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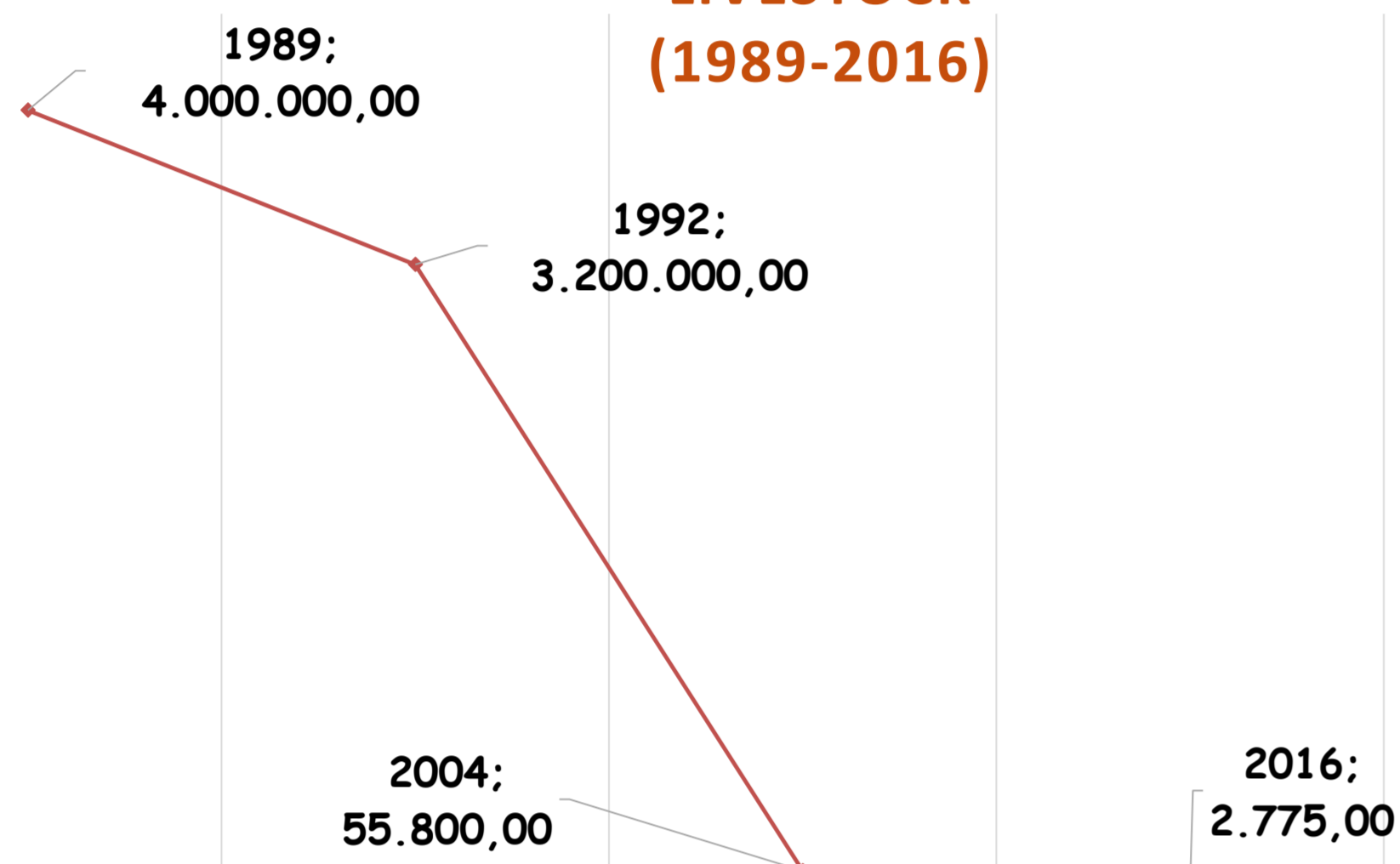
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Introduction

In Algeria, sheep genetic resources play a vital role in socio-economic, cultural and religious life. The Hamra or Deghma sheep breed is native to the high plains of western Algeria. Its cradle goes from Chott Chergui to the Moroccan border. The Hamra breed population declined drastically from 4 millions head in the 1980s to less than 50,000 in recent years. The present work is a part of a National Research Project (PNR Algeria 2022) dedicated to the development of the Hamra sheep breed in his cradle. The aim of this study is to characterize the morphology, growth and reproductive performance of this ovine breed.

EVOLUTION OF THE NUMBER OF HAMRA LIVESTOCK (1989-2016)



Materials and Methods

A sample of 15 rams and 30 ewes were used for the morphological characterization and a total of 1 328 head for the growth and reproduction performance. The study was carried out at the Technical Livestock Institute in Saida area located in the western Algeria.

Results

Hamra sheep breed is small compared to the other Algerian breeds. It has a dark brown (mahogany) head and legs, a blackish-blue tongue, white wool, spiral horns, and a fine, medium-length tail.

Table 1: Means and their standard deviations for the body measurements by sex

Parameters	Means \pm Standard deviation	
	Males	Females
Weight (kg)	80.9 \pm 6.7	46.3 \pm 4
Height at withers (cm)	83.5 \pm 3.4	72.4 \pm 1.8
Total body length (cm)	124.5 \pm 3.3	110.6 \pm 2.9
Trunk length (cm)	78.7 \pm 9.8	67.7 \pm 3.8
Chest depth (cm)	40.3 \pm 1.3	34.2 \pm 2.4
Chest width (cm)	30 \pm 4.5	22 \pm 1.4
Chest circumference (cm)	116.4 \pm 5	99.8 \pm 4.8



The ewes' reproductive performances are as follows: **82.2%** for **fertility**, **97%** for **fecundity** and **118%** for **prolificacy** at birth and weaning.



Table 2: Means and their standard deviations for live weights depending on sex and litter size

Live weights	Mean \pm Standard deviation			
	Single born		Double born	
	Males	Females	Males	Females
Weight at birth (kg)	3.64 \pm 0.17	3.45 \pm 0.17	3.02 \pm 0.17	3.0 \pm 0.16
Weight at 90 th day of age (kg)	17.87 \pm 1.88	16.17 \pm 1.63	13.59 \pm 1.74	12.18 \pm 1.98



Conclusion:

The Hamra breed has shown promise performances in terms of growth, but its butchering potential needs more assessments. Further studies are required to establish a conservation strategy becoming urgent especially by fighting the uncontrolled introduction of genetics from other sheep breeds.

