

SDG Goal 2

Zero hunger

SDG Target 2.5

By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed

SDG Indicator 2.5.2

Proportion of local and transboundary breeds classified as being at risk of extinction

Time series

Local breeds classified as being at risk of extinction

1. General information on the time series

- Date of national metadata: November 26, 2025
- National data: <http://sdg-indicators.de/2-5-2/>
- Definition: The time series shows the risk of extinction of local livestock breeds according to FAO and national classification.
- Disaggregation: type of classification, level of risk of extinction,

2. Comparability with the UN metadata

- Date of UN metadata: March 2025
- UN metadata: <https://unstats.un.org/sdgs/metadata/files/Metadata-02-05-02.pdf>
- The time series (according to FAO-classification) is compliant with the UN-metadata. However, only local livestock breeds are taken into account, not transboundary breeds.

3. Data description

- The "Red List of native livestock breeds in Germany" is used to calculate the time series. This is regularly updated in the Information System Genetic Resources (GENRES) of the Federal Office for Agriculture and Food (BLE).

1) FAO-classification:

The categorization is primarily based on three of the most important parameters: numerical scarcity (number of breeding females); inbreeding rate and presence of active conservation programmes.

The three parameters are used to assign breeds into the following six categories: extinct; cryoconserved only; critical; endangered; vulnerable; and not at risk.

The the categories critical; endangered and vulnerable sum up to "at risk".

2) National classification:

- Not at risk: Category for a population that is not threatened, with a sufficiently large effective population size, or for populations without urgent conservation needs.

- Monitoring Population: Threatened populations with a limited effective population size that are to be placed under observation and for which a seed and embryo cryopreservation program should be initiated.
- Conservation Population: Populations at high risk of extinction with a small effective population size, for which a conservation program is needed as soon as possible to stabilize the effective population size and minimize further gene loss. If no cryoreserve is yet available, one must be established immediately.
- Phenotypic Conservation Populations: Old, native livestock breeds of cultural significance to the country for which a comprehensive conservation breeding program no longer appears feasible because the animal population cannot be clearly traced back to the original breed genealogically, or the breed was already heavily mixed with other livestock breeds when it was re-established or had declined to very few animals, or the breed has had very small population sizes over several generations despite available conservation breeding measures.

4. Access to data source

- Information System Genetic Resources (GENRES):
<https://www.genres.de/en/>
- Red List of native livestock breeds in Germany (only available in German):
<https://genres.de/en/sector-specific-portals/livestock/red-list-of-livestock-breeds/>

5. Metadata on source data

- Not available.

6. Timeliness and frequency

- Timeliness: t + 5 months
- Frequency: FAO-classification: Every 4 years
- National classification: Every 2 years

7. Calculation method

- Unit of measurement: Number, Percentage
- Calculation:

$$\text{Proportion of risk classification}_i = \frac{\text{Local livestock breeds assigned to classification } i \text{ [number]}}{\text{Total livestock breeds [number]}} \cdot 100 [\%]$$