

Information documents

CGRFA/WG-AnGR-11/21/Inf.6 - Status and trends of animal genetic resources – 2020 (<http://www.fao.org/3/cb4389en/cb4389en.pdf>)

CGRFA/WG-AnGR-11/21/Inf.7 - Detailed analysis of the factors influencing the reporting of information in the Domestic Animal Diversity Information System (<http://www.fao.org/3/cb4390en/cb4390en.pdf>)

Introduction

- The Commission at its 17th Regular Session, stressed the importance of DAD-IS as the international clearing-house mechanism for animal genetic resources and requested FAO to further maintain and develop DAD-IS
- FAO's activities related to DAD-IS since the Commission's 17th Regular Session cover 2 major topics:
 - continued DAD-IS development, and
 - identification and filling of data gaps


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DAD-IS & ITWG-AnGR

Status of DAD-IS development

- DAD-IS is available at <http://www.fao.org/dad-is/>



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DAD-IS & ITWG-AnGR

Status of DAD-IS development

- Development activities include:
 - procedures for exchange of data in collaboration with managers of national and regional systems
 - language translation of the web interface and on-line publication of training/learning materials
 - data fields for monitoring the diversity of managed honey bees
 - consolidation of DAD-IS and EFABIS-net into a single information system
 - tools allowing the export of the SDG Indicators 2.5.1b and 2.5.2

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Status of DAD-IS development

- Websites translated into UN languages, visualization tools and data entry part available in English, French and Spanish
- Application programming interface (API) developed (in collaboration with the managers of the Animal Germplasm Resource Information Network [Animal GRIN]) , allowing the exchange of data between DAD-IS and other systems
- Tool developed allowing the bulk uploading of data (cryo & pop size) from national information systems to DAD-IS by using comma separated value (CSV) files

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Status of DAD-IS development

- Data entry tool for providing data to monitor the diversity of managed honey bees of relevance for food and agriculture tested by NCs and implemented
- EFABIS moved under the new technology and its national nodes are available in the respective national language
- Planned activities to finalize those development steps:
 - development of data dissemination tools for managed honey bees
 - implementation of automatic translation of DAD-IS content

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Status of reporting and reasons for data gaps

- The Commission, at its Seventeenth Regular Session, requested the Secretariat to develop an in-house analytical study on the factors associated with missing population size data for breeds.
- Inf. 6 presents the status of reporting
- Inf. 7 presents the results of the analytical study:
 - geographic region is the factor with the strongest statistical association with the presence or absence of breed population data/known or unknown risk status
 - differences among species were also observed, with pigs having the lowest proportion of recent population updates among the main species

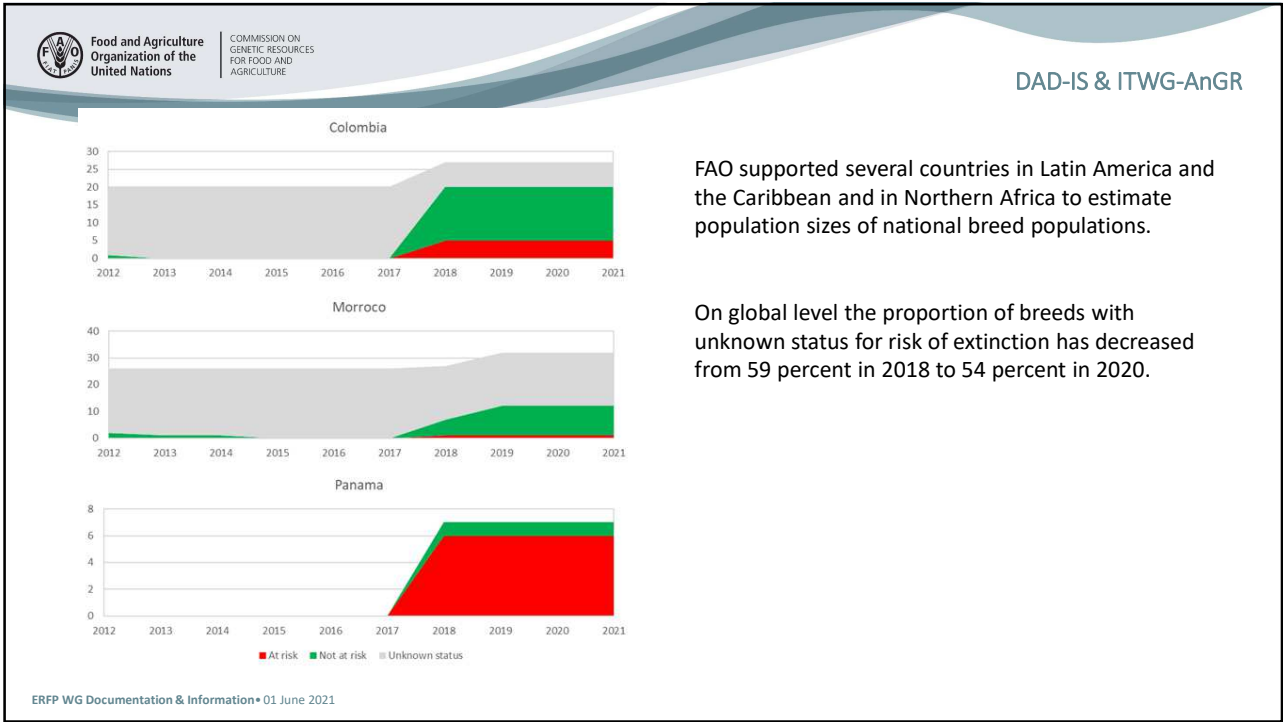
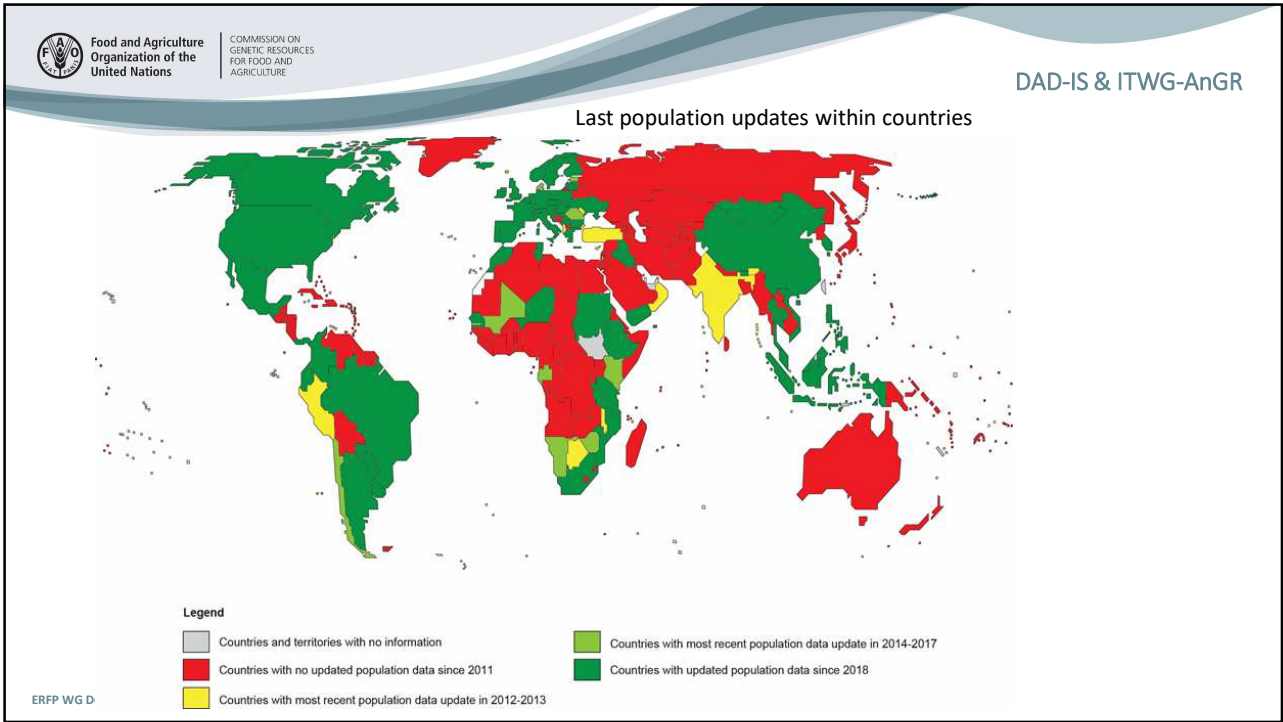
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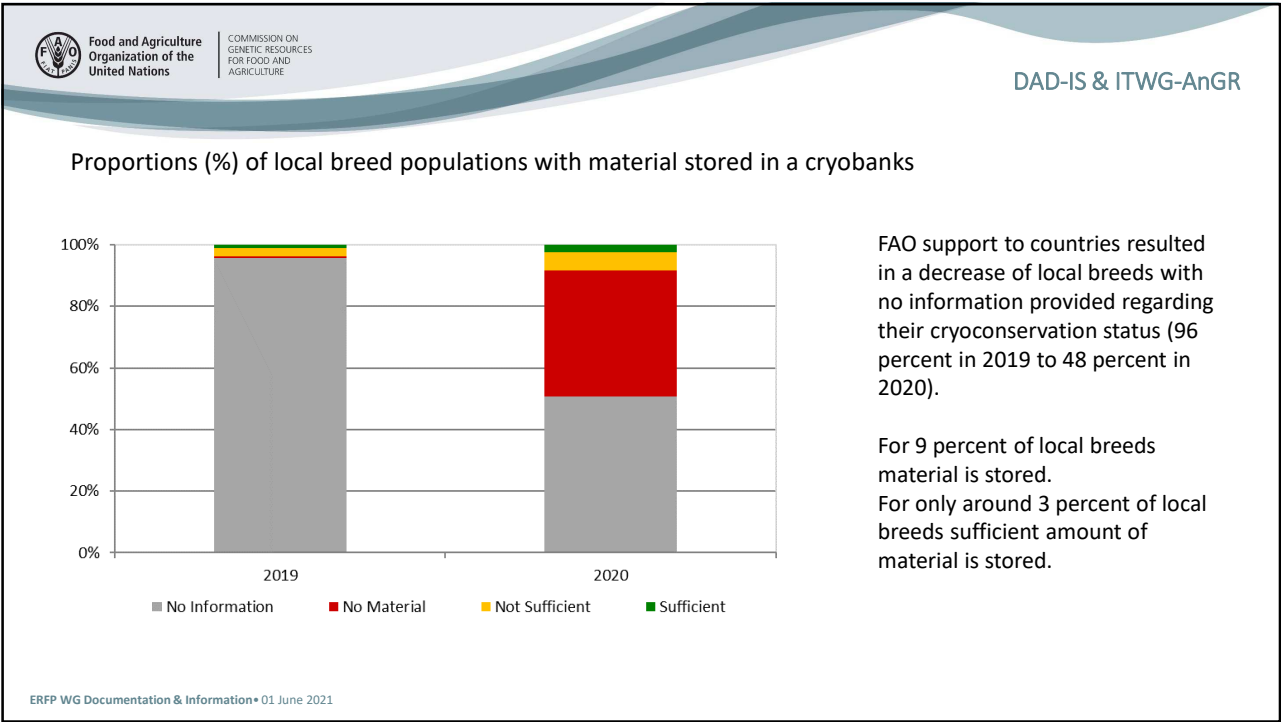
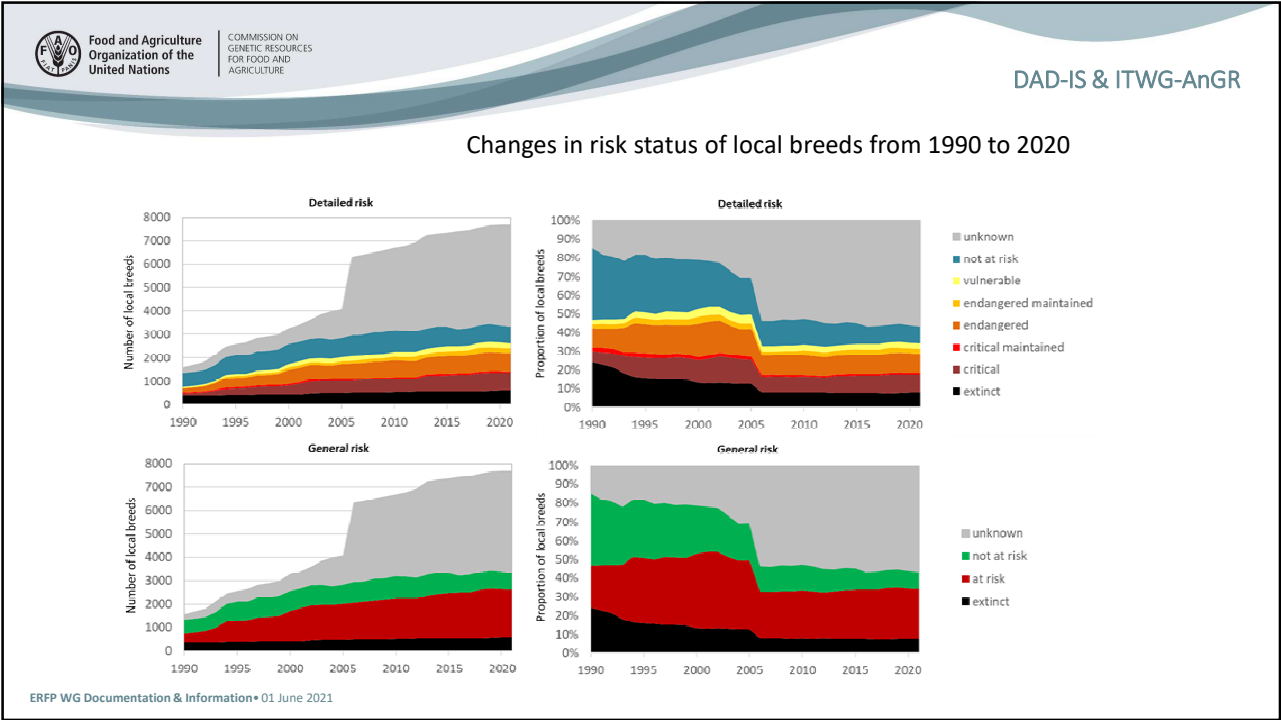
Status of information recorded in the Global Databank for Animal Genetic Resources

Status of information recorded in DAD-IS

Year of analysis	Mammalian species		Avian species		Countries covered
	Number of national breed populations	Proportion with population data (%)	Number of national breed populations	Proportion with population data (%)	
2006	10512	43	3505	39	181
2008	10550	52	3450	47	181
2010	10507	54	3414	47	182
2012	10712	57	3482	48	182
2014	11062	60	3807	56	182
2016	11116	61	3799	57	182
2018	11371	62	3689	58	182
2021	11409	66	3706	61	182

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Status of cryoconservation data

- Efforts need to be strengthened in the collection of genetic material for local breeds
- Whereas breed population data are subject to a cut-off point and thus considered to become unknown after 10 years, this is currently not the case for cryoconservation data. To achieve consistency with the procedures for breed population status, a similar 10-year cut-off point for cryoconservation status may be warranted....

Summary

- Coverage of the DAD-IS remained rather stable with some positive developments regarding reporting
- Breed-related information still far from complete, breeds with unknown status for risk of extinction still very high 54 percent
- 13 percent of all breeds are considered not to be at risk, 26 at risk and 7 percent as extinct

Summary

- Due to the intensive communication campaign undertaken by FAO in 2020 to raise awareness on updating cryoconservation data, the proportion of breeds with no information provided regarding their cryoconservation status decreased substantially, from 96 to 48 percent.
- However, genetic material is reported to be cryoconserved for a very low proportion (9 percent) of local breeds. For only around 3 percent of local breeds is the quantity of stored material estimated to be sufficient for population reconstitution.

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Recommendations of the ITWG-AnGR

The Working Group recommend that the Commission:

- stress the importance of DAD-IS as the international clearing-house mechanism for animal genetic resources for food and agriculture;
- request FAO to continue to provide Regular Programme and technical support to further maintain and develop DAD-IS and to continue to increase user-friendliness, especially with regard to tools for regular data updating;
- request FAO to develop a tool allowing automatized translation of DAD-IS content [...] from and into English, French and Spanish and to investigate the feasibility of translation across all UN languages;


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Recommendations of the ITWG-AnGR

- stress the need for countries to regularly update their national data in DAD-IS or EFABIS-net, [.....], including information on the conservation of animal genetic resources both in situ and ex situ, and
- to continue to work with FAO to improve interoperability of national and regional databases with DAD-IS to ensure that decisions on the implementation of the Global Plan of Action and achievement of SDG Target 2.5 are informed by the most up-to-date data and information available;

Recommendations of the ITWG-AnGR

- request FAO to investigate the potential integration into DAD-IS of data fields related to ecosystem services; production environment descriptors; and information on breeders, producers and breeding organizations; and genetic and genomic data and indicators. ; and
- stress the need for countries to provide basic information on their national data for monitoring the diversity of managed honey bees [.....] and request FAO to include in DAD-IS tools for visualizing these data



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11th Session of ITWG-AnGR

For further information and documents please see:

<http://www.fao.org/animal-genetics/events/events-detail/en/c/1369166/>

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DAD-IS & ITWG-AnGR

Global National Coordinators' Workshop

- DAD-IS training: **24 June 2021 12.00-14.30 Rome Time**
- New data fields: September 2021
- Information seminar: topic TBD October 2021
- Bees (DAD-IS, genebanks, new guidelines): November 2021

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