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## Managing Biodiversity in Agricultural Ecosystems

D. I. Jarvis, C. Padoch & H. D. Cooper (Eds)

Columbia University Press, New York, USA

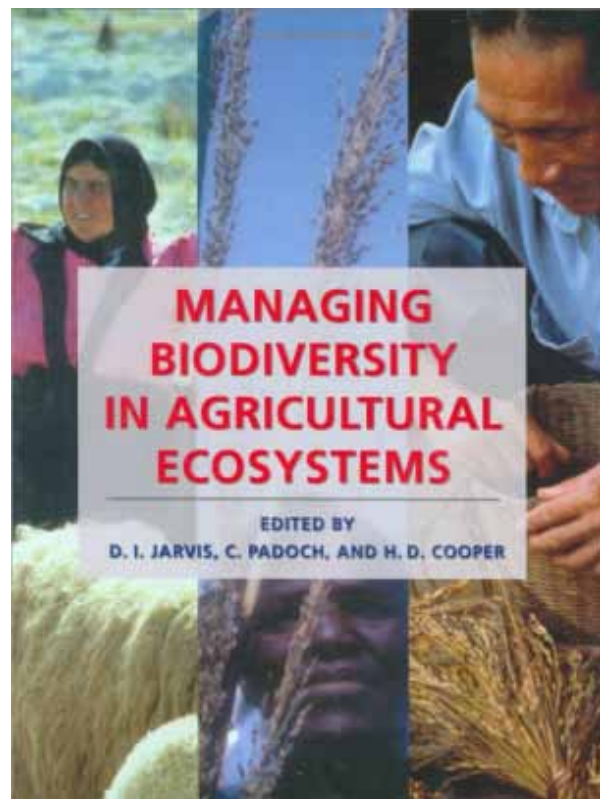
Published in 2007, pp. 105

ISBN: 9778-0-231-1364-8

This hardcover book takes a look at how farmers manage, maintain, and benefit from biodiversity in agricultural production systems. The volume includes the most recent research and developments in the maintenance of local diversity at the genetic, species, and ecosystem levels. Chapters cover the assessment and farmer management practices for crop, livestock, aquatic, and associated diversity (such as pollinators and soil microorganisms) in agricultural ecosystems; examine the potential role of diversity in minimizing pest and disease pressures; and present studies that exemplify the potential nutritional, ecosystem service, and financial values of this diversity under changing economic and environmental conditions. The volume contains perspectives that combine the thinking of social and biological scientists.

Inappropriate or excessive use of inputs can cause damage to biodiversity within agricultural ecosystems and compromise future productivity. This book features numerous case studies that show how farmers have used alternative approaches to manage biodiversity to enhance the stability, resilience, and productivity of their farms, pointing the way toward improved biodiversity on a global scale. As custodians of the world's agricultural biodiversity, farmers are fully invested in ways to create, sustain, and assist in the evolution and adaptation of a variety of plant and animal species. Thus this text is mandatory reading for conservationists, environmentalists, botanists, zoologists, geneticists, and anyone interested in the health of our ecosystem.

Assembling the efforts and expertise of a diverse and well-qualified set of authors, this book addresses a wide range of topics, yet the essays clearly cohere. The perspective is global, which will make the book the single most authoritative source to date on issues of agrobiodiversity.



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## **Marker-Assisted Selection: Status and Future Perspectives in crops, Livestock, Forestry and Fish**

**E.P. Guimarães, J. Ruane, B.D. Scherf, A. Sonnino & J.D. Dargie (Eds)**

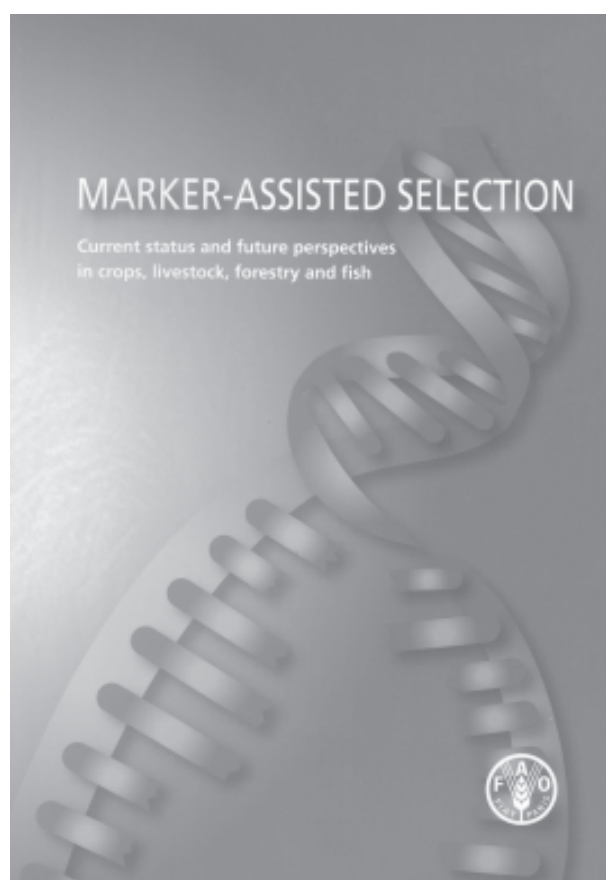
**FAO, Viale delle Terme di Caracalla, 00153 Rome, Italy**

**Published in 2007, pp. 471**

**ISBN: 978-92-5-105717-9**

The 22-chapter book includes a series of case studies giving a comprehensive technical description and assessment of the current use of Marker Assisted Selection (MAS) and concludes with a series of 5 chapters devoted to non-technical issues relevant to applications of MAS in developing countries, such as national research capacities and international partnerships, economic considerations, the impacts of intellectual property rights, and policy considerations. The 46 contributors to the book were all internationally recognised experts in their field and came from 26 different organisations (comprising universities, national research organisations, CGIAR centres, UN agencies and private companies) and 15 different countries.

At present the book is published in electronic format only and may be viewed on the web at: [www.fao.org/docrep/010/a1120e/a1120e00.htm](http://www.fao.org/docrep/010/a1120e/a1120e00.htm).



## People and Animals - Traditional Livestock keepers: Guardians of Domestic Animal Diversity

K.-A. Tempelman & R.A. Cardellino (Eds)

FAO, Viale delle Terme di Caracalla, 00153 Rome, Italy

Published in 2007, pp. 123

ISBN: 978-92-5-105684-4

This soft cover book deals with the domestic animal diversity that is being lost at an alarming rate. Worldwide, local livestock breeds are being crossed or replaced with higher-yielding animals under the motto "exotic is better". Furthermore, the native habitats of pastoralists and their animals are steadily disappearing, relinquishing their domain to agriculture, protected nature reserves and industrial activities. This trend is further encouraged by existing formal policy, short-term profit opportunities and a decreasing appreciation of the value of Local breeds.

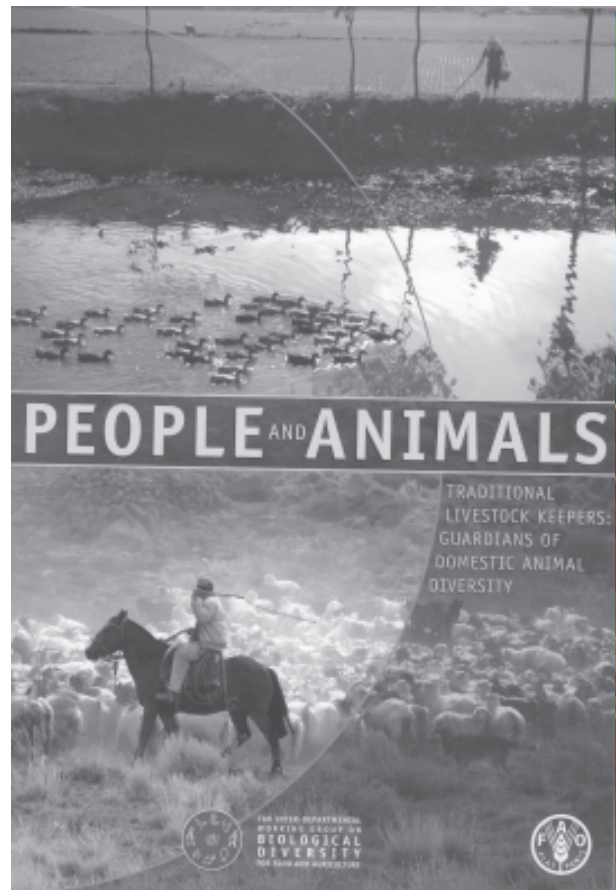
This book presents a variety of farm animal species and breeds that are the result of centuries of local knowledge-based selection by traditional livestock keepers. Through traditional farming systems a broad diversity of livestock breeds is being preserved and developed to provide meat, dairy products, eggs, fibre, fertilizer, manure and draught power. Finally, the book presents livestock diversity as a tool for future capacity to meet unforeseen needs and opportunities.

Case studies on traditional livestock farming systems using local breeds were compiled in order to understand and establish:

- How communities manage local animal genetic resources.
- Local knowledge and good practices.
- How animal genetic resources interact with their environment.
- How communities cope with threats to their local animal genetic resources.
- Long-term solutions and sustainability of strategies.

The main lessons to be drawn from the case studies are:

1. Technical and political decision-makers are often unaware of the far-reaching impact of their decisions on the conservation and sustainable use of livestock genetic diversity; consequently, raising awareness and teaching are essential elements.
2. Communities in general have identified the challenges they face in making their farming systems profitable enough to support their



livelihoods. Such knowledge should be consolidated by decision-makers, who have huge potential to contribute to solving problems related to the loss of livestock diversity faced by farming communities.

3. Connecting people with others who have already addressed, or are addressing, similar problems generates new ideas and solutions. It also empowers people to formulate solutions serving both their own and common situations and to take appropriate action.

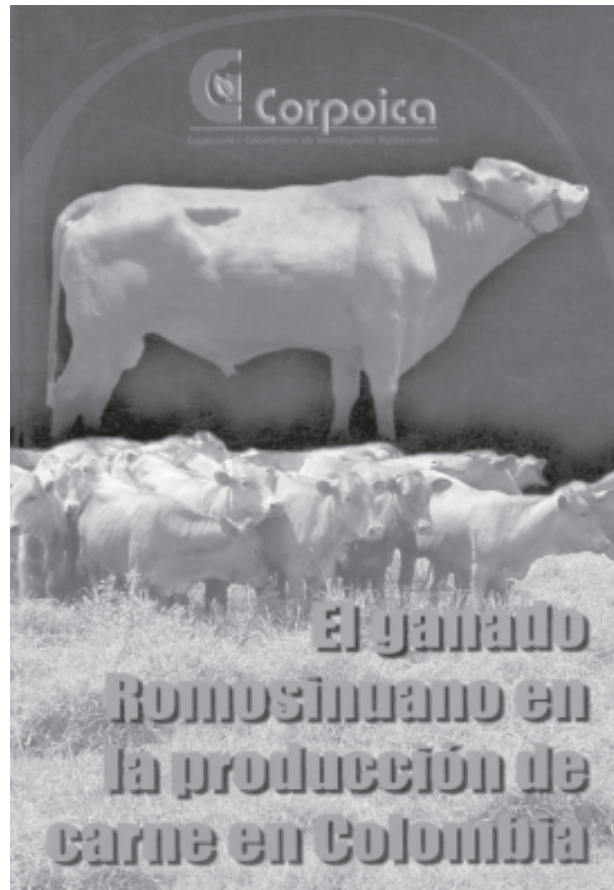
**El Ganado Romosinuano en la  
produccion de carne en Colombia**  
**The Romosinuano cattle in Colombian meat production**  
**(In Spanish)**

**R. Rodrigo Vázquez, S. Rodrigo Martínez, Ch. Hugo Ballesteros,  
L. Grajales Henry, G.J. Esteban Pérez & P. Yesid Abuabara (Eds)**  
**CORPOICA, Mosquera (Cundimarca), Colombia**  
**Published in 2006, pp. 102**  
**ISBN: 978-958-8311-10-4**

This soft cover book describes recent works in conservation, characterization and promotion in the Colombian Creole cattle Romosinuano. Initially, a brief historical review of the breed is illustrated, as well as its geographic distribution in Colombia, the effects its effects on the Colombian beef production.

In the second part of the book several characterization studies are presented together with morpho-metric studies, genetic evaluations, productive and reproductive characterizations and a compilation of results of studies on meat quality in Romosinuano, Zebu and their respective crosses. The publication also displays all activities related with conservation and promotion of this breed and it ends with a review of productive and reproductive performance of Romosinuano breed in subtropical areas.

For sure, this publication may be useful to producer, veterinarians and students with interest in this geographic area and with its production systems.



## Patrones tecnológicos y calidad de la carne bovina en el caribe colombiano

Technologies patterns and meat quality in the Colombian Caribe

(In Spanish)

R. Rodrigo Vázquez, H.J. Pulido, P.Y. Abuabara, S. Rodrigo Martínez, S.B. Abadía, L.C. Arreaza, J.Z. Silva, L.S. Sáncz, Ch. Hugo Ballesteros, C. Muñoz, T. Rivero, A. Nivia & G. Barrera (Eds)  
CORPOICA, Mosquera (Cundimarca), Colombia

Published in 2005, pp. 93

ISBN: 958-8210-82-8

This soft cover publication is the result of a project supported by Colciencias, FEDEGAN and CORPOICA.

Its objective is to illustrate the current situation of meat production in Colombia, the local expectatives, areas with higher productive potential and applied technologies in order to gain a higher quality production. The publication also includes a characterization study of meat quality in Colombia, considering some aspects like fat quality, tenderness and microbiological quality; it also describes several novelty tools to estimate meat quality.

Clear pictures and diagrams help the reader in following the clear presentation of the topics, resulting the publication of particular interest to meat technologists, students and industry responsables in meat processing.



## Development of animal identification and recording systems for veterinary surveillance and livestock development in countries of Eastern Europe

R. Pauw, A. Speedy & J. Mäki-Hokkonen (Eds)  
 Proceedings of the ICAR/FAO Seminar  
 held in Kuopio, Finland, on 6 June 2006  
 ICAR, Via G. Tomassetti 3, 00162 Rome, Italy  
 Published in 2007, pp. 130  
 ISBN: 92-95014-04-9; ISSN: 1563-2504

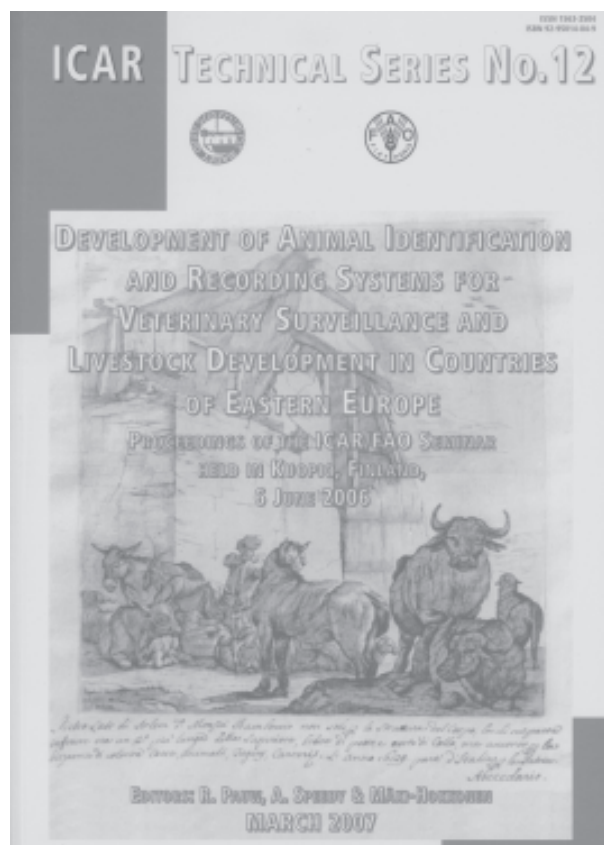
There is an increasing interest worldwide in animal identification and recording (I&R) systems including developed countries, countries in transition and developing countries. Traditionally, I&R systems were mostly developed as an essential element in breed improvement programmes and have been fundamental to the establishment and maintenance of livestock breeding programs

It is this increasing interest to develop and lay sustainable foundation for I&R systems, that resulted in FAO and ICAR together with OIE and the Government of Finland collaborating to put on a seminar at the 35<sup>th</sup> ICAR Session, held in Kuopio, Finland, in June 2006 entitled «Development of animal identification and recording systems for veterinary surveillance and livestock development in countries of Eastern Europe».

The parties of this seminar were convinced that in these countries appropriate systems to trace back the origin of animals and the food of animal origin are the natural and necessary entry point to food safety and security as well as contribution to sustainable livestock development. The basic prerequisites for an efficient I&R remain the same:

- A system that is practical and meets its expectations.
  - A system that is supported by an appropriate policy and legal framework of a country as well as by the producers and trade.
  - A system that is sustainable and self supporting.
- The seminar provided an overview of the role played by the ICAR Sub-Committee Animal Identification and its use by ICAR members.

The FAO paper on veterinary surveillance and livestock development issues in Eastern Europe stressed the priority of I&R for animal health,



particularly surveillance and control of BSE, FMD and CSF in the Region, and the need for an international standards. Further papers were presented by the European Commission on EU legislation, and by OIE on CIE activities and standards relating to I&R and traceability.

Freely available at: [www.icar.org/pages/Publications/technical\\_series.htm](http://www.icar.org/pages/Publications/technical_series.htm)

# The State of the World's Animal Genetic Resources for Food and Agriculture

B. Rischkowsky & D. Pilling (Eds)

FAO, Viale delle Terme di Caracalla, 00153 Rome, Italy

Published in 2007, pp. 552

ISBN 978-92-5-105762-9

Sustainable management of the world's livestock genetic diversity is of vital importance to agriculture, food production, rural development and the environment. *The State of the World's Animal Genetic Resources for Food and Agriculture* is the first global assessment of these resources. Drawing on 169 Country Reports, contributions from a number of international organizations and 12 specially commissioned thematic studies, it presents an analysis of the state of agricultural biodiversity in the livestock sector – origins and development, uses and values, distribution and exchange, risk status and threats – and of capacity to manage these resources – institutions, policies and legal frameworks, structured breeding activities and conservation programmes. Needs and challenges are assessed in the context of the forces driving change in livestock production systems. Tools and methods to enhance the use and development of animal genetic resources are explored in sections on the state of the art in characterization, genetic improvement, economic evaluation and conservation.

The main findings of the report are summarized in *The State of the World's Animal Genetic Resources for Food and Agriculture – in brief*. Arabic, Chinese, English, French, Russian and Spanish versions can be found on the attached CD-ROM and are also available separately in printed form.

As well providing a technical reference document, the country-based preparation of *The State of the World* has led to a process of policy development and a *Global Plan of Action for Animal Genetic Resources*, which once adopted, will provide an agenda for action by the international community.

