



Srdjan Stojanović Ministry of Agriculture and Environmental Protection



Institutions involved in the management of AnGR:





- Livestock Institute, Zemun-Belgrade / Herdbook
- Agriculture Faculty, Novi Sad / Herdbook
- Veterinary Service / Centers for Reproduction and A.I.
- PUBLIC SERVICE Extension services
- Breeding Association of the old breeds of Serbia
- Local comunities
- NGO'S, hobbyists



Legal and policy frameworks for the management of AnGR:

- Law on Animal Husbandry (2009)

- Law on Agriculture and Rural Development (2009)
- Rules oflist of autochthonous breeds (2010)
- Rulesof register of the indigenous breeds ...(2010)
- The Strategy for the Agriculture and Rural Development 2014-2020 (2014)
- Nat. Rural Develop. Program 2015-2020 (final draft 2015)
 National Program for Sustainable Use, Development and
- Conservation of Biological Diversity of Domestic Animals 2016-
- 2021 (final draft 2016)
- Biodiversity Strategy 2011-2018 (2011)
- Nagoya Protocol (signed 2011, not ratified)



Global review, Conservation and Management of AnGR: - 1944 in Spain, Toledo, experimental herd of Iberian pigs (*Zjalić et al.*, 2005).

- 50-th years, in Sweden, Centers for A.I. performed semen conserv. of all bulls used for natural mating.

 During 60-th years, the scientists and farmers have noticed a high level of erosion of AnGR (Oldenbroek, 2007).

- In Hungary 1962 First Low/Regulation (*Bodo et al.* 1996)

Global review, Conservation and Management of AnGR: - In Great Britain 1968 – (*Alderson and Ramsey*, 2001)

 In France 1970 – The First conservation programme, 1983 established the Biro aux ressources génétiques (<u>www.brg.prd.fr</u>)

- Commission on Genetic Resources for Food and Agriculture 1983 (FAO)

 Established Nordic Gene Bank 1984 – (www.nordgen.org)

Global review, Conservation and Management of AnGR:

- Global Strategy for Conservation and Management of AnGR 1985 (FAO)

- Convention on Biological Diversity 1992 (COP)

- ITWG-AnGR 1997 (FAO)

- Global plan of Action for AnGR and Interlaken declaration 2007 (FAO)

- Nagoya protocol 2014 (COP)



When its all started in Serbia

- Activities on the AnGR conservation became more important in Serbia in the ninties.
- Organized work on managment of AnGR was started at the 1994 years, with the identification of autochthonous breeds.
 Data are sent to FAO AnGR data bank.

- Till 2001 applied conservation system was economically and technically far away from selfsustaining.

 Conservation and management of AnGR had make a significant changes.



- Reintegration of AnGR conservation with the traditional mixed-farming systems and non-agricultural activities was promoted.
- Government institutions started active
 cooperation with NGOs and building interactive
 links with all stakeholders.
- AnGR stakeholders are informed that providing rural development policy is needed to support AnGR conservation.
- Work on establishing legal framework for conservation of AnGR.

In-situ conservation (currently applies). Keeping live animals in the areas where they occurred. Ex-situ conservation - In-vivo (zoo`s and Natural parks) - In-vitro (4 centers for A.I.)



Number of animals and breeders in the programe of the in situ conservation of AnGR in Serbia (2015)

Species	No of registered animals	Estimate	No of breeders
Cattle	909	1000	<mark>50</mark>
Buffalo	<mark>423</mark>	1000	144
Horse and donkey	465	700	48
Pig	899	3000	<mark>48</mark>
Sheep	<mark>2034</mark>	3000	43
Goat	<mark>521</mark>	800	17
Poultry	<mark>820</mark>	3000	2







The population trend of Localy Adapted Breeds (2000-2015)

*only registered animals and in reproduction

Breed	2015	2010	2005	2000
Podolian cattle	<mark>240</mark>	350	137	110
Busha cattle	<mark>669</mark>	550	65	/
Domestic buffalo	<mark>423</mark>	250	139	/
Domestic-mountain pony	110	<mark>30</mark>	17	9
Nonius	74	85	34	17
Balkan donkey	<mark>281</mark>	<mark>250</mark>	<mark>22</mark>	/
Mangalitsa pig	<mark>780</mark>	400	<mark>262</mark>	124
Moravka pig	103	100	33	57
Resavka pig	1 6	40	3	

The population trend of Localy Adapted Breeds (2000-2015)

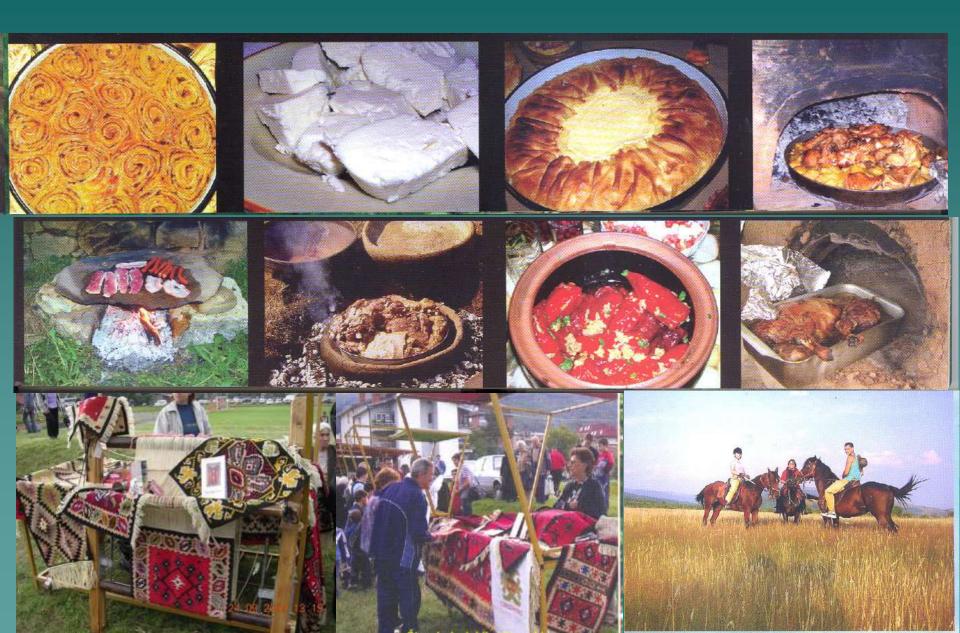
*only registered animals and in reproduction

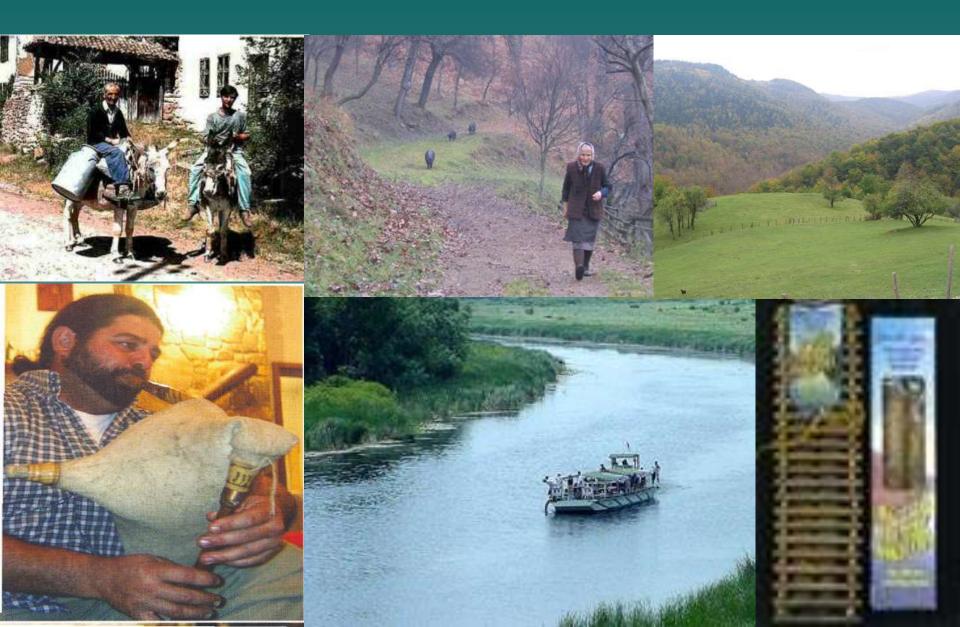
Breed	2015	2010	2005	2000
Lipska sheep	<mark>687</mark>	300	110	/
Krivovirska sheep	<mark>532</mark>	<mark>350</mark>	<mark>273</mark>	/
Bardoka sheep	<mark>81</mark>	<mark>60</mark>	<mark>31</mark>	/
Vlashko-vitoroga sheep	468	<mark>350</mark>	70	/
Pirotska sheep	101	<mark>50</mark>	20	/
Karakachanska sheep	165	130	40	/
Chokan Tsigai sheep	<mark>650</mark>	550	<mark>288</mark>	100
Balkan goat	<mark>521</mark>	<mark>250</mark>	<mark>203</mark>	242
Svrljig hen	<mark>250</mark>	300	140	
Somborska hen	<mark>250</mark>	200	15 <mark>9</mark>	100
Banat Nacked Neck	<mark>560</mark>	450	207	<mark>50</mark>

Main tasks for future work **1.Financial support for implementation** of GPA, **2.Developing of scientific research** (DNK research...), 3.Capacity building (human and infrastructure), 4.Support popularization of AnGR (exhibition, shows...),

5.Improving the quality of local products (PDO, PGO, organic),

Main tasks for future work 6.Developing sustainable use of AnGR and valorisation true agro-turism, 7.Harmonisation legislatives with the **EU Regulations,** 8.Cooperation on global, regional and national level, 9.Using indigenous knowledge for processing and producing tipycal products, 10.Established Gene Bank (ex situ)





Thank you for your attention

Ph.D. Srdjan Stojanovic Ministry of Agriculture and Environmetal Protection Belgrade, Serbia