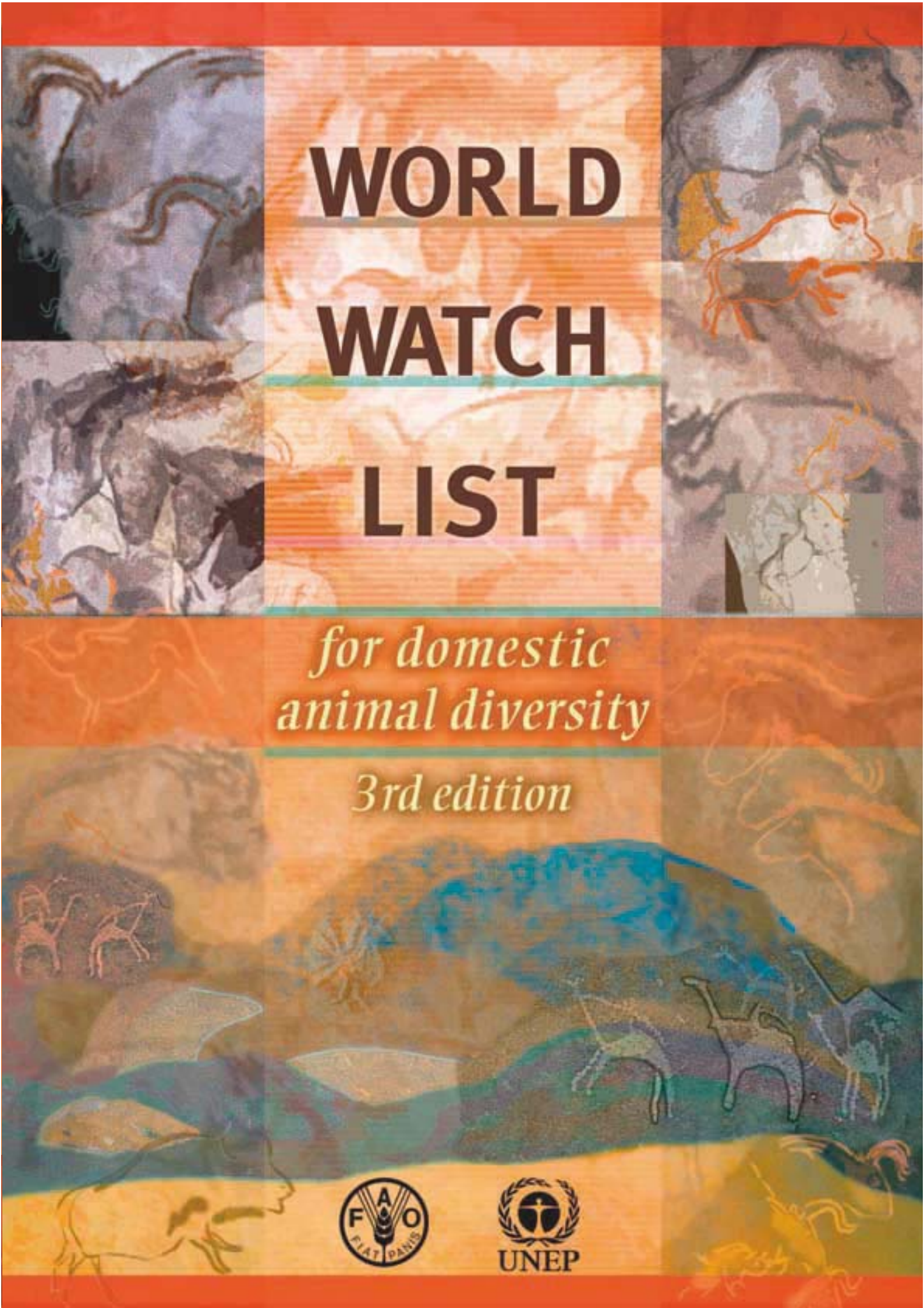
WORLD
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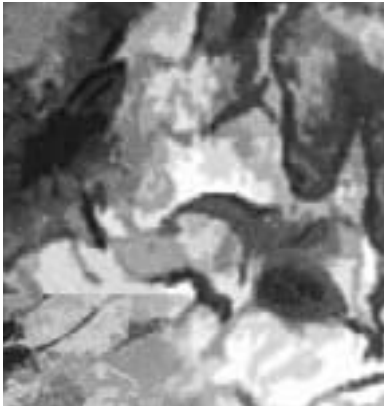

WORLD WATCH LIST

for domestic animal diversity

3rd edition

EDITED BY
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FOOD AND AGRICULTURE
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PREFACE

World food production and agriculture utilize only a few animal species, within which many breeds with unique characteristics have developed over time. These genetic resources form the pool of domestic animal diversity (DAD) that is available to meet the increasing massive global demand for food and agriculture. The DAD component of biological diversity is essential to sustain efficient production from the world's broad range of food production environments required to satisfy many different needs of human communities.

This biological diversity is being lost as human population and economic pressures accelerate the pace of change in traditional agricultural systems. More and more breeds of domestic animals are in danger of becoming extinct.

Greater efforts in the conservation and sustainable use of these farm animal genetic resources are required to stop and reverse this trend of erosion of diversity. Conservation is not simply the preservation of those breeds that are currently not in use. It also encompasses the characterisation and monitoring over time of the gene pool of each species. The wise use of these resources also contributes an important conservation element. In the drive to realize Food for All, the necessary sustainable intensification of farming systems must also provide for the further development of breeds which are already highly adapted to the world's food and agriculture production environments.

Within the Global Strategy for the Management of Farm Animal Genetic Resources, FAO is establishing the Global Early Warning System for domestic animal diversity. The basis of this system is the Domestic Animal Diversity Information System (DAD-IS) and its incorporated database, which is used for the recording of breed inventories and descriptions and for the monitoring of the conservation of these genetic resources over time. The Global Databank for Farm Animal Genetic Resources currently includes information on 6 379 breed populations comprising thirty mammalian and avian species. This information has been used to prepare this third edition of the World Watch List for Domestic Animal Diversity (WWL-DAD:3).

In preparing WWL-DAD:3 a first concerted effort has been made to list those breeds considered to have become extinct; important information that will enable rates of loss to be monitored over time for evaluating the effectiveness of animal genetic management action.

Information on wild relatives of domestic animal genetic resources is also provided. The diversity represented in wild relatives has the potential to make important contributions to food and agricultural production. This edition of the WWL-DAD also includes a section on the potential costs and benefits of feral animal populations of animal genetic resources.

The WWL-DAD acts as the voice of the Global Early Warning System by providing inventories and basic descriptive information on domestic breeds at risk. The list serves to monitor their stability and conservation needs over time. Undoubtedly this list will be used in a range of ways by many governmental and non-governmental organizations at the local, national and international levels; in training and research and in planning action required to better understand, use and conserve what may now be considered irreplaceable biological capital. Opportunities for action arising from this third edition of WWL-DAD are listed in section 1.2.

WWL-DAD:3 contains new information on a large number of breeds and additional information on breeds that were listed in the first and second editions. WWL-DAD:3 provides further evidence for the erosion of genetic diversity; the data suggesting a further global deterioration in the state of these farm animal genetic resources since the release of the second edition of WWL-DAD in 1995. Thirty percent of all remaining animal genetic resources are now classified either on the critical, critical-maintained, endangered or endangered-maintained lists and approaching 800 farm animal genetic resources have been recorded as lost over the past century. These lists are presented here based on criteria established by FAO.

FAO and UNEP consider the communication of this information on the state of global animal genetic resources to be fundamental for the management of farm animal genetic resources. Eventually all 40+ animal species in use in agriculture, involving an estimated 6 000 or more discrete breeds, will be included by countries in the Global Databank for Farm Animal Genetic Resources.

Future editions of WWL-DAD will be extended to reflect this additional information. In this process the country technical networks will collate, validate and report data and information to FAO through the country-identified National Co-ordinators for animal genetic resources management. If you are able to provide new information on one or more breeds please assist through your country's Farm Animal Genetic Resources Network. The identification and complete address of your country's National Co-ordinator can be found in the communication module of DAD-IS (http://www.fao.org/dad-is/).

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TABLES

AGRI	Animal Genetic Resources Information Bulletin
AI	Artificial Insemination
AnGR	Animal Genetic Resources
ARS	Agricultural Research Service
asl	above sea level
BC	Before Christ
CBD	Convention on Biological Diversity
CDAD	Centre for Domestic Animal Diversity
CENARGEN	Centro Nacional de Pesquisa de Recursos Geneticos e Biotechnologia
CGIAR	Consultative Group on International Agricultural Research
CIS	Commonwealth of Independent States
COP	Conference of the Parties (of the CBD)
DAD	Domestic Animal Diversity
DAD-IS	Domestic Animal Diversity - Information System
EAAP	European Association of Animal Production
EAAP-AGDB	European Association of Animal Production -Animal Genetic Data Bank
FAO	Food and Agriculture Organization of the United Nations
GRIN	Germplasm Resources Information Network
IARC	International Agriculture Research Centres
IC	Informal Contact
ICAR	International Committee for Animal Recording
ICARDA	International Centre for Agricultural Research in the Dry Areas
IICA	Inter-American Institute for Cooperation in Agriculture
ILRAD	International Laboratory for Research on Animal Disease
ILRI	International Livestock Research Institute
IPGRI	International Plant Genetic Resources Institute
ISIS	International Species Information System
IUCN	The World Conservation Union
NC	Country Official National Co-ordinator

NGO	Non-Governmental Organization
PDI	Population Data Index
REGENAL	Latin America and Caribbean Network for Animal Genetic Resources
SAR	Special Administrative Region
syn.	synonyms
UNEP	United Nations Environment Programme
USDA	United States Department of Agriculture
USSR	The Union of Soviet Socialist Republics

C	**Critical**
D	**Endangered**
CM	**Critical-maintained**
DM	**Endangered-maintained**
X	**Extinct**
–	**Unknown**

afrik.	Afrikans	kal.	Kalimantanese
alb.	Albanian	kor.	Korean
amar.	Amarhic	lat.	Latin
amb.	Ambonese	min	Minangkabows
ar.	Arabic	mong.	Mongolian
bahasa mal.	Bahasa Malaysia	nor.	Norwegian
bal.	Balinese	pers.	Persian
ban.	Banjar	pol.	Polish
bat.	Bataks	port.	Portugese
bugis	Bugese	rom.	Romanian
bulg.	Bulgarian	ru.	Russian
chin.	Chinese	slov.	Slovakian
cro.	Croatian	sloven.	Slovene
dan.	Danish	sp.	Spanish
eng.	English	sum.	Sumatranese
est.	Estonian	sun.	Sundanese
fin.	Finish	swed.	Swedish
fr.	French	tim.	Timorese
gal.	Gallic	turk.	Turkish
ger.	German	viet.	Vietnamese
gr.	Greek	yug.	Yugoslavian
heb.	Hebrew		
hun.	Hungarian		
iban.	Ibanese		
ice.	Icelandic		
indon.	Indonesia		
irian.	Irianese		
it.	Italian		
jap.	Japanese		
javan.	Javanese		