

Food and Agriculture Organization of the United Nations

About DAD-IS data

Background

The Domestic Animal Diversity Information System (DAD-IS) is an information tool for the management of Animal Genetic Resources (AnGR). It functions as the clearing house mechanism for the Global Plan of Action for Animal Genetic Resources, and provides the user with searchable databases of breed-related information (including images), data visualization tools, and a library of documents and links. The first version of DAD-IS was released in 1996, with current version (DAD-IS:4) launched in 2017.

DAD-IS is the repository of data for two Sustainable Development Goal indicators, which aggregate breed information at country, regional and global level, on the number of local and transboundary breeds for which sufficient genetic materials are stored for reconstitution of the breed in case of extinction (SDG 2.5.1b), and the proportion of local breeds classified as being at risk of extinction (SDG 2.5.2).

Data Architecture

Data can be provided exclusively by country nominated National Coordinators via web-based data-entry screens, file upload or an Application Programing Interface (API). The accuracy and quality of the data entered into DAD-IS is the sole responsibility of National Coordinators. Depending on data type and country, National Coordinators might use different data sources (see also data category). For instance, population data are generally based on censuses, surveys, or established registration systems at country level. FAO does not validate or modify national data in any way, although the database includes some consistency checking mechanisms for numeric data, notifying National Coordinators of possible inconsistencies. As of 2020, FAO provides automatized content translation from and to, English, French, Spanish and Russian for text provided by National Coordinators. DAD-IS content is public and freely available.

Data entry and updates

National Coordinators can update data at any time. Most of the visualization and data export tools are refreshed either at real-time or every 24 hours and therefore showing always the most up to date information made available to the system. The exception to this are the SDG reports and tools, which are published at least once a year (March) and up to a maximum of four times per year (March, May, September, December) according to an internationally agreed calendar. The date of last update is displayed below each figure or table.

DAD-IS content

DAD-IS includes four different datasets

- The Breed dataset contains information on more than 15 000 national breed populations (population of animals from a given breed in a given country), from 182 countries and 37 species (2022 data). It is composed of several categories of data:
 - General metadata description of the breed, including its name(s), origin and development, location, morphology, pictures, performance, management conditions, the use and ecosystem services it is linked to...
 - Population size for a given year. Ideally, these data should be updated on a yearly basis.
 - Information on In Vivo conservation programmes (start and end year, number of herds and animals included, description)
 - Information on cryo material in storage for a given year (number of samples and donors currently stored per material).
- The Bee data set including information for managed bees for food and agriculture on about 60 national species and subspecies from 28 countries (2022 data). It is composed of two categories.
 - General metadata description of the bee species or subspecies, including its names(s), origin, location, morphometric description, pictures, production, behavior and biological traits, uses, conservation and breeding programs, threats ...
 - Information on number of colonies for a given year and month. Ideally, these data should be updated on a yearly basis
- The organization dataset includes more than 1250 organizations from 78 countries (2022 data) with information of the organization type and function, its website and national breed population linked.
- The National Coordinator data set includes information the contact details of 179 National Coordinators (data 2022)

Access to data

Dataset related information can be viewed directly, through breed data sheet, bee data sheet, or organizations tools for instance, or exported for breeds and bees data. A diversity of tools are also available for generating user-defined reports. Data export using an API can be requested by contacting dad-is@fao.org indicating the purpose of data extraction.