

ANIMAL GENETIC RESOURCES

THE FIRST GLOBAL ASSESSMENT

Sustainable management of agricultural biodiversity is vital to rural development, food security and the environment. *The State of the World's Animal Genetic Resources for Food and Agriculture** is the first comprehensive global assessment of biodiversity in mammalian and avian livestock species: origins, utilization, distribution and exchange, risk status and threats; and its management: institutions, policy and legal frameworks, and breeding and conservation programmes. Needs and challenges are assessed in the context of forces driving change in livestock production systems. A section on "the state of the art" covers methods for characterization, genetic improvement, economic valuation and conservation.

*available at: www.fao.org/docrep/010/a1250e/a1250e00.htm

THE STATE OF THE WORLD REPORTING PROCESS

In 1999, the Commission on Genetic Resources for Food and Agriculture requested the Food and Agriculture Organization of the United Nations to coordinate a country-driven report on *The State of the World's Animal Genetic Resources for Food and Agriculture*. In 2001, FAO invited 188 countries to submit Country Reports on animal genetic resources. By the end of 2005, 169 Country Reports had been received. These key resources for the preparation of the SoW-AnGR were complemented by nine reports from international organizations,

12 specially commissioned studies, and by the knowledge and expertise of more than 90 authors and reviewers. FAO's Global Databank for Animal Genetic Resources was the basis for assessment of risk status and trends in AnGR diversity.



KEY FINDINGS

● Risk-status data indicate a serious ongoing threat to livestock biodiversity. Almost one breed extinction per month was reported between 2000 and 2006.

Proportion of the world's breeds by risk-status category

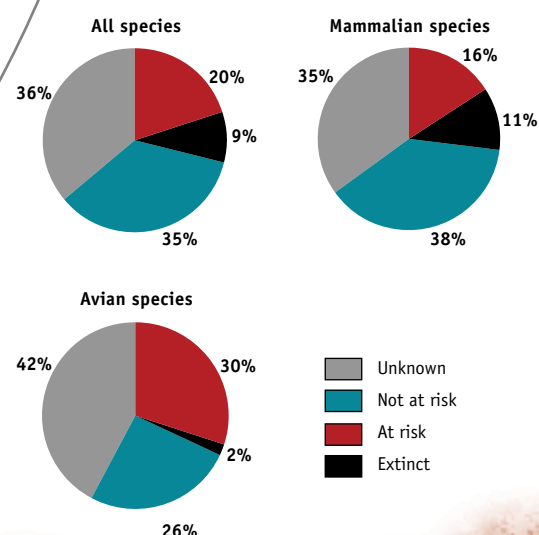


FIG. 1: Share of local and transboundary breeds in the world total

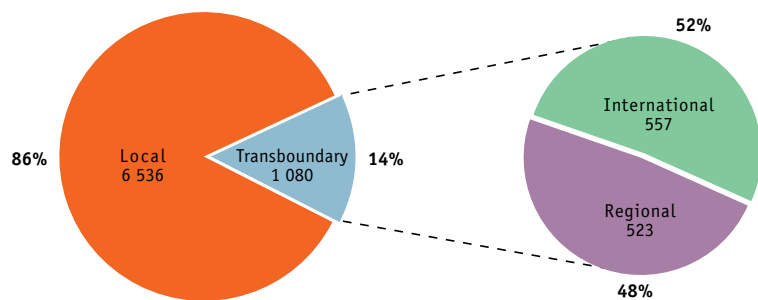


FIG. 2: Distribution of Holstein-Friesian cattle

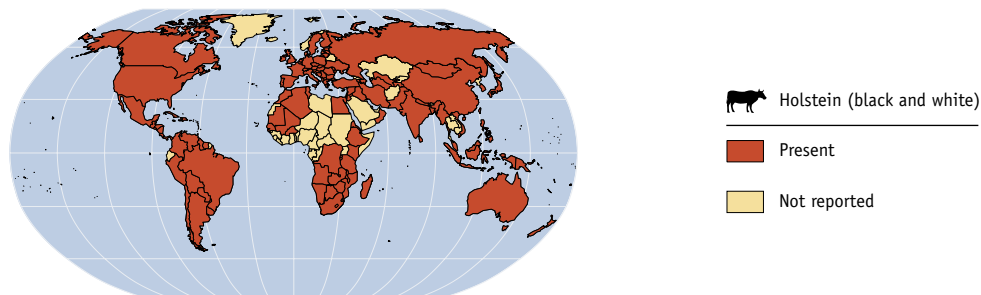


FIG. 3: Distribution of transboundary sheep breeds

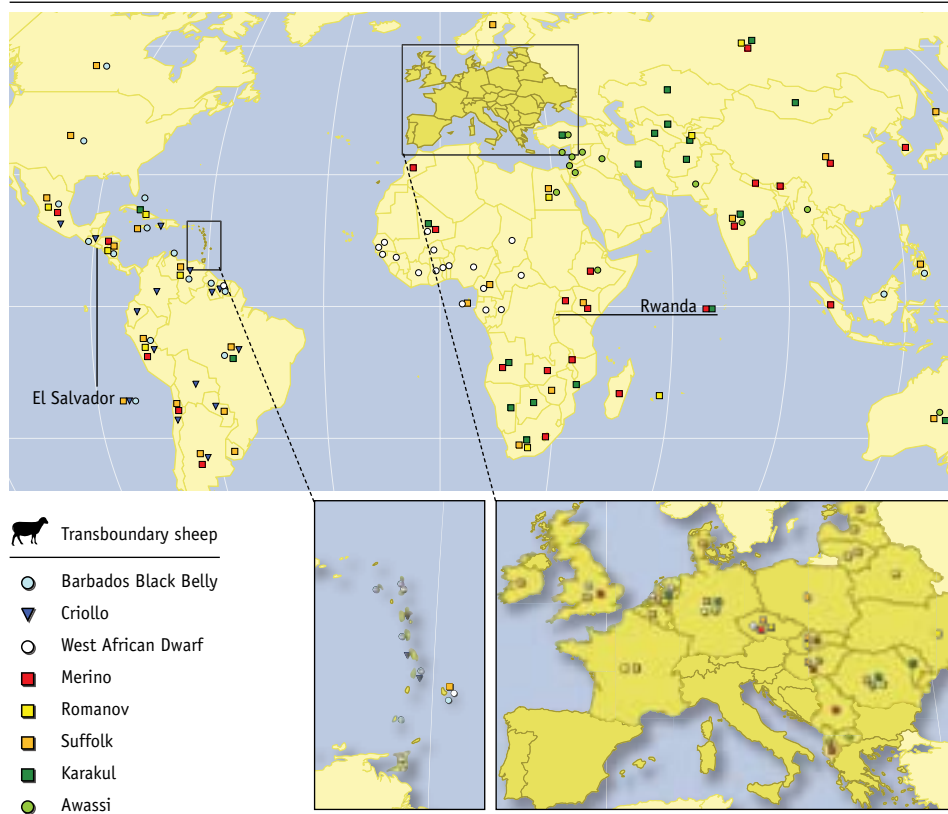
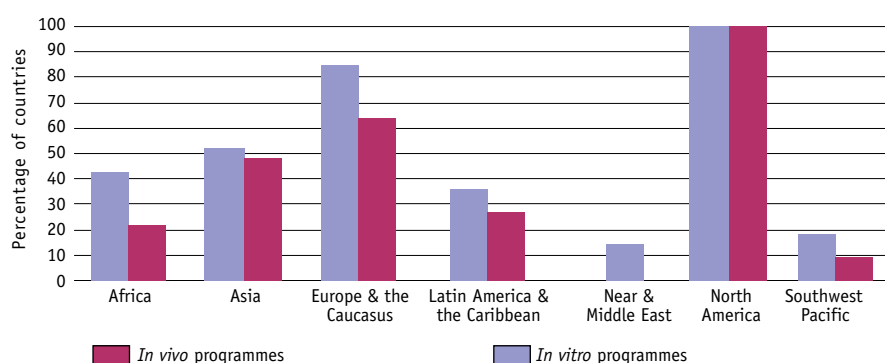


FIG. 4: Regional distribution of conservation programmes



Local breeds are defined as those occurring in only one country, while transboundary breeds occur in more than one country. The latter group are further divided into international transboundary breeds (occurring in more than one region of the world) and regional transboundary breeds (occurring in only one region).

(see fig. 1)

The most widely distributed transboundary breeds are largely from the industrialized countries of temperate zones – for example, the Holstein-Friesian is the breed found in the largest number of countries worldwide.

(see fig. 2)

There is significant movement and exchange of animal genetic resources among the countries and regions of the developing world.

(see fig. 3)

Breed conservation programmes are lacking in many countries. The same is true for structured breeding programmes, and for the policy and legal frameworks needed to support sustainable management of animal genetic resources.

(see fig. 4)

Sustainable use, development and conservation of AnGR can make an important contribution to meeting the Millennium Development Goals, in particular Goals One (to eradicate extreme poverty and hunger) and Seven (to ensure environmental sustainability), and to feeding a human population set to rise to 9 billion during the next 40 years. Securing the policies and resources needed to ensure that livestock biodiversity is well managed and remains available for future generations is a global responsibility.

Learn more:
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Further information about the work of FAO on biodiversity is available at:
www.fao.org/biodiversity