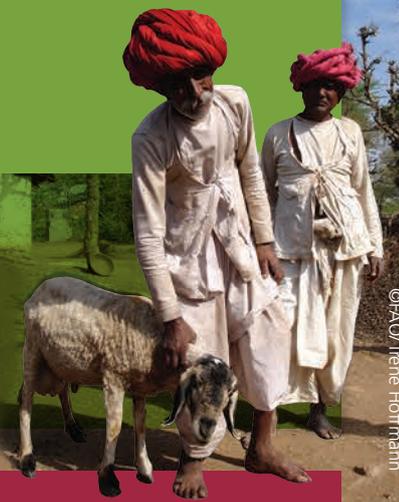




Livestock diversity

Multiple functions in multiple production systems



©FAO/rene Hoffmann

Diversity of animal genetic resources provides the fundamental biological basis for livestock production. About 38 species of domesticated birds and mammals with more than 8 800 breeds are reported to be used in agriculture and food production. FAO works together with governments and partners to safeguard this genetic heritage for current and future use.

What we do

FAO supports the implementation of the Global Plan of Action for Animal Genetic Resources. This internationally agreed framework for the management of livestock diversity has 23 strategic priorities that aim to:

- improve characterization, inventory and monitoring of trends and associated risks of animal genetic resources
- ensure its sustainable use and development in animal production systems to promote food security and rural development
- preserve genetic diversity and integrity through conservation
- promote policies, institutions and capacity-building to address the key questions of practical implementation.

FAO and one of its statutory bodies, the Commission on Genetic Resources for Food and Agriculture, oversee, monitor, evaluate and support the implementation of the Global Plan of Action by:

- convening intergovernmental meetings and providing global status and trends reports
- maintaining and developing the breed database DAD-IS
- developing policy and technical guidelines, as well as communication products
- providing technical assistance and training to support capacity-building and action in countries
- hosting an online community of practice to discuss animal genetic resources.

Some livestock species and breeds with specific purposes are:



© F. Mozfar

Commercial strains of chicken are mostly used in intensive production systems



© Kim-Anh Tempelman

Llamas are the main source of food and income for herders on the harsh semi-arid pastures of the High Andes



© Anu Osva

Yakutian cattle are well adapted to subarctic conditions and can endure temperatures as low as -60°C



Background

Livestock are used in multiple ways for food production, to generate income, transport goods and plough fields, fertilize fields with manure and for their skins and hides etc. Diverse livestock breeds also maintain and conserve landscapes and provide valuable ecosystem services.

Livestock diversity is essential for multiple production environments including rangeland-based, mixed farming, industrial or urban systems. Many breeds are well adapted to harsh environments. They may remain productive on poor quality feed, be disease resistant, tolerant towards extreme temperatures and water scarcity, or be adapted to mountainous terrains.

This diversity must be kept for current and future use. It is key for genetic improvement. It is needed to

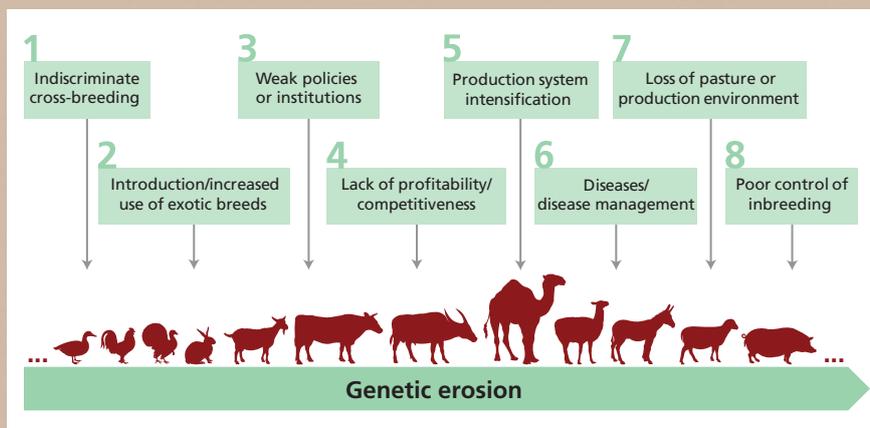
adapt and improve livestock production in the face of various challenges including the increasing demand for animal products, climate change, emerging diseases and pressures on land and water.

Livestock diversity is at risk

Some 17 % (1 458) of the world's farm animal breeds are currently at risk of extinction, while the risk status of many others (58 %) is simply unknown due to a lack of data on the size and structure of their populations.

Urgent action is needed

Actions to safeguard livestock diversity include more knowledge and awareness on the topic, stronger institutional frameworks and capacities, and an expansion of breeding and conservation programmes.

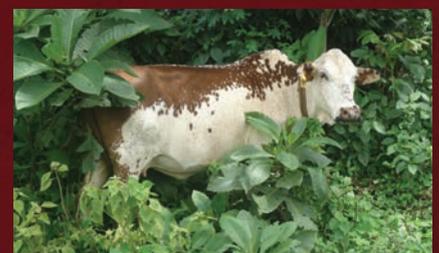


©Jacek Łojek

Polish Konik horses maintain the open vegetation of the Biebrza National Park, Poland despite the presence of wolves

Partners

The FAO Animal Genetic Resources team works together with over 170 government-appointed national coordinators, several regional focal points and networks for the management of animal genetic resources and various international organizations including the African Union Inter-African Bureau for Animal Resources, International Livestock Research Institute and the Secretariat of the Convention of Biological Diversity.



© Ethiopian Biodiversity Institute

Shoko cattle managed under free grazing in forest areas in Eastern Africa are tolerant towards the tsetse-transmitted trypanosomiasis

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