



**Food and Agriculture  
Organization of the  
United Nations**

COMMISSION ON  
GENETIC RESOURCES  
FOR FOOD AND  
AGRICULTURE



# THE SECOND REPORT ON THE STATE OF THE WORLD'S **ANIMAL GENETIC RESOURCES FOR FOOD AND AGRICULTURE**

This brochure presents key findings of the second global assessment of livestock diversity and its management, which includes a review of the implementation of the *Global Plan of Action for Animal Genetic Resources* with a view to its potential revision.

**FAO COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE**  
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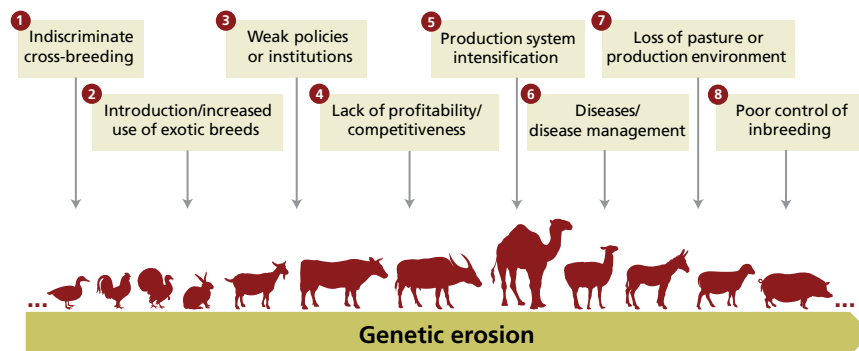
## About the report

The report provides a comprehensive assessment of livestock biodiversity and its management. It sets out the latest available information on:

- The state of livestock diversity
- Trends in the livestock sector
- The state of capacity to manage animal genetic resources
- The state of the art in animal genetic resources management
- Gaps and needs in animal genetic resources management

The report draws on information provided in 129 country reports, 15 reports from international organizations, 4 reports from regional focal points and networks for animal genetic resources, and inputs from 150 individual authors and reviewers, as well as breed-related data from FAO's Domestic Animal Diversity Information System (DAD-IS). It serves as an update of the first report on *The State of the World's Animal Genetic Resources for Food and Agriculture*, published in 2007, and focuses particularly on developments since the first report was prepared.

### Top 8 reported threats to animal genetic resources



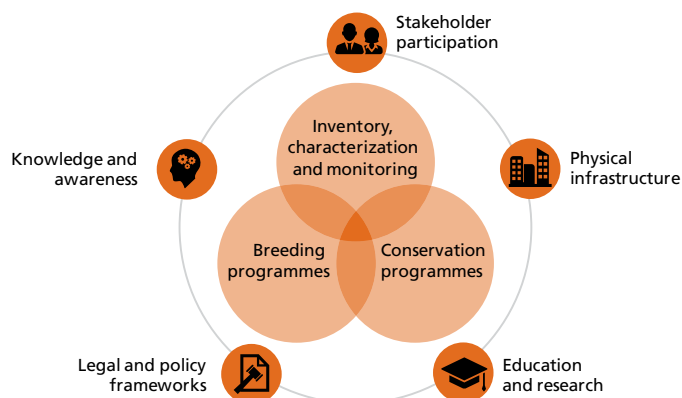
## What needs to be done?

The implementation of the Global Plan of Action for Animal Genetic Resources, adopted in 2007, is improving the sustainable use, development and conservation of the world's livestock diversity. However, efforts still need to be made to strengthen the management of these resources.

Priorities include:

- improving knowledge of the characteristics of different types of animal genetic resources, the production systems in which they are kept and the trends affecting these production systems;
- developing stronger institutional frameworks for animal genetic resources management, including mechanisms that allow for better communication among stakeholders and facilitate the participation of livestock keepers in the planning and implementation of policies and programmes;
- improving awareness, education, training and research in all areas of animal genetic resources management, including in the emerging fields of access and benefit sharing, ecosystem services and climate change adaptation and mitigation;
- strengthening breeding strategies and programmes, so as to enable full advantage to be taken of available genetic diversity and ensure that animal genetic resources are well matched to their production environments and to societal needs; and
- expanding and diversifying conservation programmes, where possible combining approaches that provide for ongoing use of livestock breeds in their usual production environments with those that provide for backup storage of genetic material.

### Capacities required for animal genetic resource management



## Key findings

1. Livestock diversity facilitates the adaptation of production systems to future challenges and is a source of resilience in the face of greater climatic variability.
2. The roles and values of animal genetic resources remain diverse, particularly in the livelihoods of poor people.
3. The adaptations of specific species and breeds to specific environmental challenges need to be better understood.
4. The impact of many livestock-sector trends on animal genetic resources and their management is increasing.
5. The world's livestock diversity remains at risk.
6. The assessment of threats to animal genetic resources needs to be improved.
7. Institutional frameworks for the management of animal genetic resources need to be strengthened.
8. Establishing and sustaining effective livestock breeding programmes remains challenging in many countries, particularly in the low-input production systems of the developing world.
9. Conservation programmes for animal genetic resources have become more widespread, but their coverage remains patchy.
10. Emerging technologies are creating new opportunities and challenges in animal genetic resources management.
11. Livestock diversity and the sustainable management of animal genetic resources are acquiring a greater foothold on policy agendas.

Full report at <http://www.fao.org/3/a-i4787e/index.html>

E-book version at <http://www.fao.org/publications/e-book-collection/en/>

Implementing the Global Plan of Action for Animal Genetic Resources at <http://www.fao.org/ag/angr.html>

