

## **TRANSYLVANIA PINZGAU - HISTORY, TRUTH AND NECESSITY FOR THE MOUNTAIN AREA OF ROMANIA**

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**Key words:** Transylvania Pinzgau

### **INTRODUCTION:**

The mountain area is a particular natural habitat, different from other areas in that mountain and alpine ecosystems are fragile ecological speaking, due to restrictive natural factors to which it adds an subsistence economy and a secular poverty, that it is necessary to be eradicated through logistical support of the national state and the European community as it already happened in more advanced countries, where the mountain became comparable, as a standard of living and civilization, with other geographical areas.

Romania has the chance to shorten, with a few years, its road to progress and civilization, to a better live, to a specific European integration, with the tribute, ethnos and its original ethos, only if it will assume with courage this kind of major programs, capable to mobilize national resources and energies, to attract cooperation, European and international support.

In the Romanian mountain area, animal breeding, in particular cattle and sheep, has represented a necessity for the household existence, helping to create a lasting connections between the environment, man and animal, which constituted, in fact, the meaning of life in a area dominated by natural restrictions.

Pinzgau of Transylvania breed, was, is and will be a part of Romanian culture and civilization, and the present, perspective and future of this breed depends on the evolution and durable development of the Romanian mountain habitat.

The sustainable development is a process that satisfies the needs of the present without compromising the possibility of future generation to meet its needs from an economical, social and environmental point of view.

Pastoral heritage of Romania, made of 4845,4 thousand ha, out of 3355 thousand ha natural pastures and 1490,4 thousand ha natural hayfields,

represents 34% out of the total national agriculture surface and is a huge potential of vegetative mass, which provides, on average, 56% of its animal feed, in equivalent green mass, with the hill and mountain areas the proportion to exceed 65-70% out of the consumption needs of cattle and sheep.

In Romania, 1.561.581 ha (32%) natural pastures are found in the mountain area, at heights over 600m, with limited exploitation possibilities of some green mass natural resources.

Natural pastures from the mountain area represent the real growth support of the exploitation area of Pizgau of Transylvania, because, the breed features qualities and anatomic morpho-physiological characteristics specific to its exploitations in areas with restrictive factors, unsuitable for expansion to other breeds of cattle.

Pinzgau of Transylvania was, is and will remain unreplaceable in the Romanian mountain area.

#### **MATERIAL AND METHOD:**

The information on the evolution of livestock, breed structure, exploitation systems, and pastoral heritage were taken out of the Ministry of Agriculture and Rural Development (MADR) database, of the National Agency for Amelioration and Reproduction in Animal Husbandry (ANARZ), of the General Agency of cattle breeding in Romania (AGCTR), of the National Statistics Institute (INS), bibliographical and own research summaries.

To be noted that I worked 8 years at Improvement and Breeding Network Bihor (OJZ), 25 years at DA Bihor and 4 years at APIA Bihor, and between 1979-2016, for 37 years, I paid particular attention to Pinzgau of Transylvania breed. The purpose, meaning and reason of my concerns was to demonstrate that Pinzgau of Transylvania represents history, truth and necessity for the Romanian mountain area.

#### **RESULTS AND STUDIES**

Following the evolution of the cattle effective in Romania after 1989, I could conclude a dramatic decrease of this effective, in the same time with the raise of the share of cows from the total existing effective. If in 1989 the share of cow out of total effective was of 39,2%, after 2000 milk cows exceed as share 60%. This is due to the increasing number of subsistence farms, where milk plays a key role, and meat has passed in second place, because in such an

exploitation system the fattening of cows and young males cannot be made efficiently, and the meat market is nonfunctional, unattractive and without financial foundation.

In 1955 almost half of the cattle effective was of Sura de Stepă breed (47%), 32% of Bălțată românească, 6% of Brună and Roșie dobrogeană breeds, and Pinzgau 9% (table 1).

**Table 1**

**The evolution of the breed structure in cattle (%) (bibliographical synthesis)**

Breed	Year					
	1955	1974	1987	1994	1999	2015
Sură de stepă	47	5	2	0,1	-	-
Bălțată românească	32	47	36	35	36	35
Brună	6	30	30	27	26	28
Roșia dobrogeană	6	7	1	0,4	-	-
Pinzgau de Transilvania	9	9	3	3,5	3	2
Bălțată cu negru românească	-	2	28	34	35	35

Today, after 60 years, 4 base breeds are left: Bălțată românească (35%), Bălțată cu negru românească (35%), Brună (28%) and Pinzgau of Transilvania (2%).

The first 3 breeds (BR, BNR, B) are populations with normal status, while the Pinzgau of Transylvania effective, according to the FAO statistics, is in the category of vulnerable populations, because of the continual annual decrease.

The biggest share of the Pinzgau of Transylvania breed within the breed structure of the country in 2015 is as follows: Hunedoara – 29% (11% pure breed and 18% crossbred), Suceava – 11% (3% pure breed and 8% crossbred), Bistrița Năsăud – 11% (7% pure breed, 4% crossbred), Alba – 6% (3% pure breed, 3% crossbred), Bihor – 5% (4% pure breed, 1% crossbred).

The age structure of Pinzgau of Transylvania breed, at the end of 2015, was 74,3% milk cows, and 25,7% young cows, which demonstrates the lack of continuity of selection works on the growth targets of the race.

Pinzgau of Transylvania of pure breed had a share of 23,8% out of the total effective in the country, not sufficient for the improvement work of the breed, comparing to the crossbred Pinzgau of Transylvania cows that represented 76,2%.

Out of the total Pinzgau of Transylvania effective, at 31.12.2015, only 9,27% were registered in the official production control, insignificant to create an improvement program for the breed. However the Pinzgau of Transylvania breed must regain its deserved place in the cattle breeding program in Romania, being a breed that meets the growth and exploitation conditions in the traditional Romanian mountain area household.

Out of the analysis of the growth and exploitation system of the Pinzgau of Transylvania we can draw the following characteristics:

- The growth and exploitation of the Pinzgau of Transylvania breed is made, exclusively, in individual households, small family exploitation with a medium size of 1-3 heads
- The exploitation condition are traditional, in many cases inadequate, especially during calves, without permanent water access and with hand milking
- Hay is the base meal during winter, and during the summer pasturage, especially in alpine pastures, without having insured a feed supplement to cover the necessary
- There are cases where a normal dry period is not ensured, cows being milked close to labor
- Early mount for the calves is practiced with negative consequences to the body development and to the latter milk production
- Clandestine mount is still practiced in some areas, thus leading to a regression of the productive and breed characteristics
- In the livestock practice there can be noticed a weak preoccupation for Official Production Control and an excessive formality in the selection of breeding cattle
- There is great variability in body size, of corporal mass and of the genetically determined productive indexes, but mainly by the environmental conditions
- Veterinary assistance and services in improving and breeding area are inadequate, reasons having at least two possible explanations: one of a financial matter and another concerning the organizing of the two

networks (veterinary health and of the improvement and breeding) and an inexplicable neglect of the professional associations

- The actual applied system in breeding and exploitation of Pinzgau of Transylvania cattle is based largely on routine and tradition

Pastoral heritage of Romania offers the real support of maintaining and growth of the exploitation area of the Pinzgau of Transylvania breed (table 2).

Table 2

**Pastoral heritage of Romania, from Bihor, Hunedoara and Suceava counties (bibliographical synthesis)**

Specification	UM	TOTAL PASTORAL HERITAGE	Din care:	
			NATURAL PASTURES	HAYFIELDS
Romania	Ha	4.845.354	3.354.970	1.490.384
	%	100	100	100
BIHOR county	Ha	183.052	138.384	44.668
	%	3,7	4,1	3,0
HUNEDOARA county	Ha	199.492	117.307	82.185
	%	4,1	3,5	5,5
SUCEAVA county	Ha	166.125	90.450	75.675
	%	3,4	2,6	5,0

Nowhere in Romania, Pinzgau of Transylvania breed, has met natural conditions as close to the origin country of Austria as in Bihor, Hunedoara and Suceava counties.

A proof to these statements is the very presence of the Pinzgau of Transylvania breed, although throughout its existence there were measures of replacements with other more performant breeds and the indestructible connection created with these counties between the man – the ambient environment and these animals which constitutes as part of the Romanian mountain area.

In Romania, 32% (1.561.581 ha) of natural meadows are found in the mountain area, at altitudes of over 600 m with limited exploitation possibilities of natural resources of green mass.

In Bihor, Hunedoara and Suceava counties, areas with tradition in breeding and exploiting the Pinzgau of Transylvania, there are, still, large areas of natural meadows in the mountain areas, 23.514 ha (14%) in Bihor, 118.498 ha (59%) in Hunedoara and 118.236 ha (71%) in Suceava, that can offer feed resources to raising the effectives of cattle and sheep (table 3).

Table 3

**Allocation of natural meadows on landscape areas**

**(bibliographical synthesis)**

Specification	UM	TOTAL	Out of:		
			LOWLANDS	HILLS	MOUNTAIN
TOTAL COUNTRY	thousand ha	4.845,4	1.026,1	2.257,7	1.561,6
	%	100	21	47	32
BIHOR COUNTY	thousand ha	183,0	57,0	102,0	24,0
	%	100	31	55	14
HUNEDOARA COUNTY	thousand ha	199,5	11,4	69,6	118,5
	%	100	6	35	59
SUCEAVA COUNTY	thousand ha	166,1	24,7	23,1	118,3
	%	100	15	14	71

Natural meadows from the mountain area represent the real support of growth of the exploitation area of the Pinzgau of Transylvania breed, because, the breed features the qualities and anatomo-morpho-physiological characteristics specific for its exploitation in areas with limitative factors, not proper for other races of cattle.

The wanted type of Pinzgau of Transylvania targets the development of morphoproductive parameters that have the following characteristics: the morphoproductive mixed type (milk – meat), body weight 600 Kg, wither height 135 cm, milk production 6.000 Kg, fat percentage 4,0%, protein percentage 3,6%, medium daily growth 1.100 g, live weight at 500 days 550 Kg, and yield at cutting 58%.

Pinzgau of Transylvania breed, was, is and it will remain a part of the Romanian mountain civilization and culture, and the present, perspective and the future of this breed depends on the evolution and sustainable development of the Romanian mountain habitat.

**CONCLUSIONS:**

1. Pinzgau of Transylvania has entered in the category of vulnerable populations, because of the continuous annual reduction and bad management of the genetic resources that the race still possesses
2. The removal of the Pinzgau of Transylvania out of the National Improvement Plan constitutes a defiance that goes beyond the border of history, truth and Romanian mountain needs
3. The breeding and exploitation systems of the Pinzgau of Transylvania breed are specific to a subsistence husbandry which constitutes an obstacle in the development of the mountain area in Romania
4. Pastoral heritage of Romania offers the real support for the increase of the area of exploitation of the Pinzgau of Transylvania breed

5. The fact that Pinzgau of Transylvania was not introduced in the group of animals in danger of abandon that is receiving Community support it is incomprehensible

#### **RECOMANDATIONS:**

1. Pinzgau of Transylvania natural characteristics, longevity, resistance and the ability to the ability to move are defining at this moment for the survival of the breed, in special in areas with natural restrictions, where other races don't stand a chance to satisfy even the current modest demands imposed by the animal breeders
2. The survival of Pinzgau of Transylvania breed in the mountains of Romania is influenced in a big way by the very survival of life and agriculture in the mountains
3. Pinzgau of Transylvania breed can adapt to the requests of the mountain habitat and can may constitute one of the essential factors for the development of mountain agriculture and mountain agritourism, with the conditions that it will be reintroduced in the National Improvement Program and will be given financial support, indispensable for the whole mountain area of Romania
4. Certainly, the future development of mountain agriculture is a combination of agriculture and tourism, thus Pinzgau of Transylvania breed should be seen not only in terms of it current characteristics, but also as a race that populates the mountain area, which, in the same time is exploited for tourism
5. In Romania, breeding the Pinzgau of Transylvania breed has meant and still means, before all, tradition and respect towards the natural conditions that we dispose of, evidently natural grasslands hold a special place, next to the most appreciated and valued Romanian mountain civilization
6. Achieving the desired type, increasing the area of operation and the creation of an indestructible connection between Pinzgau of Transylvania breed, man and the environment, are goals who's realization depend on all those who are convinced of the fact that this breed means "history, truth and necessity for the Romanian mountain area"
7. To assist powerless to the conduct of the perpetual exodus from the mountain to the plains would be an unforgiven mistake to the current

generation and a handicap far harder to recover by future generation that are not to be blamed by our indifference.

This paper needs to be appreciated “today” as for “tomorrow” it could be too late for Pinzgau of Transylvania breed and for the sustainable development of animal husbandry of the Romanian mountain area.

#### **BIBLIOGRAPHY:**

1. Grigoriu E., Pavel F., (1996) – Marketing, Ed. Mirton Timișoara;
2. Otiman Păun I., (1997) - Dezvoltarea rurală în România, Ed. Agroprint Timișoara;
3. Hans Stockl, (1998) -Pinzgauer–eine österreichische Rinderrasse mit Tradition;
4. Marușca T., (2001) - Elemente de gradientică și ecologie montană, Ed. Universității Transilvania din Brașov;
5. Swalve H., (2003) – Proiect privind Strategia pentru conservarea activă a rasei de vaci cu scop dublu Pinzgau, Raportul specialistului principal, prof. dr .Hermann S, prezentat la CEFIDEC Vatra Dornei în data de 14 aprilie 2003;
6. Pavel F., (2007) – Pinzgau de Transilvania in Romania, Editura Universitatii din Oradea;
7. \* \* \* (1989 – 2015) – INS - Anuarul statistic al României;
8. \* \* \* (1989 – 2015) - A.N.A.R.Z. – Rapoarte tehnice operative;
9. \* \* \* (1989 – 2015) - M.A.D.R. – Rapoartele tehnice operative;
10. \* \* \* (1989 - 2015) - A.G.C.T.R. - Rapoarte tehnice operative;
11. \*\*\* (2003) - MADR - Managementul durabil al resurselor genetice la animalele domestice din Romania;
12. \* \* \* (2004) - MADR – Strategia de dezvoltare durabilă a agriculturii și alimentației din România.