

# Raising public awareness of AnGR particularly ex situ conservation

**Ewa Sosin**



National Research Institute of Animal Production, Balice, Poland  
Department of Farm Animal Biodiversity Conservation and Horse Breeding  
National Bank of Biological Material

**Ex situ WG Meeting, Athens, 7 th May 2025**

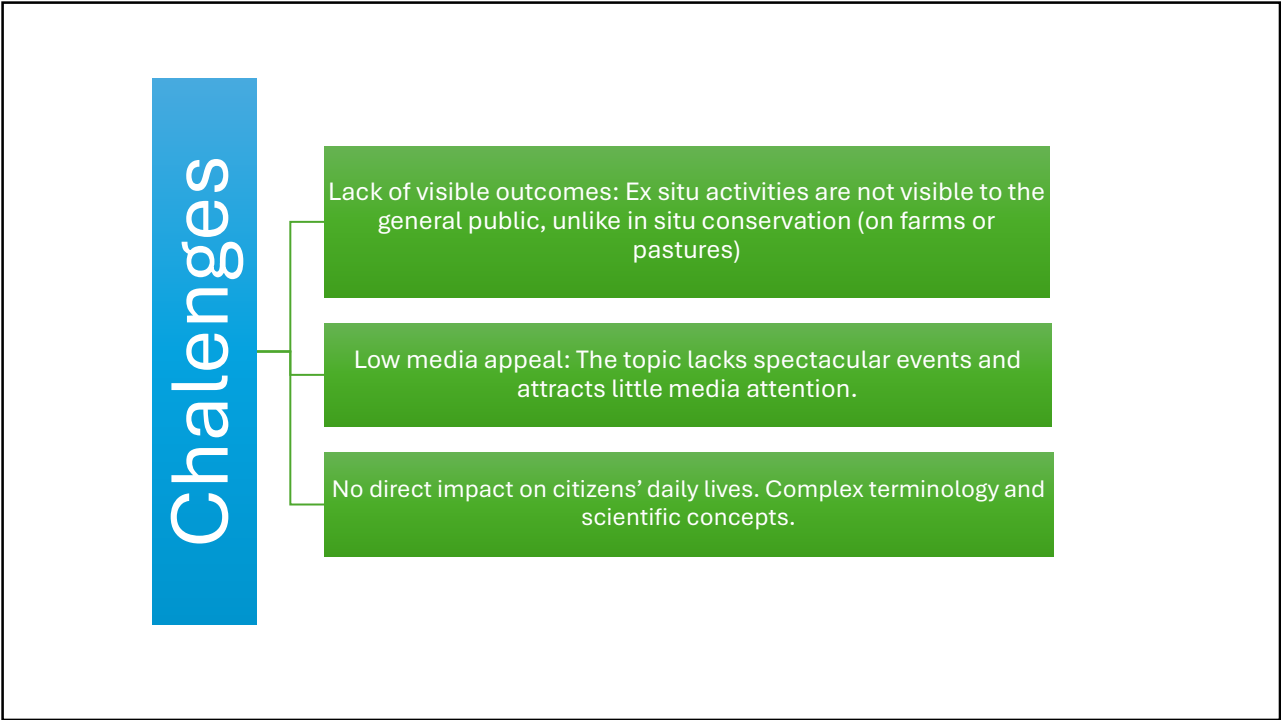
1

## Why it is so difficult to build public awareness about need to conserve AnGR


- Animal genetic resources (AnGR) are crucial for sustainable agriculture, food security, and adaptation to climate change.
- However, public awareness of their conservation—especially ex situ, meaning outside of their natural environment (e.g. in gene banks, conservation herds, or zoological gardens)—is very low.



2



3

 Clarity of Message – In Situ vs. Gene Banks

 **In Situ Conservation:**

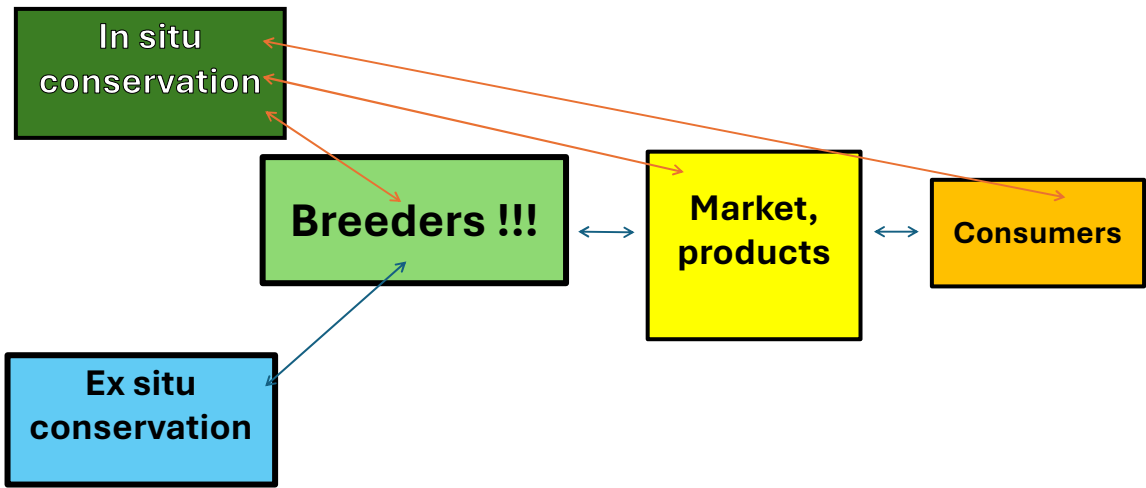
- Involves **direct, live contact with the animal** in a familiar context (a farm, the countryside).
- Easy to demonstrate and understand: “This particular animal, of this breed, is alive and reproducing.”
- You can observe its **behavior, appearance, and relationship with humans** – it appeals to **emotions and the senses**.
- It is **linked to local culture, history, and tradition**, which makes educational storytelling easier (e.g., “The Polish Red cow has been in the Carpathians for centuries”).

 **Ex Situ Conservation (e.g., Gene Banks):**

- Abstract and technical – “DNA preservation,” “biological material,” “embryos in liquid nitrogen.”
- For the average person, these are **difficult-to-imagine concepts with little emotional resonance**.
- There is **no physical interaction** with the object of conservation.
- Requires **additional explanation of the technology**, which may discourage those without a biological background.

4

Building awareness

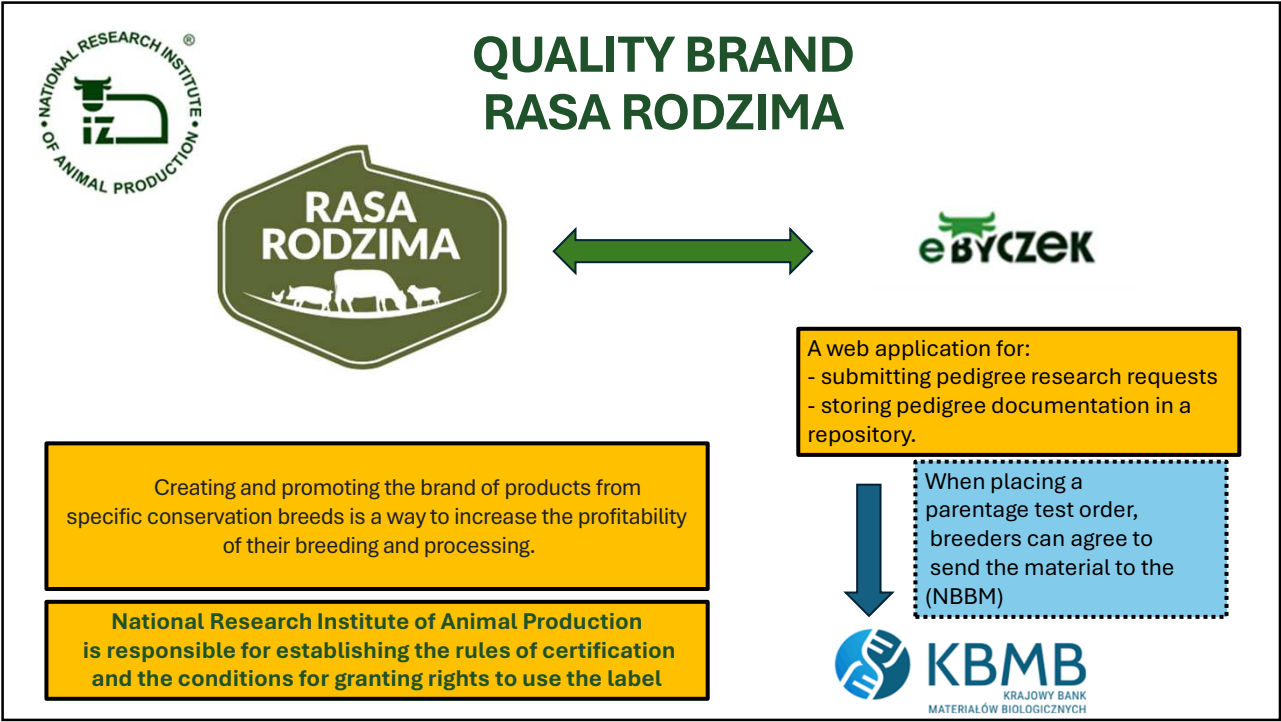


5

Building awareness



6



7

### AIM: PROMOTION AND CONSERVATION OF FARM ANIMAL GENETIC RESOURCES

- through the promotion of raw materials and products of native breeds with high dietary and pro-health values,
- increasing **public awareness** of the need to protect biodiversity; increasing consumer access to healthy, tasty, low-processed and traditional products from native breeds;
- improving the economic situation of native breeds owners;
- farms keeping animals of native breeds; development of local markets and short supply chains

8

Quality brand **NATIVE BREED** is the emphasis of:



- the importance of Polish native races, their historical, socio-cultural value, their role in building tradition;
- the role they play in protecting the environment and landscape of the Polish countryside;
- the unique potential of native races;
- high nutritional and health-promoting value of products from native breeds;

9

As part of the BIOSTRATEG project, certification rules and the collective logo RASA RODZIMA (Native Breed) were developed, along with specific logo variations assigned to each native breed.



10

## DNA Repository in e-byczek app – for internal use

- DNA Repository also allows for quick verification of the location of a material sample originating from a specific animal;
- Enables identification of the type of stored material (hair, semen, blood serum, DNA isolate);
- Determines the availability of material stored in the biorepositories of the National Research Institute of Animal Production (IZ PIB) in the event of an inquiry for specific material addressed to the KBMB.



It is more advisable to make hair follicles or DNA isolates available for scientific research, rather than a straw of valuable semen, which may have broader use and importance for conservation programs.

11

## Cooperation Agreement of NRIAP with other Institutes – promotion of ex situ conservation of genetic resources

- The National Research Institute of Animal Production
- The National Institute of Horticultural Research
- The Institute of Plant Breeding and Acclimatization – National Research Institute
- Kostrzyca Forest Genebank



12