other documents necessary to support the implementation of this Protocol. A first legal comparative analyze was done and the main directions for the near future development were defined.

24. Have training and technical support programmes for the breeding activities of livestock-keepers been established or strengthened in your country (SP 4, Action 1)?

- a. Yes, sufficient programmes have existed since before the adoption of the GPA
- b. Yes, sufficient programmes exist because of progress made since the adoption of the GPA
- c. Yes, some programmes exist (progress has been made since the adoption of the GPA)
- d. Yes, some programmes exist (but no progress has been made since the adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

The training process and technical support are the main tasks of National Network of AnGR and Public Extension Service. During the implementation of FAO/TCP "Capacity building to support in-situ conservation and use of animal genetic resources", 2004-2006 a training program was implemented. One of the most important output of this program is the experiences that benefited public institutions, farmers organizations and NGO-s. Share the experiences in organizing training activities, open field day and transfer of breeding technologies between National Network of AnGR, Public Extension Service and other stakeholders is a sustainable process. The training programs and technical support programs up date each years. To prepare the files for participants the FAO guidelines are the most important materials. Financial support for these activities came from public funds of Ministry of Agriculture and other donors.

25. Have priorities for future technical training and support programmes to enhance the use and development of animal genetic resources in your country been identified (SP 4, paragraph 42)?

- a. Yes, priorities have been identified or updated since the adoption of the GPA
- b. Yes, priorities were identified before the adaption of the GPA but have not been updated
- c. No, but action is planned and funding identified
- d. No, but action is planned and funding is sought
- e. No

Please provide further details:

In the new version of National Action Plan, updated after GPA, training process and technical support were elaborated. The main directions would be:

- Strengthen the farmer's capacities to implement the breeding program, in general and in-situ conservation program, in particular.
- Encouragement the initiatives which aims at strengthen the collaboration in farmers' community
- Capacity building to support traditional system of production and traditional processing methods as key factors for increase the production added value.
- Strengthen the human and infrastructures capacities of Public extension service, necessary for implementing the technical training process.

26. Have efforts been made in your country to assess and support indigenous or local production systems and associated traditional knowledge and practices related to animal genetic resources (SP 6, Action 1, 2)?

- a. Yes, sufficient measures have been in place since before the adoption of the GPA
- b. Yes, sufficient measures are in place because of progress made since the adoption of the GPA

- c. Yes, some measures are in place (and were established or strengthened after the adoption of the GPA)
- d. Yes, some measures are in place (but no progress has been made since the adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

Support of indigenous or traditional production system is considered as a priority action in the last version of National Plan of Action. But, actually there is no concrete action, there is no project which have as objectives the implementation of traditional production system. The level of identification, collection and study of the traditional knowledge and practices related to animal genetic resources is low.

27. Have efforts been made in your country to promote products derived from indigenous and local species and locally adapted breeds, and facilitate access to markets (SP 6, Action 2, 4)?

- a. Yes, sufficient measures have been in place since before the adoption of the GPA
- b. Yes, sufficient measures are in place because of progress made since the adoption of the GPA
- c. Yes, some measures are in place (and were established or strengthened after the adoption of the GPA)
- d. Yes, some measures are in place (but no progress has been made since the adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

To promote traditional products derived from indigenous and local animal breeds were periodically organized:

- local and national fairs
- leaflets and brochures
- seminars and scientific activities
- movie to promote the Albanian traditional kitchen.

28. If applicable, please list and describe priority requirements for enhancing the sustainable use and development of animal genetic resources in your country:

Capacity building to support farmers' cooperation aiming at increasing the access level of farmers to local market

- Support the development of agro-traditional production system
- Support local market establishment
- Development of rules and regulations to protect local production from unfair competition
- Revitalization of traditional food processing methods.
- Increasing awareness-raising activities, organizing national and local fairs where local animal breeds and their products are demonstrated.
- Elaborate a more functional subsidies system
- Increase funds necessary for supporting the farmers, group of farmers or farmers' association to implement the programs for development and sustainable use of AnGR.

29. Please provide further comments on your country's activities related to Strategic Priority Area 2: Sustainable Use and Development (including regional and international cooperation)

Note: It is not necessary to duplicate information provided in previous sections. Where relevant, please provide cross-references.

- Awareness campaign, training activities, workshops, field days with different stakeholders, seminars and scientific symposiums are always organized in Albania to improve capacities for sustainable use of animal genetic resources.
- Participation of Albanian representatives (scientists, farmers, technician) in different international, regional and cross-border events: scientific meetings, workshops, regional livestock fairs, etc. has been realized. Sharing experiences in field of sustainable use and development of AnGR, was the main output.
- Participation in FAO regional workshops was very useful. Transfer the knowledge and implementation of the FAO

guidelines in Albanian conditions it is important for a good development and implementation of policies and programs for management and sustainable use of AnGR.

- Collaboration with neighboring countries in the framework of cross-border and regional projects.

STRATEGIC PRIORITY AREA 3: CONSERVATION

- The state of national conservation policies
- The state of *in situ* and *ex situ* conservation programmes
- The state of regional and global long-term conservation strategies and agreement on technical standards for conservation

30. Does your country regularly assess factors leading to the erosion of its animal genetic resources (SP 7, Action 2)?

- a. Erosion not occurring
- b. Yes, regular assessments have been implemented since before the adoption of the GPA
- c. Yes, regular assessments have commenced since the adoption of the GPA
- d. No, but action is planned and funding identified
- e. No, but action is planned and funding is sought
- f. No

Please provide further details:

The monitoring of the dynamic of factors leading to the erosion of AnGR is the duty of the local structures of the National Network of AGnR. To evaluate this dynamic, each five years, a survey process shall be carried out.

31. What factors or drivers are leading to the erosion of animal genetic resources? Please describe the factors specifying which breeds or species are affected:

Local breeds: Cattle, Sheep, Goat, Pig, are affected by the following factors:

- The economic factors caused to the low production performances of local animal breeds is the first and most important factor leading to genetic erosion of AnGR.
- Insufficient subsidies and other kind of financial support for farmers that farming the local animal breeds.
- Lack of a appropriate policies to support the collaboration amongst farmers.
- The demographic factors - during last 20 years the process of migration of human population from rural areas to urban regions, especially young people, was intensive.

Local breeds: Cattle, Sheep, Pig

- Decrease the farmer's interest to breeding the animal of local breeds and their replacement with exotic breeds
- Import of exotic breeds and an intensive uncontrolled crosses-breed process with local breeds.

Local breeds: Sheep, Goat

- Insufficient support to revitalization the traditional system of production and traditional processing methods of milk, meat and wool.
- Lack of necessary infrastructures for development the rural and ecotourism.
- Lack of an appropriate awareness on natural resources, animals and rural landscapes from local and national tourist agencies.

Local breeds: Cattle, Sheep, Goat, Pig

- Lack of well-organized of local markets. Unfair competition for local products from imported ones.
- Lack of appropriate implementation of breeding programs.

32. Does your country have conservation policies and programmes in place to protect locally adapted breeds at risk in all important livestock species (SP 7, SP 8 and SP 9)?

Glossary: Locally adapted breeds are breeds that have been in the country for a sufficient time to be genetically adapted to one or more of traditional production systems or environments in the country. The phrase "sufficient time" refers to time present in one or more of the country's traditional production systems or environments. Taking cultural, social and genetic aspects into account, a period of 40 years and six generations of the respective species might be considered as a guiding value for "sufficient time", subject to specific national circumstances.

- a. Country requires no policies and programmes because all locally adapted breeds are secure
- b. Yes, comprehensive policies and programmes have been in place since before the adoption of the GPA
- c. Yes, comprehensive policies and programmes exist because of progress made since the adoption of the GPA
- d. For some species and breeds (coverage expanded since the adoption of the GPA)
- e. For some species and breeds (coverage not expanded since the adoption of the GPA)
- f. No, but action is planned and funding identified
- g. No, but action is planned and funding is sought
- h. No

Please provide further details:

The conservation policies are part of National Strategy of FAnGR. According to these policies a National Action Plan was elaborated. Sources of funds for the implementation of this plan are different-public, private, international donors. Actually, some projects of in-situ conservation of local animal breeds at risk of extinction are being implemented.

Examples:

In-situ conservation and sustainable use of local cattle breed "Busha"

In-situ conservation of Local Cattle breed "Albanian Prespa Cows "

In-situ Conservation of local sheep breeds "Lara e Polisit" through economic sustainable use.

Rescue of endangered native pig breeds and building up the farmers network in the Velipoja Nature Reserve

In-situ conservation of Albanian Buffaloes etc.

33. If conservation policies and programmes are in place, are they regularly evaluated or reviewed (SP 7, Action 1; SP 8, Action 1; and SP 9, Action 1)?

- a. Yes
- b. No, but action is planned and funding identified
- c. No, but action is planned and funding is sought
- d. No

Please provide further details:

The evaluation is the responsibility of local structure of National Network of AnGR. Farms implementing in situ conservation programs are being monitored every year.

34. Does your country have in situ conservation measures in place for locally adapted breeds at risk of extinction and to prevent breeds from becoming at risk (SP 8 and SP 9)?

Glossary: Locally adapted breeds are breeds that have been in the country for a sufficient time to be genetically adapted to one or more of traditional production systems or environments in the country. The phrase "sufficient time" refers to time present in one or more of the country's traditional production systems or environments. Taking cultural, social and genetic aspects into account, a period of 40 years and six generations of the respective species might be considered as a guiding value for "sufficient time", subject to specific national circumstances.

- a. Country requires no in situ conservation measures because all locally adapted breeds are secure
- b. Yes for all breeds
- c. For some breeds (coverage expanded since the adoption of the GPA)
- d. For some breeds (coverage not expanded since the adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

Part of these measures are the implementation of the in-situ conservation program. The Red Book is the basic information to decide on which species/breeds will be implemented an in-situ program. The regular survey to evaluate the trend and risk level, carried out by the local public structure of National Network. The involvement in the subsidy scheme is the measures to prevent breed from becoming at risk.

35. Does your country have ex situ in vivo conservation measures in place for locally adapted breeds at risk of extinction and to prevent breeds from becoming at risk (SP 8 and SP 9)?

Glossary: Ex situ in vivo conservation - maintenance of live animal populations not kept under their normal management conditions - e.g. in zoological parks or governmental farms - and/or outside the area in which they evolved or are now normally found.

- a. Country requires no ex situ in vivo conservation measures because all locally adapted breeds are secure
- b. Yes for all breeds
- c. For some breeds (coverage expanded since the adoption of the GPA)
- d. For some breeds (coverage not expanded since the adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

National Ex-situ in vivo gene bank was established four years ago, as a public institution. Actually three breeds are being conserved:

- "Shkodrane" sheep breed
- "Lara e Polisit" sheep breed
- Illyric Dwarf Cattle "Albanian Prespa cow".

36. Does your country have ex situ in vitro conservation measures in place for locally adapted breeds at risk of extinction and to prevent breeds from becoming at risk (SP 8 and SP 9)?

Glossary: Ex situ in vitro - conservation, under cryogenic conditions including, inter alia, the cryoconservation of embryos, semen, oocytes, somatic cells or tissues having the potential to reconstitute live animals at a later date.

- a. Country requires no ex situ in vitro conservation measures because all locally adapted breeds are secure
- b. Yes for all breeds
- c. For some breeds (coverage expanded since the adoption of the GPA)
- d. For some breeds (coverage not expanded since the adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

37. Please describe the measures (indicating for each whether they were introduced before or after the adoption of the GPA) or provide a web link to a published document that provides further information:

- <http://www.akad.edu.al/simpoziume/>
- <http://www.agrobiodiversity.net/balkan/>
- http://www.fao.org/fileadmin/user_upload/Europe/documents/Events_2010/Announcement_en.pdf
- <http://www.fao.org/europe/meetings-and-events/angr-wageningen/en/>

38. If your country has not established any conservation programmes, is this a future priority?

- a. Yes
- b. No

Please provide further details:

39. Has your country identified the major barriers and obstacles to enhancing the conservation of its animal genetic resources?

- a. Country requires no conservation programmes because all animal genetic resources are secure
- b. Yes
- c. No
- d. No major barriers and obstacles exist. Comprehensive conservation programmes are in place

Please provide further details. If barriers and obstacles have been identified, please list them:

The main constraints are the following:

- Low level of support of conservation programs by public institutions and decision-maker.
- Insufficient human and technical capacities of public and other institutions, like agricultural university, research centers, public extension service, NGO etc. to implement conservation programs.
- Lack of financial support.
- Low levels of collaboration between the farmers.
- Low level of knowledge about the conservation methods,
- Not enough level of public awareness, in general and in community of farmers in particular, concerning the values of native/local genetic pool in farm animal.
- Lack or insufficient technical support to implement the in-situ conservation programs.
- Low economic levels of farmers, weak financial system in rural areas and difficulties in finding funds, necessary for implementation of conservation programs
- Not enough capacities for development the International, cross border and regional collaborations to support the development of biodiversity protection and sustainable economic use of AnGR, *in general*, and conservation of native/local breeds at risk of extinction, *in particular*.

40. If your country has existing ex situ collections of animal genetic resources, are there major gaps in these collections (SP 9, Action 5)?

- a. Yes
- b. No

If yes, have priorities for filling the gaps been established?

- a. Yes
- b. No, but action is planned and funding identified
- c. No, but action is planned and funding is sought
- d. No

Please provide further details:

Ex National Bull station was the center where the bank of cryo conservation of bull semen was implemented. Now, this public institution does not exist. Their equipments and biologic materials are under the administration of Center of Agricultural Technology Transfer, Fushe Kruja. The option is using these infrastructure and lab capacities to establish the National Bank of cryo conservation. The establishment of the cryogene bank with Somatic Cell has started.

41. Are arrangements in place in your country to protect breeds and populations that are at risk from natural or human-induced disasters (SPA 3)?

- a. Yes, arrangements have been in place since before the adoption of the GPA
- b. Yes, arrangements put in place after the adoption of the GPA
- c. No, but action is planned and funding identified
- d. No, but action is planned and funding is sought
- e. No

Please provide further details:

42. Are arrangements in place in your country for extraction and use of conserved genetic material following loss of animal genetic resources (e.g. through disasters), including arrangements to enable restocking (SP 9, Action 3)?

- a. Yes, arrangements have been in place since before the adoption of the GPA
- b. Yes, arrangements put in place after the adoption of the GPA
- c. No, but action is planned and funding identified
- d. No, but action is planned and funding is sought
- e. No

Please provide further details:

43. Is your country conducting research to adapt existing, or develop new, methods and technologies for in situ and ex situ conservation of animal genetic resources (SP 11, Action 1)?

- a. Yes, research commenced before the adoption of the GPA
- b. Yes, research commenced since the adoption of the GPA
- c. No, but action is planned and funding identified
- d. No, but action is planned and funding is sought
- e. No

Please provide further details. If yes, please briefly describe the research:

44. Does your country implement programmes to promote documentation and dissemination of knowledge, technologies and best practices for conservation (SP 11, Action 2)?

- a. Yes, programmes commenced before the adoption of the GPA
- b. Yes, programmes commenced since the adoption of the GPA
- c. No, but action is planned and funding identified
- d. No, but action is planned and funding is sought
- e. No

Please provide further details:

The methods of conservation are part of curricula in Animal Production Department- Agricultural University. Promote of documentation, knowledge, technologies and best practices are one of the main objectives of training process, open farm day, workshops, seminars and scientific events. The public extension service and Centers of Agricultural Technology Transfer are the main institutions that collect, process and disseminate this information.

45. What are your country's priority requirements for enhancing conservation measures for animal genetic resources? Please list and describe them:

- Development of the legal framework relevant to conservation of AnGR in light of International and EU legislations.
- Filling the gaps between the legal framework and their implementation.
- Increase the level of awareness to decision-markers.
- Increase the public fund with the destination the conservation of AnGR.
- Strengthen the human, infrastructure and technique capacities of the Public extension service, National Network of AnGR, Agricultural University, Centers of research and technology transfer.
- Support to increase the awareness and the role of farmers community.
- Capacity building to support farmers' collaboration.

- Capacity building to support the development of family farms, traditional system of production, traditional processing methods, culture and knowledge for eco-agro tourism
- Capacity building to support the development of labeling process and market for local products.

46. Please provide further comments describing your country's activities related to Strategic Priority Area 3: Conservation (including regional and international cooperation)

Note: It is not necessary to duplicate information provided in previous sections. Where relevant, please provide cross-references.

- Regional and international cooperation has been developing better after the adoption of GPA. Albania has been a partner or coordinating country in various regional projects financed by ERFP, for example:
1. Evaluation of current status of Busha cattle and develop a regional breeding program for their conservation and sustainable economic use.
 2. Development of regional network in function of sustainable breeding programs for transboundary breeds.
 3. Study of origin and conservation of the Pramenka sheep breeds as regional transboundary breeds.
 4. Building up the role of National Coordinator for the Management of Animal Genetic Resources for strengthening the capacity of Balkan's network for agro-biodiversity of livestock.
 5. Current status of the brachycerous cattle populations in the SEEC and strategies for their sustainable conservation.
 6. BushaLive.

STRATEGIC PRIORITY AREA 4: POLICIES, INSTITUTIONS AND CAPACITY-BUILDING IMPLEMENTATION AND FINANCING OF THE GLOBAL PLAN OF ACTION FOR ANIMAL GENETIC RESOURCES

- The state of national institutions for planning and implementing animal genetic resources measures
- The state of information sharing
- The state of educational and research facilities capacity for characterization, inventory, and monitoring, sustainable use, development, and conservation
- The state of awareness of the roles and values of animal genetic resources
- The state of policies and legal frameworks for animal genetic resources

47. Does your country have sufficient institutional capacity to support holistic planning of the livestock sector (SP 12, Action1)?

- a. Yes, sufficient capacity has been in place since before the adoption of the GPA
- b. Yes, sufficient capacity is in place because of progress made after the adoption of the GPA
- c. No, but action is planned and funding identified
- d. No, but action is planned and funding is sought
- e. No

Please provide further details:

After the adoption of the GPA, following the FAO guidelines, a set of improvements in field of institutional capacity development was undertaken. But, these achievements are not sustainable. Changes in the structures of the Ministry of Agriculture have their effects to the structures of public institutions that have as main target conservation, management and sustainable use of AnGR. For example, actually the department/sector of animal production is not part anymore of the organizational structure of the Ministry of Agriculture, meanwhile according to the law this department has a number of tasks that need to perform. Meanwhile no other structure is performing such tasks.

48. What is the current status of your country's national strategy and action plan for animal genetic resources (SP 20)?

Glossary: National strategy and action plan for animal genetic resources: a strategy and plan, agreed by stakeholders and preferably government-endorsed, that translates the internationally agreed Global Plan of Action for Animal Genetic Resources into national actions, with the aim of ensuring a strategic and comprehensive approach to the sustainable use, development and conservation of animal genetic resources for food and agriculture.

- a. Previously endorsed national strategy and action plan is being updated (or new version has been endorsed)
- b. Completed and government-endorsed
- c. Completed and agreed by stakeholders
- d. In preparation
- e. Preparation is planned and funding identified
- f. Future priority activity
- g. Not planned

Please provide further details. If available, please provide a copy of your country's national strategy and action plan as a separate document or as a web link:

The Ministry of Agriculture, Rural Development and Water Management, following the GPA and strategic priorities of new government in field of rural development, has started the update process of National Strategy and National Action Plan. The main important objective is compiling the Strategy and Action Plan that should support sustainable rural development.

49. Are animal genetic resources addressed in your country's National Biodiversity Strategy and Action Plan (<http://www.cbd.int/nbsap/>)?

- a. Yes
- b. No, but they will be addressed in forthcoming plan
- c. No

Please provide further details:

National Biodiversity Strategy and Action Plan was compiled by the Ministry of Environment. Farm animal genetic resources was not addressed in these documents. With the support of UNDP, an update process of these documents has started. According to the new terms of references, in accordance with which will be developed the new National Biodiversity Strategy and Action Plan, it will fill this gap.

50. Are animal genetic resources addressed in your country's national livestock sector strategy, plan or policy (or equivalent instrument)?

- a. Yes
- b. No, but they will be addressed in a forthcoming strategy, plan or policy
- c. No, animal genetic resources are not addressed
- d. No, the country does not have a national livestock sector strategy, plan or policy

Please provide further details. If available, please provide the text of the strategy, plan or policy or a web link to the text:

Issues relevant to animal genetic resources are addressed by the Agriculture and Food Sector Strategy and Crosscutting Strategy for Rural Development. According to these strategies, the tools to support development of livestock sector are:

- public funds to support animal production development;
- technical support to transfer new breeding and processing technologies;
- establishing the market information system and promoting niche markets;
- improving the training system for farmers;
- improving the financial system for farmers;
- developing methods to add value to livestock products; and
- awareness-raising campaigns.

www.mbumk.gov.al

51. Has your country established or strengthened a national database for animal genetic resources (independent from DAD-IS) (SP 15, Action 4)?

- a. Yes, a national database has been in place since before the adoption of the GPA
- b. Yes, a national database is in place because of progress made since the adoption of the GPA
- c. Yes, a national database is in place but still requires strengthening (progress since adoption of the GPA)
- d. Yes, a national database is in place but still requires strengthening (no progress since adoption of the GPA)

- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

The informations about the Animal Genetic Resources are not organized like a database. Despite this, the informations that was collected during the years are sufficient to asses the current situation of AnGR and to evaluate the trend of populations size and productions. Soon it will be established a National database connected to EFABIS and DAD-IS.

52. Have your country's national data on animal genetic resources been regularly updated in DAD-IS?

Note that the Commission on Genetic Resources for Food and Agriculture has requested FAO to produce global status and trends reports every two years.

- a. Yes, regular updates have been occurring since before the adoption of the GPA
- b. Yes, regular updates started after the adoption of the GPA
- c. No, but it is a future priority
- d. No

Please provide further details:

The DAD-IS informations are not updated. The update process will startd soon.

53. Has your country established a National Advisory Committee for Animal Genetic Resources (SP 12, Action 3)?

- a. Yes, established before the adoption of the GPA
- b. Yes, established after the adoption of the GPA
- c. No, but action is planned and funding identified
- d. No, but action is planned and funding is sought
- e. No

Please provide further details. If a National Advisory Committee has been established, please list its main functions:

National Advisory Committee was established as an output of FAO/TCP. Their composition and functions have changed during the years. The objectives was - have an effective committee and development their ToR according to FAO guidelines. Actually ToR of NCC, decided by the Order of Ministry of Agriculture are the following:

- a. Organizes, supports, monitors and evaluates the progress of the preparation and updating of the National Strategy and Action Plan for conservation, management and sustainable use of farm animal genetic resources;
- b. In accordance with the Biodiversity Strategy, Crosscutting Strategy for Rural Development and Strategy for Agriculture and Food Sector, it identifies and lists the priorities and main objectives of the National Strategy and Action Plan for conservation and use of AnGR by detailing them for each species / breeds of farm animals and for different regions of the country;
- c. Examines programs / projects for conservation and good management of farm animal genetic resources and present to the Minister of Agriculture the planed budget for their implementation.
- d. Examines needs, gives opinion on activities directions and judges the work and evaluates the results achieved for:
 - (i) Development of legal and regulatory framework necessary for the administration of farm animal genetic resources;
 - (ii) Elaboration of criteria for assessing the risk of extinction of species/breeds/local populations;
 - (iii) Elaboration and update of the Red Book for breeds/ecotypes/local populations of farm animals;
- e. Reviews and takes decision on the list of breeds/ecotypes/local populations of farm animals that should receive subsidies from public funds to avoid their irreversible extinction and submit it to the Minister for approval;
- f. Monitors and evaluates the work of the National Network for conservation, management and sustainable use of farm animal genetic resources;

54. Is there strong coordination and interaction between the National Focal Point and stakeholders involved with animal genetic resources, such as the breeding industry, livestock keepers, government agencies, research institutes and civil society organizations (SP 12, Action 3)?

- a. Yes, strong coordination has been in place since before the adoption of the GPA

- b. Yes, strong coordination was established after the adoption of the GPA
- c. No, but action is planned and funding identified
- d. No, but action is planned and funding is sought
- e. No

Please provide further details:

The collaboration it is not at the desired level.

55. Does the National Focal Point (or other institutions) undertake activities to increase public awareness of the roles and values of animal genetic resources (SP 18)?

- a. Yes, activities commenced before the adoption of the GPA
- b. Yes, activities commenced after the adoption of the GPA
- c. No, but activities are planned and funding identified
- d. No, but activities are planned and funding is sought
- e. No

Please provide further details:

Organize the awareness campaign is a duty of different institutions such as National Focal Point, Centers of Agricultural Technology Transfer, Public Extension Service, NGO-s etc. that shall be carried out under the coordination of NC. In conditions when:

- The public fund to support these activities are limited.
- NGO-s and/or other non public institutions have no interest to support, as a sustainable activity, the awareness campaign in field of animal genetic resources

Organizing and development of the awareness campaign as effective, permanent and sustainable activity is a very harsh work. Some of the annual activities, can be listed as follows:

- National Symposium on Biodiversity as crucial factor for rural sustainable development.
- European Biodiversity Day (EAD) - 29 September
- Promotion of the traditional animal productions in local and national fairs
- Local, national and cross-border fairs to promote the native/local animal breeds
- Organizing the field open days in farms that farming animals of native breed under the small scale family production system or under the traditional system.
- Posters, leaflets and brochures were distributed as part of implementation of the different in-situ conservation projects and awareness campaign carried out by Public Extension Service and National Focal Point.

56. Does your country have national policies and legal frameworks for animal genetic resources management (SP 20)?

- a. Yes, comprehensive national policies and legal frameworks were in place before the adoption of the GPA and are kept up to date
- b. Yes, comprehensive and up-to-date national policies and legal frameworks in place because of progress made since the adoption of the GPA
- c. Yes, some national policies and legislation in place (strengthened since the adoption of the GPA)
- d. Yes, some national policies and legislation in place (not strengthened since the adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

Policies relevant to AnGR are elaborated as parts of Rural Development policies. The most important issues of these policies were:

- Tools development and necessary public and technical infrastructures for establishing programs and projects for identification, characterization, management and sustainable use of FAnGR.
- Strengthen capacities for implementing cross-border and regional projects for transboundary breeds.
- Promote technology transfer for AnGR management and support the traditional products market.

- Develop the AnGR legal framework in accordance with international legal framework and EU legislation

The most important Act is Law no. 9426, dated 20.01.2008 "On Livestock Breeding". The purposes of this Act are:

1. protect, improve and conserve the livestock genetic resources quality,
2. increase the livestock production and improve its quality and
3. conserve the genetic variation of farm animals.

The Act regulates the following matters:

1. livestock conditions and practices for a good breeding, methods and technologies for animal breeding and feeding
2. criteria for preparation and approval of breed programs;
3. gene funds and native breeds;
4. professional services in the area of animal breeding;
5. establishment and administration of gene banks;
6. establishment of breeders' associations; and
7. trade in breed materials.

57. Which of the following options best describes the state of training and technology transfer programmes in your country related to inventory, characterization, monitoring, sustainable use, development and conservation of animal genetic resources (SP14, Action 1)?

- a. Comprehensive programmes have been in place since before the adoption of the GPA
- b. Comprehensive programmes exist because of progress made since the adoption of the GPA
- c. Some programmes exist (further progress since the adoption of the GPA)
- d. Some programmes (no further progress since the adoption of the GPA)
- e. None, but action is planned and funding identified
- f. None, but action is planned and funding is sought
- g. None

Please provide further details:

Public extension service in collaboration with National Network for AnGR, Centers for Agricultural Technology Transfer and different NGO-s have organized and carried out training process in the frame of inventory, characterization, sustainable use, development and conservation activities. Farmers, animal production specialists, technician of A.I. and other stakeholders were part of them. Training is a continuous activity anticipated in the annual plans of the Ministry of Agriculture.

58. Have organizations (including where relevant community-based organizations), networks and initiatives for sustainable use, breeding and conservation been established or strengthened (SP 14, Action 3)?

- a. Yes, comprehensive organizations, networks and initiatives have existed since before the adoption of the GPA
- b. Yes, comprehensive organizations, networks and initiatives exist because of progress made since the adoption of the GPA
- c. Yes, some organizations, networks and initiatives exist (established or strengthened since adoption of the GPA)
- d. Yes, some organizations, networks and initiatives exist (but no progress made since adoption of the GPA)
- e. No, but action is planned and funding identified
- f. No, but action is planned and funding is sought
- g. No

Please provide further details:

The National Network for AnGR was established. This is one of the most important output of FAO/TCP. Different public and private stakeholders, interested for the conservation, development, management and economic sustainable use of AnGR, are part of this network.

59. Are there any national NGOs active in your country in the fields of:
Characterization?

- a. Yes

b. No

Sustainable use and development?

c. Yes

d. No

Conservation of breeds at risk?

e. Yes

f. No

If yes, please list the national NGOs and provide links to their web sites:

ALBAGENE - National Association for Conservation, Development and Use of Farm Animal Genetic Resources
BLEKALB Foundation - Science, Technology and Extension Service for Farms' Development
Heifers- Albania
National Organization of Farmer of Small Ruminant.

60. Has your country established or strengthened research or educational institutions in the field of animal genetic resources management (SP 13, Action 3)?

a. Yes, adequate research and education institutions have existed since before the adoption of the GPA

b. Yes, adequate research and education institutions exist because of progress made since the adoption of the GPA

c. Yes, research and education institutions exist but still require strengthening (progress made since the adoption of the GPA)

d. Yes, research and education institutions exist but still require strengthening (no progress made since the adoption of the GPA)

e. No, but action is planned and funding identified

f. No, but action is planned and funding is sought

g. No

Please provide further details:

Agricultural University of Tirana, is the most important research and educational institution in the field of animal genetic resources management. Besides this, some agricultural high schools, distributed in different regions of the country, forming secondary education specialists for animal production.

Public Centers of Agricultural Technology Transfer carrying out the applied research in field of conservation, management and use of AnGR.

61. Please provide further comments describing your country's activities related to Strategic Priority Area 4: Policies, Institutions and Capacity-building (including regional and international cooperation)

Note: It is not necessary to duplicate information provided in previous sections. Where relevant, please provide cross-references.

The establishment of the Agency for Agricultural and Agrarian Development, is one of the most important development in the context of the capacity building for the management of Agro-biodiversity. This Agency is the executive authority of the Ministry of Agriculture, Rural Development and Water Management for the implementation of the government decisions No. 219 of 16.05.2002 and No. 1708, of the 29.12.2008, for subsidizing local breeds at risk of extinction.

Albanian representatives participate actively in different regional activities in the framework of programs financed by the ERFPP or other donors.

IMPLEMENTATION AND FINANCING OF THE GLOBAL PLAN OF ACTION FOR ANIMAL GENETIC RESOURCES

- The state of international collaboration for planning and implementing animal genetic resources measures
- The state of financial resources for the conservation, sustainable use and development of animal genetic resources

62. Has your country established or strengthened international collaboration in (SP 16):
Characterization?

- a. Yes
- b. No, but action is planned and funding identified
- c. No, but action is planned and funding is sought
- d. No

Sustainable use and development?

- e. Yes
- f. No, but action is planned and funding identified
- g. No, but action is planned and funding is sought
- h. No

Conservation of breeds at risk?

- i. Yes
- j. No, but action is planned and funding identified
- k. No, but action is planned and funding is sought
- l. No

Please provide further details:

Albania has been a partner or coordinating country in various regional projects financed by ERFP or other donors, for example:

1. Evaluation of current status of Busha cattle and development of a regional breeding program for their conservation and sustainable economic use.
2. Development of regional network in function of sustainable breeding programs for transboundary breeds.
3. Study of origin and conservation of the Pramenka sheep breeds as regional transboundary breeds.
4. Building up the role of National Coordinator for the Management of Animal Genetic Resources for strengthening
5. the capacity of Balkan's network for agro-biodiversity of livestock.
6. Current status of the brachycerous cattle populations in the SEE and strategies for their sustainable conservation.
7. BushaLIVE

Share the experiences in field of identification, characterization, conservation and use of AnGR, discuss the possibilities for implementing common breeding strategies and/or common breeding and/or conservation programs, for native breeds and/or transboundary breeds have been the objectives and the main output of these activities.

63. Are there any international NGOs active in your country in the fields of:

Characterization?

- a. Yes
- b. No

Sustainable use and development?

- c. Yes
- d. No

Conservation of breeds at risk?

- e. Yes

f. No

If yes, please list the international NGOs:

SAVE Foundation
Hiefer Albania

64. Has national funding for animal genetic resources programmes increased since the adoption of the GPA?

a. Yes

b. No

Please provide further details:

Several projects for in situ conservation have been financed by public funds, for example:

- in situ conservation and sustainable use of Albanian buffalo;
- in situ conservation of local sheep breed "Shkodrane" and "Lara e Polisit";
- in situ conservation of Ilyrian Dwarf Cattle "Prespa Cattle";
- in situ conservation of local pig breeds.

Subsidies are implemented for Albanian buffalo since 2002 and for Local small ruminants breeds at risk of extinction after 2007.

65. Has your country received external funding for implementation of the GPA?

a. Yes

b. No

c. No, because country generally does not receive external funding

Please provide further details:

66. Has your country supported or participated in international research and education programmes assisting developing countries and countries with economies in transition to better manage animal genetic resources (SP 15 and 16)?

a. Yes, support or participation in place before the adoption of the GPA and strengthened since

b. Yes, support or participation in place before the adoption of the GPA but not strengthened since

c. Yes, support or participation in place since the adoption of the GPA

d. No, but action is planned and funding identified

e. No, but action is planned and funding is sought

f. No

Please provide further details:

67. Has your country supported or participated in programmes aimed at assisting developing countries and countries with economies in transition to obtain training and technologies and to build their information systems (SP 15 and 16)?

a. Yes, support or participation commenced before the adoption of the GPA and strengthened since

b. Yes, support or participation commenced before the adoption of the GPA but not strengthened since

c. Yes, support or participation commenced since the adoption of the GPA

d. No, but action is planned and funding identified

e. No, but action is planned and funding is sought

- f. No

Please provide further details:

68. Has your country provided funding to other countries for implementation of the Global Plan of Action?

- a. Yes
 b. No, but action is planned and funding identified
 c. No, but action is planned and funding is sought
 d. No
 e. No, because country is generally not a donor country

Please provide further details. If relevant, specify whether funding was bilateral or multilateral; research cooperation or aid; and to whom and for what it was given:

69. Has your country contributed to international cooperative inventory, characterization and monitoring activities involving countries sharing transboundary breeds and similar production systems (SP 1, Action 5)?

- a. Yes
 b. No, but action is planned and funding identified
 c. No, but action is planned and funding is sought
 d. No

Please provide further details:

In frame of international collaboration, Albania has contributed through publications of its information in books, brochures, etc., example:

- Busha - old cattle breeds of Balkan countries.
- Possible way of conservation the multipurpose Tsigai and other indigenous sheep breeds in Central-Eastern European and Balkan countries.
- SUBSIBREED Proper way of supports for endangered livestock breeds.
- Breed Atlas Balkan - SAVE foundation.

To disseminate the current data the process of update of information in EFABIS and DAD-IS has started.

70. Has your country contributed to establishing or strengthening global or regional information systems or networks related to inventory, monitoring and characterization of animal genetic resources (SP 1, Action 6)?

- a. Yes
 b. No, but action is planned and funding identified
 c. No, but action is planned and funding is sought
 d. No

Please provide further details:

71. Has your country contributed to the development of international technical standards and protocols for characterization, inventory and monitoring of animal genetic resources (SP2)?

- a. Yes

- b. No, but action is planned and funding identified
- c. No, but action is planned and funding is sought
- d. No

Please provide further details:

72. Has your country contributed to the development and implementation of regional in situ conservation programmes for breeds that are at risk (SP 8, Action 2; SP 10, Action 1)?

- a. Yes
- b. No, but action is planned and funding identified
- c. No, but action is planned and funding is sought
- d. No

Please provide further details:

The contribution was done through the participation in regional projects, which have had as their target issues related to in-situ conservation programs for breeds that are at risk.

73. Has your country contributed to the development and implementation of regional ex situ conservation programmes for breeds that are at risk (SP 9, Action 2; SP 10, Action 3; SP 10, Action 4)?

- a. Yes
- b. No, but action is planned and funding identified
- c. No, but action is planned and funding is sought
- d. No

Please provide further details:

74. Has your country contributed to the establishment of fair and equitable arrangements for the storage, access and use of genetic material stored in supra-national ex situ gene banks (SP9, Action 3)?

- a. Yes
- b. No, but action is planned and funding identified
- c. No, but action is planned and funding is sought
- d. No

Please provide further details:

75. Has your country participated in regional or international campaigns to raise awareness of the status of animal genetic resources (SP19)?

- a. Yes
- b. No, but action is planned and funding identified
- c. No, but action is planned and funding is sought
- d. No

Please provide further details:

76. Has your country participated in reviewing or developing international policies and regulatory frameworks relevant to animal genetic resources (SP 21)?

- a. Yes
- b. No, but action is planned and funding identified
- c. No, but action is planned and funding is sought
- d. No

Please provide further details:

EMERGING ISSUES

77. In view of the possibility that at some point countries may wish to update the GPA, please list any aspects of animal genetic resources management that are not addressed in the current GPA but will be important to address in the future (approximately the next ten years). Please also describe why these issues are important and indicate what needs to be done to address them.
Issues to be addressed in future

Issues to be addressed in future (next ten years)	Reasons	Actions required
Establish the National Agency for management of AnGR.	As a result of the institutional reform in the scientific research, the Livestock Research Institute was abolished. Currently, Albania does not have any public institution responsible to handle the entirety of issues related to the identification, conservation, administration and use of AnGR. The establishment of the National Agency for AnGR, as a public institution under the Ministry of Agriculture, Rural Development and Water Management, that will serve also as a host institution of the National Focal Point, is one of the options that can be handled within the formulation of policies for scientific research development and administration of AnGR.	Formulate the ToR for Agency, that the Ministry of Agriculture, Rural Development and Water Management shall submit to the Council of Ministers. Support the development of human and infrastructure capacities. Finding the necessary funds from public funds and donors.
Development the national gene bank for ex-situ cryo conservation	Evaluation of actual trend show that some of native/indigenous breeds will be at high risk level. Their ex-situ conservation is a urgent action. To establish the cryo conservation gene bank, the actual level of human and infrastructure knowledges and skills is insufficient.	Development of legal framework. Development of the human capacities, skills and lab infrastructures Generate the necessary funds.
Development the National Rescue stations and Arks farms Network	To prevent the effect of outbreaks of animal diseases, human or nature catastrophes	Development of legal framework. Support farmers community to develop their capacities necessary for the implementation and management of the Rescue station and Arks farms Network. Capacity building to cooperate with the European RS and Ark farms Network.

Issues to be addressed in future (next ten years)	Reasons	Actions required
Implementation of the Nagoya Protocol.	Albania has signed the Nagoya Protocol on 28 February 2013. Implementation is a request deriving from the Albanian Constitution.	Legal framework development in light of Nagoya Protocol. Capacity development at national and local level.

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