



# The management of global animal genetic resources

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## INTRODUCTION

This Expert Consultation was called at the end of a decade in which animal genetic resources moved from relative obscurity to centre stage of interest in development agriculture. During the 1980s, it was increasingly realized that the use and preservation of animal genetic resources are inseparable.

Today animal genetic resources are seen as an integral part of global biological diversity and of the natural environment; they are also an important component of the modified natural environments which are introduced by mankind in development activities and which are now rightly subject to careful scrutiny, appropriate limitation and planned conservation.

During the decade of the 1980s, FAO was very active, jointly with the United Nations Environment Programme (UNEP), in developing a new approach to the management of global animal genetic resources. These activities were carried out in full consultation and cooperation with the member governments of FAO. Thorough studies were made of the underlying rationale and of the needs, opportunities, difficulties and benefits of a new approach to the conservation of animal genetic resources. Extensive consultations took place with all interested organizations; several Expert Consultations were held to sharpen specific aspects of the work as they were brought to fruition; and some preliminary operational infrastructures were set up.

The FAO Committee on Agriculture and the FAO Council have reviewed these activities in recent times and have both expressed their support and wish to see a global programme in place as quickly as possible. They pointed out that new funding sources are needed for this global programme, and they expressed the wish to see the programme integrated as closely as possible with other global programmes in biodiversity and sustainable agriculture.

This Expert Consultation was called both to assist in making a judgement on the desirability of a separate forum for Animal Genetic Resources and to consider the proposed global programme on Animal Genetic Resources. The Expert Consultation was asked to look at the organisation of such a programme, to recommend practices, where needed, and to identify priorities within a global programme.

The participants, although invited in their personal capacities, represented all regions of the world and included experts in all domestic animals species of mammals and poultry. Several were from organizations with close involvement and responsibilities for animal genetic resources. Dr. L. Ollivier of France and Dr. C. Chantalakhana of Thailand were unanimously elected Chairman and Vice-Chairman respectively.

### **David E. Steane**

Technical Secretary of Expert Consultation

FAO Officer in charge (Animal Breeding & Genetic Resources)

## ABSTRACT

The subject of this publication is the global management of animal genetic resources, namely of the domesticated livestock and poultry species and breeds. Attention is focussed upon the genetic resources themselves, upon the need to identify and to give priority to those which are threatened and to regular monitoring mechanisms for discerning changes in the status of animal populations. Practical issues of conservation are evaluated and the need to combine both preservation and improved use is emphasized. Biotechnology prospects for use with animal genetic resources are described. Attention is given to the institutional, financial and administrative structures needed for a global programme and for its regional and national components. The papers presented in this publication were prepared and studied at the Expert Consultation by the authors and others. Participants attended in their personal capacities and covered all areas of the world and all the domestic species. The recommendations are given in full and are directed towards Institutional Infrastructures, Monitoring Practices, Breed Development and Conservation Programmes, Biotechnology and Legal Aspects.

## KEY WORDS

Cattle, buffalo, sheep, goats, camilidae, pigs, equines, fowl, poultry, chicken, ducks, geese, wild animals, breeds, genetics, breeding, breed improvement, nucleus breeding, germplasm, conservation, preservation, biotechnology, rare breeds, endangered and threatened status, small populations, environment, adaptation, World watch, gene bank, animal genetic data bank, institutional, legal, finance.



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