



## LEGAL AND POLICY FRAMEWORKS AFFECTING THE MANAGEMENT OF ANIMAL GENETIC RESOURCES - 2013 -

Country: Serbia

### SECTION 1: SUSTAINABLE USE, DEVELOPMENT AND CONSERVATION OF ANIMAL GENETIC RESOURCES

This section targets information on legislation and policies related specifically to the management of animal genetic resources, i.e. to:

- characterization, surveying and monitoring;
- sustainable use and development;
- conservation; and
- research and development related to animal genetic resources management.

It also includes issues related to patenting and access and benefit sharing. Instruments in these fields of action may or may not include specific provisions related to animal genetic resources or to relevant broader categories such as living organisms or genetic resources for food and agriculture.

#### 1. Overall management of animal genetic resources

*Note: In the policy field, this might include, for example, a national strategy and action plan for animal genetic resources.*

Legislation

Yes

Policy

Yes

Details of the measure(s)

**Law on Animal Husbandry** („Official Gazette R.S.“, No. 41/09, 93/12). This Law sets measures and rules for: animal husbandry; animal husbandry subjects and their organization forms; animal husbandry programmes; production control and preservation of characteristics of domestic animals; domestic animal husbandry; apiculture; aquaculture; wild animal husbandry; preservation of genetic reserves of domestic animals and biodiversity in animal husbandry; and production and distribution of animal food and animal food products. This Law provides standards for husbandry of: beef; buffaloes; sheep; goats; horses; donkeys; pigs; poultry; furry animals; rabbits; bees; wild animals; fish and other aquatic organisms; and other domestic animals. Law on Animal Husbandry in Chapter X, in articles 67-71, defines the preservation of genetic reserves of domestic animals and biological diversity in livestock. On the basis of Article 67. paragraph 2. and Article 69. paragraph 2. of the Low, enacted the Rules on the list of genetic reserves of domestic animals, the way of preserving genetic reserves of domestic animals, as well as a list of indigenous breeds of domestic animals and endangered indigenous breeds ("Official Gazette RS", No. 38/10). On the basis of Article 69. paragraph 4-9. of the Low, enacted the Rules on the conditions of breeding and trade of indigenous breeds of domestic animals, as content and method of management register of the indigenous breeds of domestic animals („Official Gazette R.S.“, No. 56/10).

**Law on Agriculture and Rural Development** ("Official Gazette RS", No. 41/09). This law regulates: the objectives of agricultural policy and the way of its implementation, the types of incentives in agriculture, the conditions for achieving right to incentives, incentives to users, Register of Agricultural farms, logging and reporting of agriculture, an integrated agricultural information system, monitoring the implementation of this law. The articles 3, 6, 9, 12 and 13 define the possibilities of using financial incentives for preservation of indigenous breeds (biodiversity) through rural development measures (structural incentives).

**Agriculture Strategy Republic of Serbia 2005** (Government decision from the date of 18.08.2005.). I sent draft english translation which is not compatible with the serbian translation in structure of text, **but the content for mentioned paragraphs is compatible**. Paragraf 233 in english translation is compatible with paragraf 274 in serbian translation and paragraf 234 and 235 in english translation is compatible with the paragraf 275 in serbian translation. These variances are due to the fact that I do not have the original version but the translation of draft version. Later in original version is something added in the text but no changes in mentioned paragraphs.

In the Chapter VII Rural Development, the Strategy provides inputs for conservation and sustainable use of genetic resources.

[274] The basis of all agreements and treaties concerning protection of biodiversity at a global level is a Convention on Biological Diversity, which also defines responsibilities of the states in view of preservation of the genetic fund. These responsibilities primarily refer to: identification and monitoring of biodiversity and processes or activities which have significant adverse effects to biodiversity, **in situ** and **ex situ** preservation of biodiversity, access to genetic resources, access to biotechnologies and to their transfer, information exchange, particularly taking into account the needs of the developing countries, technical and scientific cooperation, in the area of preservation and sustainable usage of biodiversity, distribution of benefits, etc. In the Republic of Serbia, there is a great number of specific and sensitive eco-systems, which include flora and fauna having numerous biological species, which are of the international relevance. An exceptionally rich genetic fund of wild plants and animals, as well as a great number of autochthonous populations of grown plants and domestic animals are very important as genetic resources for medicine, agriculture, forestry, biotechnology, and can be used for a further development of our country. The Convention on Biological Diversity pointed out a great importance of the agro-diversity from the aspect of its maintenance and sustainable usage.

[275] Current legislation, which regulates management and maintenance of genetic resources in the Republic of Serbia, is not fully harmonized with the EU regulations and the lack of appropriate regulations makes the work in this area more difficult. Still does not pending National Programme for Preservation and Sustainable Usage of Genetic Resources in Agriculture, which should be an integral part of the National Programme on Preservation of Biodiversity. Initiatives for elaboration of this Programme should be put in action as soon as possible in cooperation with responsible Ministries, first of all the Ministry of Agriculture, Forestry and Water Management and the Ministry of Science - Sector for Protection of Environment.

⇒ **Preservation and Sustainable Usage of Genetic Resources**

Pass legal regulations which will regulate management and sustainable usage of genetic resources relevant for agriculture, and which must be in accordance with the EU Directives

Make a National Programme for Preservation and Sustainable Usage of Genetic Resources in Agriculture (this programme should include: identification and characterization, collection, conservation, exchange of materials, access to and distribution of benefits, staff training, raising public awareness, improving the international cooperation, etc.).

Adjust the current National database of plant and animal genetic resources to the international standards (FAO, IPGRI)

Support development of mixed farm systems and agricultural production based on the autochthonous breeds of domestic animals and plant types, protection of traditional knowledge and cultural heritage, development of rural tourist industry, manufacture of local products having a protected geographical origin, etc.

Support researching of agro-biodiversity (old types, old breeds, wild relatives, endemic species ...)

Put in operation the National Plant Gene Bank and follow experiences of the EU countries in managing the Animal Gene Bank.

The process of making a new Agricultural Strategy for the period 2014-2024 is ongoing.

**National Programme of Rural Development 2011-2013** („Official Gazette R.S.“, No. 15/11)

TECHNICAL DESCRIPTION OF THE MEASURE NO. 2.1.2

MEASURE 2.1: Activities aiming to improve the environment and rural landscapes/countryside

Sub-measure 2.1.2: Support for autochthonous breeds of domestic animals

***Justification of the sub-measure***

Breeding of domestic animals has always been one of the major branches of agricultural production in Serbia, and traditional method of growing of animals expending through several centuries has brought great diversity of domestic, local animal breeds. Autochthonous breeds are closely associated with geographical and cultural diversity of the Serbian village.

Unfortunately, number of local/autochthonous breeds traditionally bred has decreased significantly over the last 50 to 60 years due to collectivization and intensifying of agricultural production. Recently, economic status of the agricultural sector after privatization and land restitution is reflecting indirectly on breeding of autochthonous breeds.

Disappearance of local/autochthonous breeds of domestic animals poses significant threat in regard to potential decline or even loss of agro-biodiversity of Serbia because of following reasons:

a) Loss of important traits such as general resistance and resistance to disease as consequence of loss of one part of

genetic diversity typical for autochthonous breeds, and can be of great importance for selection within breed and improvement of the quality, i.e. traits of other breeds;

- b) local/autochthonous breeds of domestic animals (cattle, sheep and goats) are very well adapted to poor/low growing conditions in mountainous regions and at the same time are very important for preservation of general biodiversity of the agro-ecosystem through traditional grazing on mountain pastures of high natural value.

All stated is in accordance with various agreements and official documents such as Convention on biological diversity, global plan of activities for genetic animal resources of the Food and Agriculture Organization within UN - FAO, Network for plant genetic resources in South-East Europe (Genetic Resources in Plant Production - SEEDNET), European cooperation program for networks of plant genetic resources, etc.

In average, there are 400-500 individual agricultural farms/holdings in Serbia engaged in breeding of rare, i.e. endangered autochthonous breeds of domestic animals. For their management and breeding presently financial aid is provided (according to special criteria) from the budget for the support for rural development. This assistance is key factor in preservation of breeding heads of livestock, and without this aid the number of livestock would drop significantly. Additional support (in the form of projects) is also provided for registration and identification of animals, forming of new herds of endangered breeds and for infrastructure (reconstruction of facilities, etc.).

Since payment for preservation of autochthonous breeds have been executed for long time, it is possible that in the programming of utilization of pre-accession funds of EU this will not be considered as pilot activity for co-financing from the IPARD fund. However, it is too early to make such conclusion because in any case it is necessary to carry out preparation activities with aim to a) harmonize of existing support to requirements of EU, and b) building/development of indispensable institutional capacities for expansion of this system of support, including improvement of existing administration/management procedures and control procedures.

### **Objectives**

Sub-measure 2.1.2 will provide support to agricultural producers - keepers of autochthonous breeds of domestic animals with objective to:

- preserve animal genetic resources and cultural heritage through increase of number of breeding livestock of local/autochthonous breeds whose number is in constant decline;
- support certain local breeds of domestic animals that are well adapted to poor conditions in traditional agricultural production in mountainous regions and have potential to play significant role in preservation of traditional systems of grazing (utilization/exploitation of pastures) in mountainous and hilly-mountainous regions; and
- building/development of institutional capacities and acquisition of practical experience in execution of support schemes for autochthonous breeds of domestic animals according to EU standards.

### **Association to other measures included in NRDP**

Support to breeding of autochthonous breeds of domestic animals is directly associated to sub-measure 2.1.3: Preservation of bio-diversity and landscape/countryside, and combination of these two sub-measures will be supported where necessary, i.e. feasible, through pilot projects financed by international organizations.

### **Conditions for the exercise of incentive**

Sub-measure 2.1.2 can be carried out if the conditions for the realization of incentives relating to:

- 1) geographical distribution - all rural areas of the Republic of Serbia;
- 2) the applicant for the use of incentives - a individuals and legal entity - holders of endangered breeds of farm animals;
- 3) the general conditions for the realization of incentives - the applicant for the use of incentives in accordance with this sub-measure must meet the following requirements:

- (1) be registered in the Register of Agricultural Holdings and is in active status,
- (2) the holder of marked animals appropriate race and origin that were registered,
- (3) that the holder of the required minimum number of animals eligible for this assistance on his farm in order to ensure sustainable farming - number of animals, respectively individuals (listed in the table - the program to preserve the number of animals, respectively endangered breeds / strains of domestic animals)
- (4) possession of evidence against him hasn't been prosecuted for the public debt,
- (5) agrees to carry out production in accordance with the organic production,
- (6) must ensure that all animals for which the user has received the support of the sub-measure , must be kept throughout the five-year period of the contract on the behavior of animals . Department of Agricultural Payments and competent veterinary office must be notified immediately of the death of animals for which the user receives help . The user can replace the dead animal to another animal of the same breed ( which meets the same conditions for granting aid), and at the same time not lose the right to continue the implementation of assistance,
- (7) to provide breeding of pure breed ( animals can not crossbreed ) - a certified purebred are eligible for incentives

- (8) must allow of the relevant departments for selection and research institutions, of recording / monitoring of the quality of production,
- (9) must keep records of the sale and purchase of livestock on the farm, which must be available for inspection
- (10) must notify and obtain written permission of the Department of Agricultural Payments prior to slaughter or sale of any head that receive assistance under this sub-measure. The user can replace the slaughtered / sold animal to another animal of the same breed (which meets the same conditions for granting aid) , and at the same time not lose the right to continue the implementation of assistance,
- (11) must apply the guidelines and advice to the relevant authorities regarding the health and welfare of animals,
- (12) If the applicant is a legal entity must:
- Registered in the Company Register
  - Have a maximum of 25% of the state capital.

Endangered autochthonous breeds of domestic animals eligible/acceptable for utilization of means within this sub-measure are following (in accordance to their status of endangerment on the *List of world endangered species of domestic animals* of the UN FAO and limits for "loss due to agricultural production" established in the Article 27(4) and Annex IV of the Commission Regulation No. 1974/2006): Podolian cattle, Busha cattle, Domestic buffalo, Nonius, Domestic-mountain pony, Balkan donkey, Mangalitsa pig, Moravka pig, Resavka pig, Pramenka sheep -Pirotska, Krivovirska, Bardoka, Lipska, Vlashko-vitoroga and Karakachanska, Chokan Tsigai, Balkan goat and poultry-Svrljig hen, Sombor Crested, Banat Naked neck.

### **Payment rates**

Adequate payments as a support for each of the endangered breeds will be made annually, as a lump sum per head of livestock in the period of duration of the contract on animal keeping provided that the beneficiary continues to meet the specific requirements of this sub-measure.

This payment rate will provide to beneficiaries compensation/reimbursement for lost income and/or additional expenses generated due to execution of special requirements in animal keeping.

If it is discovered that payments have been granted based on false information and that the beneficiary has violated in his/her conduct the conditions of the contract on animal keeping, MoA is entitled to issue request for return of the awarded payments/means.

### **Coherency and compatibility**

Support to preservation of autochthonous breeds of domestic animals is in accordance to Strategic objective of this programme which relates to preservation and improvement of the environment and sustainable use of natural resources, as well as with sub-measures 2.1.3. and 3.1.1.

### **Financing**

Financing incentives are provided in the following table:

<b>Year</b>	<b>Total expenses</b>	<b>Public expenses (national)</b>	<b>Private/individual contribution</b>
	RSD	RSD	RSD
1	4=2+3	2	3
2011	30.000.000,00	30.000.000,00	0
2012	35.000.000,00	35.000.000,00	0
2013	40.000.000,00	40.000.000,00	0
<b>Total</b>	<b>105.000.000,00</b>	<b>105.000.000,00</b>	<b>0</b>

### **Monitoring and evaluation indicators**

Indicators for monitoring the implementation of the sub-measure for evaluating the effects of sub-measure 2.1.2. given in the following table:

<b>Type of indicator</b>	<b>Indicator</b>	<b>Objective</b>
<i>Output</i>	Number of farm holdings and holdings of other land managers receiving support under this sub-measure	500
	Total number of contracts under this sub-measures	500
<i>Result</i>	Number of actions related to conservation of genetic resources under this sub-measure	2.000 - 5.000



*Influence*

## Changes in preservation of biodiversity

**The National Agricultural Programme of the Republic of Serbia 2010-2013** („Official Gazette R.S.“, No. 83/10) in Action Plan define subsidies for breeding of AnGR. Farmers used these subsidies over Rural Development Measures.

**Biodiversity Strategy of the Republic of Serbia for the period 2011-2018** („Official Gazette R.S.“, No. 13/1)

Domestic Animal Genetic Resources Statistical data shows that generally far less livestock is registered on the territory of Central Serbia and AP Vojvodina than in the period prior to the collapse of Yugoslavia.

The Republic of Serbia possesses unique breeds and varieties of domestic animals created through long-term selection processes conducted by humans and influenced by natural conditions present in particular regions. However, the depopulation of mountainous areas, coupled with the neglect and abandonment of livestock production in marginal areas, has led to the extinction of many breeds and varieties of domestic animals.

Strategy indicates the following autochthonic breeds of domestic animals in the Republic of Serbia are still in existence: domestic turkey, domestic duck, Danubian goose, domestic guinea fowl, Serbian High-flyer pigeon and the Serbian Sarplaninac (Sar Mountain) Sheppard dog. The status of the following breeds is unknown: baljusa (Black-head Pramenka from Metohia), East-Serbian chicken, Novi Pazar goose, as well as non-standardized breeds of dogs used to protect herds (Serbian Sheppard) or those used as working dogs for herd management (pulini). The Republic of Serbia also has an autochthonic breed of bee, *Apis mellifera carnica*, with its varieties. It is one of most valuable breeds of honeybee in the world. Between 400 and 500 individual agricultural farms, entrepreneurs, state institutions and public enterprises own endangered breeds of domestic animals. Activities on the conservation of domestic animal genetic resources and endangered autochthonic breeds are implemented with the goal of breed conservation and can be applied in one of the following ways:

- 1) *In-situ* or “on-farm” -implies the conservation or cultivation of living animals in the production systems where they were developed or are currently located, which equally includes both farm and extensive production systems, and;
- 2) *Ex-situ* implies conservation of external production systems where animals are developed, which can be:
  - *In vivo*-cultivation of live animals in a zoo, nature park, museum, research institute etc., and;
  - *In vitro* -cryopreservation of embryos, sperm, fertilized egg cells, DNA, somatic cells and other biological materials that may be used for the reconstitution of animals.

## Impact on animal genetic resources management

**Law on Animal Husbandry** („Official Gazette R.S.“, No. 41/09, 93/12). List of genetic reserve of domestic animals, ways of preservation of genetic reserve of domestic animals, a list of indigenous breeds of domestic animals and endangered of autochthonous breeds and register of the indigenous breeds of domestic animals.

**Law on Agriculture and Rural Development** ("Official Gazette RS", No. 41/09). Regulation on the establishment of programme of the distribution and use of incentive funds for the conservation and sustainable use of genetic resources of domestic animals on annual level (subsidies per head).

**Agriculture Strategy Republic of Serbia 2005** (Government decision from the date of 18.08.2005.). In the strategy of agricultural development, the Action Plan of the Strategy envisages the adoption of the National Programme for the conservation and sustainable use of genetic resources in agriculture, to adapt the existing national database of animal and plant genetic resources to the international standards (FAO and IPGRI); support production based on indigenous farm animal breeds and varieties of plants, to study of agro-biodiversity and putting into operation of the national gene bank.

**National Programme of Rural Development 2011-2013** („Official Gazette R.S.“, No. 15/11) **and The National Agricultural Programme of the Republic of Serbia 2010-20130** („Official Gazette R.S.“, No. 83/10)

Support farmers to receive subsidies and increase the number of population of autochthonous endangered breeds. Farmers used these subsidies over Rural Development Measures.

**Biodiversity Strategy of the Republic of Serbia for the period 2011-2018** („Official Gazette R.S.“, No. 13/1)

Action Plan define the following activities:

- Conduct a national assessment of potentials and priorities for *ex-situ* conservation
- Strengthen and expand *ex-situ* conservation, including the provision of adequate resources and training to relevant institutions and organizations by:
  - Establish *ex-situ* conservation programmes or offices within relevant institutions
  - Increase support to national gene banks
- Reform breeding policies of only specialized breeds in animal husbandry, which reduce the multifunctional role of local indigenous breeds and lead to biodiversity degradation and reduction

- Establish a National Council for Genetic Resources
- Develop a national strategy and programme for sustainable use, development and conservation of domestic animal genetic resources
- Establish an efficient national agro-environmental programme
- Develop and promote best practice guidelines for sustaining biodiversity for agriculture and support their implementation
- Capacity Building for *ex-situ* protection of genetic resources and genetic resource management
- Support NGO sector projects that pertain to the promotion of biodiversity conservation
- Collaborate with neighbouring countries on the exchange of information and reproduction of material for the recovery of native and cross-border species
- Exchange genetic resources with other international institutions and gene banks

Future needs

Develop a National Programme and Action Plan for Conservation and Management of AnGR.

## 2. Integration of animal genetic resources management with the management of other genetic resources for food and agriculture (plant, forest or aquatic genetic resources)

Legislation

No

Policy

Yes

Details of the measure(s)

**Biodiversity Strategy of the Republic of Serbia for the period 2011-2018** („Official Gazette R.S.“, No. 13/1)

Impact on animal genetic resources management

Future needs

## 3. Surveying and monitoring of animal genetic resources

Legislation

Yes

Policy

No

Details of the measure(s)

**Law on Animal Husbandry** („Official Gazette R.S.“, No. 41/09, 93/12). The articles 7, 8, 9 and 17 relating to surveying and monitoring of animal genetic resources.

### 1. Breeders' organizations

#### 1) Primary breeders' organization

##### Article 7.

The primary breeders' organization shall develop and implement the breeding program.

In implementation of the breeding program the primary breeders' organization, particularly:

- 1) shall participate in selection of domestic animals, carries out the control of production performance and identification of domestic animals;
- 2) shall keep primary register and delivers data to the regional breeders' organization and main breeders' organization;
- 3) shall control production performance and abilities of domestic animals in the lowest number of domestic animals which enables the proper implementation of the breeding program.

#### 2) Regional breeders' organization

##### Article 8.

The regional breeders' organization shall implement the breeding program on its territory.

In implementation of the breeding program the regional breeders' organization, in particular:

- 1) shall perform developmental, scientific and research tasks on its territory;
- 2) shall select domestic animals and spreads their genetic progress;
- 3) shall maintain the register of bee pasture;
- 4) shall participate in development of the plan of insemination;
- 5) shall analyze data from primary registry delivered by the primary breeders' organization and delivers it to the main breeders' organization;

6) shall perform task relating to gene bank.

### 3) Main breeders' organization

#### Article 9.

Main breeders' organization shall develop and implement the breeding program, which is accepted by the Decision of the Ministry.

In implementation of the main breeding program, the main breeders' organization, in particular:

- 1) Maintain the main registry according to species, i.e. breeds of domestic animals present on the territory of the Republic of Serbia;
- 2) Shall issue pedigrees and certificates of the origin and other zoo-technical documents and maintains records of them;
- 3) Shall control production performance of breeding livestock;
- 4) Shall evaluate the breeding value of domestic animals;
- 5) Shall rank and categorize breeding livestock;
- 6) Shall develop the plan of utilization and distribution of semen from high quality breeding livestock;
- 7) Shall develop the plan of utilization of breeding queen bee mothers;
- 8) Shall maintain the register of primary breeding organizations;
- 9) Shall maintain the register of breeders of high quality breeding livestock;
- 10) Shall recommend recognition of newly created breeds, lines and hybrids of domestic animals;
- 11) Shall develop professional instructions for implementation of the main breeding program;
- 12) Shall control the application of regulated methods and procedures in implementation of the main breeding program.

#### Measures to attain objectives from the breeding program

#### Article 17.

Measures to attain objectives from the breeding program are:

- 1) the control of the productivity of breeding and high quality breeding livestock;
- 2) selection and production of breeding and high quality breeding livestock;
- 3) production of high quality animal food;
- 4) selection and utilization of high quality male and female breeding livestock for production;
- 5) research of the transmission of traits onto progeny of high quality breeding livestock;
- 6) controlled breeding of domestic animals;
- 7) keeping of register of domestic animals;
- 8) production and introduction in the production of other breeds and newly created breeds and hybrids of domestic animals;
- 9) other breeding and zoo-technical measures.

Impact on animal genetic resources management

There are heard-book for all the indigenous breeds. Every year main breeding organization provide reports to the Ministry.

Future needs

### 4. Official recognition of livestock breeds

Legislation

Yes

Policy

No

Details of the measure(s)

**Law on Animal Husbandry** („Official Gazette R.S.“, No. 41/09, 93/12). The articles 26, 27 and 31 relating to official recognition of livestock breeds.

#### Origin of high quality breeding livestock

#### Article 26.

Every high quality breeding animal, i.e. other breeding material, must have known origin.

Known origin of high quality breeding animal and other breeding material is determined by the main breeders' organization.

Origin of female high quality breeding livestock can be complete or incomplete origin.

Origin of male breeding livestock can be complete.

Complete origin of high quality breeding livestock, according to this Law, shall be considered if two or more generations of ancestors are known, with the exception of ungulates where complete origin shall be considered if five generations of ancestors are known.

Incomplete origin of breeding livestock, according to this Law, shall be considered if not all ancestors can be determined in the way defined in the Paragraph 5 of this Article. Minimum known origin in such case is known origin of one parent. The Minister regulated the requirements for meeting complete or incomplete origin of high quality breeding livestock referred to in the Paragraph 5 and 6 of this Article, as well as methods for determination and verification of the origin.

### **Types, entering and content of the register of domestic animals**

#### **Article 27.**

Domestic animals can be entered in the register, as follows:

- 1) main register of domestic animals;
- 2) register of autochthonous livestock breeds on origin of the breed;
- 3) register of poultry flocks;
- 4) register of queen bees of known origin.

High quality breeding livestock, by species and breeds, are entered into main register.

Autochthonous breeds of livestock are entered into register of autochthonous livestock breeds on origin of the breed.

Poultry flocks are entered into the register of poultry flocks.

Queen bees of known origin are entered into the register of queen bees of known origin.

Register contains data on:

- 1) species, breed and origin of livestock;
- 2) identification of the head of livestock;
- 3) date of birth of heads of livestock;
- 4) first name and family name, i.e. breeders name and address, i.e. head office of the breeder.

Register referred to in the Paragraph 1 of this Article is managed by the Main breeder's organization.

The Minister shall determine conditions for registration of domestic animals in the register, as well as the content and way to keep/manage the register.

### **Recognition of new breeds, lines and hybrids of domestic animals**

#### **Article 31.**

New breeds, lines and hybrids of domestic animals created on the territory of the Republic of Serbia are recognized by the Decision of the Minister.

The Minister shall regulate conditions for recognition of new breeds, lines and hybrids of domestic animals.

Impact on animal genetic resources management

Future needs

Develop a National Programme and Action Plan for Conservation and Management of AnGR.

## **5. Animal breeding and genetic improvement strategies**

Legislation

Yes

Policy

No

Details of the measure(s)

**Law on Animal Husbandry** („Official Gazette R.S.“, No. 41/09, 93/12). The articles 16-24 relating to the animal breeding and genetic improvement strategies.

Impact on animal genetic resources management

Future needs

**Do these measures address:**

### **5.1 Animal identification and recording**

*Note: Sections 2 and 3 include questions on traceability and on animal identification as it relates to animal health. If relevant, please use cross-references to indicate that a given law or policy affects more than one field of action.*



Legislation  Policy

Details of the measure(s)

**Law on Animal Husbandry** („Official Gazette R.S.“, No. 41/09, 93/12). The articles 25-30 and 57 relating to animal identification and recording.

Impact on animal genetic resources management

Future needs

## 5.2 The establishment and operation of breeders' associations

Legislation  Policy

Details of the measure(s)

**Law on Associations** („Official Gazette R.S.“, No. 51/09).

Impact on animal genetic resources management

No impact on animal genetic resources because all matters is regulated by the **Law on Animal Husbandry** („Official Gazette R.S.“, No. 41/09, 93/12).

Future needs

## 6. Use of reproductive biotechnologies (excluding zoosanitary issues)

*Note: Zoosanitary issues are covered in Section 3.*

Legislation  Policy

Details of the measure(s)

**Law on Animal Husbandry** („Official Gazette R.S.“, No. 41/09, 93/12). The articles 36-42 and 44-45 relating to use of reproductive biotechnologies.

Impact on animal genetic resources management

The farmers who keep indigenous breeds use natural mating.

Future needs

## 7. Genetic modification of animals used for food and agriculture

Legislation  Policy

Details of the measure(s)

- **Law on Genetically Modified Organisms** („Official Gazette R.S.“, No. 41/09).
- **Cartagena Protocol** (date of ratification 08.02.2006., date of entry into force 09.05.2006.)

Impact on animal genetic resources management

No impacts on AnGR.

Future needs

## 8. Suitability of imported genetic material for use in local production environments

*Note: For example, rules requiring a "genetic assessment" before genetic material can be introduced.*

Legislation  Policy

Details of the measure(s)

Impact on animal genetic resources management

Future needs

## 9. Conservation programmes for animal genetic resources

Legislation

Yes

Policy

No

Details of the measure(s)

**Law on Animal Husbandry** („Official Gazette R.S.“, No. 41/09, 93/12). On the basis of Article 67. paragraph 2. and Article 69. paragraph 2. of the Law, enacted the Rules on the list of genetic reserves of domestic animals, the way of preserving genetic reserves of domestic animals, as well as a list of indigenous breeds of domestic animals and endangered indigenous breeds ("Official Gazette RS", No. 38/10).

Impact on animal genetic resources management

Future needs

Develop a National Programme and Action Plan for Conservation and Management of AnGR.

### Do these measures include provisions specifically related to:

#### 9.1 *In vivo* conservation

Legislation

Yes

Policy

No

Details of the measure(s)

**Law on Animal Husbandry** („Official Gazette R.S.“, No. 41/09, 93/12). On the basis of Article 67. paragraph 2. and Article 69. paragraph 2. of the Law, enacted the Rules on the list of genetic reserves of domestic animals, the way of preserving genetic reserves of domestic animals, as well as a list of indigenous breeds of domestic animals and endangered indigenous breeds ("Official Gazette RS", No. 38/10).

Impact on animal genetic resources management

Future needs

Develop a National Programme and Action Plan for Conservation and Management of AnGR.

#### 9.2 Cryoconservation

Legislation

Yes

Policy

No

Details of the measure(s)

**Law on Animal Husbandry** („Official Gazette R.S.“, No. 41/09, 93/12). On the basis of Article 67. paragraph 2. and Article 69. paragraph 2. of the Law, enacted the Rules on the list of genetic reserves of domestic animals, the way of preserving genetic reserves of domestic animals, as well as a list of indigenous breeds of domestic animals and endangered indigenous breeds ("Official Gazette RS", No. 38/10).

Impact on animal genetic resources management

Future needs

Develop a National Programme and Action Plan for Conservation and Management of AnGR.

## 10. Research and development related to animal genetic resources management

Legislation

No

Policy

Yes

Details of the measure(s)

**Strategy of Scientific and Technological Development of Republic of Serbia 2010-2015** („Official Gazette R.S.“, No. 13/10).

### 3.3.5. Agriculture and food

**The importance of research in the field of agriculture and food**

Research in the field of agriculture and food has always been directly related to the development of agriculture and food industry of our country. Past experiences show that in this area it is important for each country to have good quality scientific research organizations and educational institutions. Such institutions in each country are imperative for growth. Their future mission needs to resolve the long guide and review the needs of consumers and producers.

Changed economic and systemic conditions in the world and our demand of scientific research to the social, environmental and economic challenges (increasing demand for safer, healthier and better quality food ) and for sustainable use and production of renewable bio resources . In future research , it is necessary to integrate basic, applied and development research should contribute to the common development of Serbian bioeconomy which knowledge through the integration of science , industry and other stakeholders in order to:

- conservation of soil, plant and animal resources ;
- building a sustainable and efficient agricultural and food sector that can compete on the world market, contributing to the growth of national income ;
- food security to meet the needs of consumers in terms of quality and safety (" food quality and safety ");
- development of technologies that will save the environment from the effects of agricultural production;
- prepare agriculture and food industry of Serbia for EU integration.

### Research priorities in agriculture and food

Future research should include the following thematic frames:

- sustainable use, fertility enhancement, remediation and soil protection
- evaluation and use of cultivated and wild genetic resources by means of conventional and new biotechnological methods in plant breeding in order to obtain productive varieties, hybrids or race, which will serve as a basis for food production, particularly functional, special and new foods;
- the introduction and development of new biotechnologies aimed at sustainable management of intensive and organic farming in the use of existing biological resources;
- development of new technologies and products in the food industry and technology based on traditional products;
- research and development of new applications of enzymes and microorganisms in bioproducts, new products, the production of biomass.

Impact on animal genetic resources management

I have no information how many projects for AnGR are supported by the Ministry of Science.

Future needs

## 11. Patenting

Legislation

**If legislation is place or under development, does/will it include provisions (including exemptions) specifically targeting:**

Animal genetic resources for food and agriculture

Living organisms in general

Details of the measure(s)

**The Patent Law** („Official Gazette R.S.“, No. 99/11).

Impact on animal genetic resources management

No information

Future needs

## 12. Access and benefit sharing arrangements

*Note: The Secretariat of the Commission on Genetic Resources for Food and Agriculture, on 8 August 2013, invited countries to report on the conditions under which genetic resources for food and agriculture are exchanged and used (Circular State Letter C/ NRD-5). Please coordinate responses within your country.*

Legislation

Policy

**If instruments are in place or under development, do/will they include provisions (including exemptions) specifically targeting:**

Animal genetic resources for food and agriculture

Genetic resources for food and agriculture in general

Details of the measure(s)

Nagoya Protocol is under development.

Impact on animal genetic resources management

Future needs

## SECTION 2: MARKETING AND CONSUMER INFORMATION AND PROTECTION

This section targets information on legislation and policies addressing the marketing of animal products, including those addressing:

- the production and marketing of organic products;
- the production and marketing of products sold under protected designations of origin or similar labels;
- production and marketing of products sold under labels indicating adherence to animal-welfare-related standards; and
- food safety.

While some policies and legislation in these fields of action may include specific references to animal genetic resources, it is likely that many will not. The latter may, nonetheless, have indirect effects on animal genetic resources and their management. Consumer demand for animal products often has a major influence on the use and development of animal genetic resources. A lack of demand may place a breed at risk of extinction. Marketing initiatives for breed-specific products, or products from production systems in which locally adapted breeds are kept, can provide a means of promoting the use of at-risk breeds and reducing the risk that they will become extinct. Legislation and policies that facilitate initiatives of this kind can have a positive effect in terms of the maintenance of animal genetic diversity. Conversely, legislation and policies that inhibit the marketing of particular types of products, or products from particular locations or production systems, may inhibit the use of animal genetic resources associated with these products, locations or production systems.

### 1. Marketing of animal products in general

*Note: This question refers to measures that are not specifically focused on market subsectors such as organic products or products with designated labels of origin.*

Legislation  No Policy  No

Details of the measure(s)

Impact on animal genetic resources management

Future needs

### 2. Production and marketing of organic products

Legislation  Yes Policy  Under development

Details of the measure(s)

- **Law on organic production** („Official Gazette R.S.“, No. 30/10).
- **Rulebook/Regulation on control and certification in organic production and methods of organic production** („Official Gazette R.S.“, No. 48/11).

The article 32 of Rulbook, define “when choosing a breed or strain of animals in applied methods of organic livestock production priority should be given to indigenous breeds and strains”.

Article 32.

In selection of animal breeds or animal strains for organic livestock production, the ability of animals to adapt to local conditions, their vitality and resistance to diseases shall be taken into the account.

Animal breeds or strains used in organic livestock production are chosen in a way to avoid certain diseases or health issues typical for animal breeds or strains used in intensive production, such as porcine stress syndrome, pale, soft and

executive meat (PSE), sudden deaths, abortions and difficult births which require caesarean procedure.  
In selection of animal breeds or strains used in organic livestock production, preference shall be given to indigenous/ autochthonous breeds and strains.  
In regard to bees, methods of organic livestock production can be applied only on bees of breed *Apis mellifera carnica*.

Impact on animal genetic resources management

Some breeders of autochthonous breeds are in programme of organic production. No reliable data how many breeders.

Future needs

### 3. Production and marketing of products sold under protected designations of origin or similar labels

Legislation

Policy

Details of the measure(s)

- **Law on indications of geographical origine** („Official Gazette R.S.“, No. 18/10).
- **Regulation on condition, manner and procedure for quality control and special properties for agriculture and foodstuff products with geographical indication** („Official Gazette R.S.“, No. 73/10).

Impact on animal genetic resources management

There are several protected cheeses (PDO or PGI) for the production of which can only use milk from certain native species.

Future needs

### 4. Production and marketing of products sold under labels indicating adherence to particular animal welfare-related standards

*Note: For example, rules relating to the marketing of products as “free range” or under similar designations. Basic animal welfare legislation (i.e. not specifically related to marketing) is covered in Section 3.*

Legislation

Policy

Details of the measure(s)

Impact on animal genetic resources management

Future needs

### 5. Safety of food products from animals

*Note: If relevant, include measures related to the marketing of products derived from genetically modified organisms.*

Legislation

Policy

Details of the measure(s)

Impact on animal genetic resources management

Future needs

### 6. Traceability of animal-origin products

*Note: Sections 1 and 3 include questions on animal identification as it relates to breeding and to animal health. If relevant, please use cross-references to indicate that a given law or policy affects more than one field of action.*

Legislation

Policy

Details of the measure(s)



Impact on animal genetic resources management

Future needs

### SECTION 3: ANIMAL HEALTH AND WELFARE

This section targets information on legislation and policies addressing animal health and animal welfare. While some policies and legislation in these fields may include specific references to animal genetic resources, it is likely that many will not. The latter may, nonetheless, have indirect effects on animal genetic resources and their management. Animal genetic resources and their management can be affected both by the direct effects of animal diseases and by the effects of measures taken to control animal diseases. For example, a disease epidemic may threaten the existence of at-risk breeds, particularly if their populations are concentrated geographically. Animal diseases, as influenced by the presence or absence of effective animal health services, can also influence the type of animal genetic resources that can be kept in particular locations, influence breeding objectives and/or affect the economic sustainability of livestock-keeping livelihoods. Compulsory culling measures used to control disease epidemics may pose a threat to geographically concentrated breed populations. Legal restrictions on the import of genetic material because of zoosanitary reasons may affect breeders' access to genetic resources. Legal restrictions on livestock movements, restrictions on particular husbandry practices, or onerous requirements for animal health-related actions on the part of livestock keepers (or in the food processing and marketing chain), may inhibit the keeping of animal genetic resources associated with the production systems targeted. Zoosanitary legislation related to the use of semen, embryos and other genetic materials may have implications for cryoconservation programmes.

Legal and policy frameworks related to animal welfare might promote or inhibit the keeping of animals in particular production systems or the use of animals to provide specific products or services. In turn, these developments might promote or inhibit the continued use of the animal genetic resources associated with the respective production systems, products or services.

#### 1. Delivery of animal health services and control of animal diseases

Legislation

Policy

Details of the measure(s)

**Law on veterinary matters** („Official Gazette R.S.“, No. 91/05).

Impact on animal genetic resources management

No information

Future needs

#### Do these measures include provisions specifically related to:

##### 1.1 Animal identification

*Note: Sections 1 and 2 include questions on animal identification as it relates to breeding and on traceability. If relevant, please use cross-references to indicate that a given law or policy affects more than one field of action.*

Legislation

Policy

Details of the measure(s)

**Law on veterinary matters** („Official Gazette R.S.“, No. 91/05).

Impact on animal genetic resources management

No information

Future needs

##### 1.2 Control of the import of animal genetic resources (live breeding animals and/or germplasm) for zoosanitary reasons

Legislation

Details of the measure(s)

**Law on veterinary matters** („Official Gazette R.S.“, No. 91/05).

Impact on animal genetic resources management

No information

Future needs

### 1.3 Control of the export of animal genetic resources (live breeding animals and/or germplasm) for zoosanitary reasons

Legislation Yes

Details of the measure(s)

**Law on veterinary matters** („Official Gazette R.S.“, No. 91/05).

Impact on animal genetic resources management

No information

Future needs

### 1.4 Zoosanitary rules related to the use of reproductive technologies

Legislation Yes

Details of the measure(s)

**Law on veterinary matters** („Official Gazette R.S.“, No. 91/05).

Impact on animal genetic resources management

No information

Future needs

### 1.5 Control of livestock movements (within the country) for zoosanitary reasons

Legislation Yes

Details of the measure(s)

**Law on veterinary matters** („Official Gazette R.S.“, No. 91/05).

Impact on animal genetic resources management

No information

Future needs

### 1.6 Restrictions or compulsory actions related to husbandry practices (for zoosanitary reasons)

Legislation Yes

Details of the measure(s)

**Law on veterinary matters** („Official Gazette R.S.“, No. 91/05).

Impact on animal genetic resources management

No information

Future needs

### 1.7 Compulsory culling in the event of outbreaks of specific diseases

Legislation Yes

**If legislation is in place or under development, does/will it include provisions to protect at-risk animal genetic resources from the effects of culling programmes?**

Details of the measure(s)

**Law on veterinary matters** („Official Gazette R.S.“, No. 91/05).

Impact on animal genetic resources management

No information

Future needs

## 2. Animal welfare

Legislation

Yes

Policy

Yes

Details of the measure(s)

**Animal welfare law** („Official Gazette R.S.“, No. 41/09).

Impact on animal genetic resources management

No information

Future needs

## SECTION 4: AGRICULTURE, LAND USE AND NATURAL RESOURCES MANAGEMENT

This section targets information on legislation and policies that address the overall management of the production systems, ecosystems and environments within which animal genetic resources are used and developed. The questions address the following main topics:

- general frameworks or strategies for rural development;
- agriculture, land use and natural resources management;
- management of biodiversity;
- other aspects of environmental protection;
- overall livestock-sector development;
- management of rangelands and other grazing lands;
- establishment of livestock farms or holdings
- establishment and operation of civil society organizations in the livestock sector
- participation of livestock keepers in decision-making in livestock-sector development; and
- prevention, preparedness and response to natural or human-induced disasters

While some policies and legislation in these fields may include specific references to animal genetic resources, it is likely that many will not. The latter may, nonetheless, have indirect effects on animal genetic resources and their management. For example, policies and legislation that promote or constrain the keeping of livestock in particular production systems, for particular purposes or in particular geographical areas may promote or discourage the use of the animal genetic resources associated with these systems/uses/locations (hence possibly affecting their risk status), lead to the establishment of breeding objectives targeting the development of animals suitable for the favoured systems/uses/locations or lead to the import of genetic resources suitable for these systems/uses/locations.

### 1. General framework or strategy for sustainable agriculture, land use and natural-resources management

*Note: This question relates to broad strategic-level instruments such as national agricultural or rural development policies, strategies or laws. Instruments related to specific aspects of agricultural and rural development should be described under other questions as and where relevant.*

Legislation

Yes

Policy

Yes

Details of the measure(s)

- **Agriculture Strategy Republic of Serbia 2005** (Government decision from the date of 18.08.2005.).
- **National Programme of Rural Development 2011-2013** („Official Gazette R.S.“, No. 15/11).
- **Law on Agriculture and Rural Development** ("Official Gazette RS", No. 41/09).

Impact on animal genetic resources management

Future needs

## 2. Management of biodiversity

Note: Please use this question to provide information on the general framework for managing all aspects of the country's biodiversity (e.g. instruments related to the designation and management of protected areas). Include, for example, information on whether animal genetic resources issues are included in your country's National Biodiversity Strategy and Action Plan and on any provisions addressing potential conflicts, or perceived conflicts, between the management of animal genetic resources and the management of other elements of biodiversity. Specific animal genetic-resources-related instruments (e.g National Strategy and Action Plans for Animal Genetic Resources) should be reported in Section 1 (Question 1).

Legislation  Policy

Details of the measure(s)

**Biodiversity Strategy of the Republic of Serbia for the period 2011- 2018** ("Official Gazette of RS" no. 13/2011)  
[http://www.zzps.rs/novo/kontent/stranicy/propisi\\_strategije/strategija\\_bioloske\\_raznovrsnosti.pdf](http://www.zzps.rs/novo/kontent/stranicy/propisi_strategije/strategija_bioloske_raznovrsnosti.pdf)

Impact on animal genetic resources management

Future needs

## 3. Environmental protection

Note: Instruments specifically targeting the management of biodiversity are covered under Question 2. Please use this question to provide information on instruments addressing other environmental issues (e.g. addressing pollution of land and water, deforestation, climate change, water use or flood protection). If an instrument addresses both biodiversity and other aspects of environmental protection, please indicate this using a cross-reference to your answer to Question 2.

Legislation  Policy

Details of the measure(s)

- **Law on Environmental Protection** ("Official Gazette of the Republic of Serbia", Issues 135/04 and 36/09);
- **Law on Environmental Protection Fund** ("Official Gazette of the Republic of Serbia", Issue 72/09);
- **Law on Nature Protection** ("Official Gazette of the Republic of Serbia", Issues 36/09, 88/10 and 91/10 - amendment);
- **Law on National Parks** ("Official Gazette of the Republic of Serbia", Issues 39/93, 44/93, 53/93, 67/93, 48/94, 101/05 and 36/09 - the other law);
- **Law on Strategic Environmental Impact Assessment** ("Official Gazette of the Republic of Serbia", Issue 135/04);
- **Law on Environmental Impact Assessment** ("Official Gazette of the Republic of Serbia", Issues 135/04, 36/09);
- **Law on the Protection and Sustainable Use of Fish Stocks** ("Official Gazette of the Republic of Serbia", Issue 36/09);
- **Law on Forests** ("Official Gazette of the Republic of Serbia", No.46/91, 83/92, 53/93, 67/93, 48/94, 54/96, 101/05);
- **Law on Hunting** ("Official Gazette of the Republic of Serbia", No.39/93, 44/93, 60/93);
- **Law on Waters** ("Official Gazette of the Republic of Serbia", No.46/91, 53/93, 67/93, 48/94, 54)

National Strategy for Sustainable Development ("Official Gazette of RS", no. 57/2008)

[http://www.zzps.rs/novo/kontent/stranicy/propisi\\_strategije/sodrzivog%20razvoja.pdf](http://www.zzps.rs/novo/kontent/stranicy/propisi_strategije/sodrzivog%20razvoja.pdf)

National Strategy for Sustainable Use of Natural Goods and Resources ("Official Gazette of RS" no. 33/2012)

[http://www.zzps.rs/novo/kontent/stranicy/propisi\\_strategije/S\\_prirodnih%20resursa.pdf](http://www.zzps.rs/novo/kontent/stranicy/propisi_strategije/S_prirodnih%20resursa.pdf)

National Strategy for Approximation of Environment of the Republic of Serbia ("Official Gazette of RS" 80 /2011)

[http://www.zzps.rs/novo/kontent/stranicy/propisi\\_strategije/strategija\\_aproksimacije.pdf](http://www.zzps.rs/novo/kontent/stranicy/propisi_strategije/strategija_aproksimacije.pdf)

National Program of Environmental Protection ("Official Gazette of RS" no. 12/2010)

[http://www.zzps.rs/novo/kontent/stranicy/propisi\\_strategije/Nacionalni\\_program\\_zastite\\_%20zs.pdf](http://www.zzps.rs/novo/kontent/stranicy/propisi_strategije/Nacionalni_program_zastite_%20zs.pdf)

Impact on animal genetic resources management

Future needs

## 4. Overall development of the livestock sector

Note: This question relates to broad strategic-level instruments addressing the livestock sector as a whole, such as national livestock development strategies or laws. Instruments related to specific aspects of livestock development should be described under other questions as and where relevant.

Legislation  Policy

**If provisions are in place or under development do/will they include:**

**Particular provisions aimed at supporting livestock keeping in harsh production environments**

*Note: Please consider direct and indirect forms of support (e.g. grants or subsidies, favourable access to credit or livestock services, facilitation of market access).*

Legislation  Policy

**Particular provisions aimed at supporting large-scale, high external input or export-oriented production systems or supporting management practices associated with such systems**

*Note: Please consider direct and indirect forms of support (e.g. grants or subsidies, subsidized inputs, favourable access to credit or livestock services, support for infrastructure development or mechanization).*

Legislation  Policy

Details of the measure(s)

Impact on animal genetic resources management

Future needs

**5. Management of and access to rangelands or other grazing lands**

Legislation  Policy

Details of the measure(s)

Impact on animal genetic resources management

Future needs

**6. Establishment of livestock farms or holdings**

*Note: This question relates to planning rules related to the size, location, ownership, registration, etc. of livestock farms or holdings.*

Legislation  Policy

Details of the measure(s)

**Law on veterinary matters** („Official Gazette R.S.“, No. 91/05).

Impact on animal genetic resources management

Future needs

**7. Establishment and operation of civil society organizations in the livestock sector**

*Note: Instruments specifically related to organizations focused on breeding (genetic improvement) activities are covered in Section 1 (Question 5.2). Please use the present question to provide information on instruments of a more general nature (e.g. related to the operation of cooperative societies or community organizations).*

Legislation  Policy

Details of the measure(s)

Impact on animal genetic resources management



Future needs

**8. Participation of livestock keepers in decision-making related to the development of the livestock sector**

Legislation

Yes

Policy

Yes

Details of the measure(s)

Impact on animal genetic resources management

Future needs

**9. Prevention, preparedness and response to natural or human-induced disasters**

Legislation

Yes

Policy

Yes

**If instruments are in place or under development, do/will they include any provisions specifically targeting:**

**Animal genetic resources**

*Note: For example, measures targeting the protection of at-risk breeds.*

Legislation

No

Policy

No

**Livestock in general**

Legislation

No

Policy

No

Details of the measure(s)

Impact on animal genetic resources management

Future needs

**SECTION 5: ADDITIONAL INFORMATION**

Please provide information on any aspects of your country's legal and policy framework that affect animal genetic resources and their management but are not covered by any of the questions above.

Submit by e-mail