

December 2006



منظمة الأغذية  
والزراعة  
للأمم المتحدة

联合国  
粮食及  
农业组织

Food  
and  
Agriculture  
Organization  
of  
the  
United  
Nations

Organisation  
des  
Nations  
Unies  
pour  
l'alimentation  
et  
l'agriculture

Organización  
de las  
Naciones  
Unidas  
para la  
Agricultura  
y la  
Alimentación

**COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE**

**INTERGOVERNMENTAL TECHNICAL WORKING GROUP  
ON ANIMAL GENETIC RESOURCES  
FOR FOOD AND AGRICULTURE**

Fourth Session

Rome, 13-15 December 2006

**COMPENDIUM OF PRIORITIES FROM REGIONAL CONSULTATIONS**

**TABLE OF CONTENTS**

	<i>Para.</i>
I. INTRODUCTION	1 - 3
II. PRIORITIES FROM REGIONAL CONSULTATIONS	
Priority Area 1: Characterization, Inventory and Monitoring	4 – 30
Priority Area 2: Sustainable Use and Development	31 - 51
Priority Area 3: Conservation	52 - 67
Priority Area 4: Policies, Institutions and Capacity Building	68 - 89



---

## COMPENDIUM OF PRIORITIES FROM REGIONAL CONSULTATIONS

---

### I. INTRODUCTION

1. The present document contains main issues and recommendations for regional priority actions as presented in summary reports of the regional e-mail consultations on the *Report on Strategic Priorities for Action*. The document offers a synthesis of strategic priorities and actions for each region. The findings of the regional consultations were used as a key input into the draft *Strategic Priorities for Action*, which is presented in *Appendix 1* of the document, *Review of the draft Strategic Priorities for Action for the Sustainable Use, Development and Conservation of Animal Genetic Resources for Food and Agriculture*.<sup>1</sup>
2. The regional consultations were held on the basis of the *Report on Strategic Priorities for Action*. The priorities contained therein are presented in the document, *Compendium of Priorities from Country Reports*.<sup>2</sup> The synthesis also draws upon the findings of several sub-regional consultations held within regions. The full process of the regional consultations is described in the information document *Report on regional consultations in the preparation of the Strategic Priorities for Action*.<sup>3</sup>
3. The document is structured according to the four priority areas of the *Strategic Priorities for Action*: 1) inventory, monitoring and characterization; 2) sustainable use and development; 3) conservation; 4) policies, institutions and capacity building. Within each priority area, for each region a brief summary of issues is presented, followed by the priority actions indicated by the participants of the regional consultations. In several cases issues are flagged that need further resolution within the regions.

### II. PRIORITIES FROM REGIONAL CONSULTATIONS

#### PRIORITY AREA 1: CHARACTERIZATION, INVENTORY AND MONITORING

##### *AFRICA*

##### *Issues*

4. A majority of participants of the consultations underlined the lack of awareness of the important roles and values of animal genetic resources. They also noted the lack of awareness, political will and insufficient human and financial resources to carry out characterization and inventory of animal genetic resources at country levels.

##### *Regional Priorities*

5. The participants of the consultation underlined the need for the development of an adequate institutional framework in each country, in particular the establishment and strengthening of the National Focal Points and the provision of technical and financial support from international institutions and organizations. Other priorities relate to the establishment of sub-regional structures with functions similar to Regional Focal Points and with a task to coordinate inter-country and sub-regional work in the field of animal genetic resources, including

---

<sup>1</sup> CGRFA/WG-AnGR-4/06/4.

<sup>2</sup> CGRFA/WG-AnGR-4/06/Inf 2

<sup>3</sup> CGRFA/WG-AnGR-4/06/Inf 3.

inventory and characterization of transboundary breeds. Reliance on the existing institutions in more advanced countries in the region for characterization of animal genetic resources was recommended.

6. Participants supported all priority actions contained in the draft *Report on Strategic Priorities for Action*, such as comprehensive national breed inventory, monitoring, phenotypic characterization and breed performance analysis at country level. Participants considered that actions require strong collaborative arrangements and international technical and financial support. Collaboration is necessary, in particular, to: exchange experience and expertise among countries with transboundary breeds; to establish and manage sub-regional databases; and to involve institutions from more advanced countries in molecular characterization of breeds from the region or sub-region.

7. The following areas were suggested in which FAO could facilitate the implementation of national breed inventories, monitoring and characterization: to support human capacity building by training nationals in breed inventory, monitoring and characterization; to develop standardized methodologies for carrying out breed inventory, monitoring and characterization; and to encourage national governments, NGO's and the private sector to contribute resources to undertake characterization, inventory and monitoring activities.

## **NEAR EAST AND NORTH AFRICA**

### ***Issues***

8. Participants noted that management of animal genetic resources has little national and region support, and considered the Global Strategy for the Management of Farm Animal Genetic Resources as an opportunity to give to the management of animal genetic resources the attention it deserves, both at national and regional levels. The region is rich in animal genetic resources, in particular sheep, goats and camels, which play important socio-economic roles for the rural population, especially in low external input production systems. There are many interesting cases of animal genetic resources management and conservation in the region that can be valuable for the exchange of experiences among countries.

### ***Regional Priorities***

9. Participants recommended that animal genetic resources get more support at national and regional levels, in order to meet the increasing demand for animal products and to fulfil its important socio-economic role in the region. Regional priority actions include: to enhance research on breed performance for valuable traits, including disease resistance and adaptability within the prevailing production systems; to carry out censuses for each breed within species; to provide technical assistance from regional and international organizations to countries in need for priority actions; to strengthen knowledge dissemination of research results; to monitor changes in the socio-economic framework, traditional knowledge and production systems, and their impacts on animal genetic diversity; to enhance exchange of experiences between stakeholders within the region through networking and technical meetings; and to establish a Regional Focal Point for animal genetic resources.

## **ASIA**

### ***Issues***

10. In some countries of South-East Asia (Nepal, Pakistan and Sri Lanka), there is no ongoing work on genetic characterization due to the lack of appropriate prioritisation, financial resources, relevant expertise and technical know-how. Additionally, the countries of Central Asia reported that there are no modern databases, information networks and sustainable animal genetic resources programmes in their countries.

11. East Asian countries (China, Japan, Republic of Korea) have developed monitoring systems with the objective of obtaining information with a view to providing an early warning system for breeds potentially at risk. Breed characterization is considered to be a priority. Several obstacles need to be overcome: the lack of breed identification methods and harmonized nomenclature for breeds. Japan has already prepared a manual for characterization. China has recently embarked on a national survey and, in an attempt to overcome the human resource limitation, is using senior experts to assist and to guide the junior staff. Japan is attempting to establish monitoring and characterization of poultry breeds through collaboration with local poultry keepers. For other species it already prepares annual reports. Korea is developing standardized protocols for breed characterization and cooperating with Japan in molecular characterization.

### ***Regional Priorities***

12. Countries of South East and Central Asia should start actions to develop their own strategies to address national priorities related to breed inventories, monitoring and characterization. They proposed this should be implemented with the coordination and assistance of FAO. Countries of Central Asia need financial and technical assistance to develop breed inventory and characterization activities. It was suggested that FAO could assist the establishment of a regional database for countries on the basis of national information systems.

## ***EUROPE***

### ***Issues***

13. Participants from Eastern European and Caucasian countries underlined that the old national institutional infrastructure for management of animal genetic resources have completely eroded. There are no national or regional programmes for characterization and monitoring of animal genetic resources on a permanent basis. Countries do not have appropriate institutional capacity for the management of animal genetic resources. Participants from these countries indicated that, under these conditions, the identification, registration and characterization of farm animals has high priority.

14. In some countries of the Central Europe, the main restriction to carry out species and breeds inventories and characterization is the lack of confidence of the farmers who are afraid of having to pay taxes if disclosing the real number of animals they are keeping. This refers to small animals (goats, rabbits, chicken, and geese).

15. Member states of the European Union regularly report the list of recognized breeding organizations for specific breeds to the European Commission. The difficulty lies in knowing which breeds are closely linked and which breeds could be grouped. Interbull provides breeding value estimations across countries. DAD-IS provides the opportunity to add information on breed associations and to indicate transboundary breeds.

16. Networking was indicated to help solve the limitations on access to information systems and databases, and to standardize methods. The European Regional Focal Point was noted as the appropriate institution to coordinate networking activities. Participants recognized the need for using compatible databases and information systems, and the importance of adopting standard methods.

17. The following limiting factors were noted that hinder the implementation of actions: a lack of awareness of the importance of characterization, inventory and monitoring activities as a precondition for the sustainable management of animal genetic resources, and a resulting lack of appropriate prioritisation and lack of human and financial resources; weak coordination within the region; a lack of expertise in some countries; and a lack of cooperation between departments of environment and agriculture in the European Commission and within countries;

### ***Regional Priorities***

18. In countries without animal genetic resources inventories it is necessary: to collect baseline data and carry out inventories; to set up a permanent systems for monitoring; to build human capacity through training of professionals; to define breeds; and to establish institutional infrastructure that actively involves breeders and farmers in characterization, monitoring, breeding and selection activities.

19. In countries with sub-optimal animal genetic resources inventories it is necessary: to develop guidelines for improving inventories; to develop improved software and databases; to establish a system for breed characterization; and to establish a validation mechanisms for data.

20. In countries with complete animal genetic resources inventories it is necessary: to integrate existing electronic information systems at national level, especially in countries with federal governments; to improve monitoring through establishment of permanent monitoring systems; to raise awareness among decision makers; and to involve breeding organizations, community and hobby groups.

21. At regional and international level the priorities identified are: to standardize nomenclature for breeds across the region; to improve regional systems for collection and monitoring of data for the European database; to continue and further develop DAD-IS as a global communication tool and clearing-house mechanism for animal genetic resources, which also facilitates networking among countries and international organizations; to extend the information on breed inventory and monitoring to environmental conditions coupled with performance data, molecular data and characterization for disease resistance traits, sustainability traits; genetic distance, and traits relating to human health (proteomics / lipidomics / anti-carcinogenic traits); to establish links with other databases; and to use the existing European regulations to encourage further development of the regional database.

## ***LATIN AMERICA***

### ***Issues***

22. In Latin America, in general, political authorities lack awareness about the importance of animal genetic resources, particularly at local level. Main limitations in the area of inventory and characterization include: lack of public awareness of the roles and values of animal genetic resources; lack of human, financial and technical resources for establishing the phenotypical difference between genotypes; lack of national and regional coordination on animal genetic resources activities, resulting in some cases in duplication of efforts and insufficient integration among the different institutions; the promotion of import of exotic animal genetic resources by governments; difficulties of access to certain regions for geographical reasons or because of armed conflicts; cattle raisers fear that information about the numbers of animals may be used to increase their tax burden; and most of the existing farm animal censuses do not specify breeds.

### ***Regional Priorities***

23. Regional priority actions include: to develop national databases for animal genetic resources; regularly update DAD-IS; to develop regional projects on characterization of common animal genetic resources; to conduct training on methodologies for animal inventory and characterization; to increase the knowledge of policy makers about the need to carry out inventories for monitoring animal genetic resources and include such activities in rural development programmes; to strengthen the databases of breeders' associations; to carry out inventories, identifying breeds and genetic groups; to form strategic alliances with institutions that coordinate zoo-sanitary campaigns in order to include information about the breeds in their work; to develop and strengthen international education in order to increase the qualified human

resources; carry out regional cooperation agreements in order to perform inventories and make plans for conservation, improvement, and sustainable use of animal genetic resources; and to include environmental data in characterization and inventory activities.

## ***NORTH AMERICA***

### ***Issues***

24. Almost all farm animal genetic resources were either imported or the result of crossing imported genotypes. While one might infer from this that the within breed diversity is relatively small, this is probably not the case. For a significant number of livestock breeds have had a presence in North America for over 100 years and in some instances breeds have been in North America for over 400 years. As a result of different production systems, mutation, and genetic drift, North American breeds could be very different from their counter parts in the country of origin. Two examples demonstrate this point: the North American Holstein which has been exported globally; and Hereford cattle where research has demonstrated that most of the Herefords in the United Kingdom currently have Canadian Hereford ancestors. In the USA the sheep industry has emphasized increasing growth rates, mature size, and prolificacy. Such emphasis has altered the performance of sheep raised in different environments suggesting the development of genetically diverse subpopulations.

25. In addition to the global breeds as mentioned above there are significant numbers of rare/minor breeds located throughout North America. Many of these breeds have not had consistent selection pressure placed upon them. Therefore, natural selection and drift have undoubtedly contributed to altering the genotype from their original population. For cattle, there are great similarities between the production systems and genotypes used in the region. The primary difference between the two countries are the breeds of cattle raised in the sub-humid Gulf Coast region where *Bos indicus* breeds are utilized either as purebreds or as crossbreds with *Bos Taurus* breeds.

### ***Regional Priorities***

26. Priority areas of the region include: to improve information management; to develop a regional database for genetic resource management; to quantify genetic diversity within and between breeds; and to establish categories of collected material, based on ownership, disease status and other criteria.

## ***SOUTH WEST PACIFIC***

### ***Issues***

27. The main restriction on the development of national and regional inventories is the low priority given animal genetic resources. This is reflected in a lack of funding for animal genetic resources activities. In contrast, plant genetic resources activities generally have a higher priority and are better funded.

28. The formation of a strong regional focal point is seen as a prerequisite for developing a programme of regional activities, which could include training, networking, databases and information systems. Given the state of development of the livestock sector and the strength of the government and academic institutions, Australia is in a strong position to support the development of regional activities.

### ***Regional Priorities***

29. Regional priorities included: to develop awareness of the importance of animal genetic resources within governments; to hold a regional workshop to identify further national needs and priorities; to establish a strong Regional Focal Point for developing a programme of regional

activities, which could include training, networking, databases and information systems; to collate all available information on local breeds in a central regional database; to conduct national and regional surveys on the status of animal genetic resources; to begin inventory and characterization with a view to ascertain the status of genetic diversity, productive characteristics and values of local breeds; to undertake training in the areas of characterization, monitoring, the development of breed inventories, and research and development activities for animal genetic resources, facilitated by FAO.

30. In carrying out these activities the FAO should seek the support of other international, regional and local community based organizations. Existing regional organizations need to be involved in the implementation of national and regional priorities through the establishment of networks and information systems.

## **PRIORITY AREA 2: SUSTAINABLE USE AND DEVELOPMENT**

### ***AFRICA***

#### ***Issues***

31. In order to undertake the proposed activities of the *Report on Strategic Priorities for Action* successfully, it will be necessary to establish a network through which information on the present state of knowledge on animal genetic resources can be shared. It will then be possible for the region to set realistic priorities for action both in the short and long term.

32. Noting that the main animal genetic resources products were milk, meat (red and white), eggs, hides and skins, participants at consultations also recommended marketing activities in support of use and development of animal genetic resources.

33. Participants agreed on the need to establish centres of excellence. These centres should be located in countries that have the necessary infrastructure and where the importance of diverse species and breeds are recognized. They should be regularly supervised by FAO and their reports should be presented at international meetings. Their establishment could be supported by a variety of regional and international bodies and institutions, such as the International Livestock Research Institute (ILRI), the Centre International de Recherche-Développement sur l'Élevage en Zone Subhumide (CIRDES), the Institut du Sahel, FAO, Centre de de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD), the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), the United Nations Development Program (UNDP), the World Bank, the European Commission, as well as by national institutions and regional universities and schools, such as Inter-States School of Sciences and Veterinary Medicine of Dakar. Countries such as South Africa and Zimbabwe that are already advanced in animal genetic resources research and have already formulated conservation policies, could provide leadership in establishing regional centres of excellence in the region.

#### ***Regional Priorities***

34. Regional priority actions indicated were: to study the zoo-technical potential of local breeds; to develop research programmes on the genetic improvement of local breeds and species; to develop breeding strategies for indigenous breeds, including nucleus breeding plans with simplified recording schemes; to equitably share benefits deriving from the resources; to integrate innovative advanced production techniques to complement indigenous knowledge and practices by communities that keep local breeds, with a focus on areas such as preventive therapy and ethno-veterinary practices to control common diseases like Foot and Mouth Disease, East Coast Fever and Bovine and Caprine Pleuro-Pneumonia; to locally develop and patent vaccines; to introduce simple techniques for breeding management, such as rotation of breeding males and castration in traditional production systems, combined with simplified animal recording to assist

in selection of genetically good animals; to intensify production in areas where land area is limited, for example, through planned forage production and conservation in arid and semi-arid areas; to promote use and exchange of genetic materials that will increase food production and food security in the region; to train experts to be aware of and understand the protocols of research and development programmes; and to exchange experiences with other regions;

35. In the field of marketing, the consultations suggested the following priorities: to promote breeds that have valuable production, functional or adaptive traits; to review existing livestock marketing structure and facilities to establish their adequacy; to create markets for indigenous breeds and their products and support farmers to find niche markets for organic products from indigenous breeds; to create labels and promotion of breeds through the media and organization of fairs for the best specimens of animals at local and national levels; and to promote aesthetic values of indigenous breeds and exploit them for ecotourism

36. Other priorities identified were: to maintain and restore the natural environments of local breeds; to integrate indigenous breeds in the national research agenda and programmes; to improve elements of production systems such as animal health, pastures and management of bush fires that degrade the pastures; to secure interest of keepers of indigenous breeds through provision of incentives such as niche markets for the animals and their products, as well as through protecting ownership over their genetic resources; to advertise the breeds and their products based on the philosophy that the resources are a global heritage and, therefore, all people should participate in their conservation in one way or another, including by consuming animal products even at premium prices; to intensify use of artificial insemination in local breeds to increase production and also control breeding diseases; to encourage breeding associations through relevant governmental policies and legislation as well as transboundary agreements, similar to the European Union, to enhance attention and thereby trade in animal genetic resources; and to review zoo-sanitary requirements and their impact on animal genetic resources.

## ***NEAR EAST AND NORTH AFRICA***

### ***Regional Priorities***

37. Regional priorities identified were: to assess the suitability of and develop plans for exotic animal genetic resources for breeding and production in medium and high external input systems; to enhance efforts to evaluate and improve productivity of local breeds especially in low external input production systems; to provide technical assistance for human resources development from regional and international organizations to countries in need for priority actions for animal genetic resources; to exchange experiences between stakeholders within the region through networking, technical meetings and the establishment of a Regional Focal Point; to strengthen dissemination of research results; to develop joint action on genetic resources management with regard to common breeds, especially Awassi and Berbery sheep breeds, Shami goats, Magrabi camels and Arabian horses; to identify opportunities to enhance the use of underutilized species and breeds and develop niche markets for their products; and to monitor changes in the socio-economic framework, traditional knowledge and production systems, and their impacts on animal genetic diversity.

## **ASIA**

### ***Issues***

38. Participants from Central Asia did not propose new priorities for the sustainable use and development of animal genetic resources. They considered that the agricultural sector in their countries was not on the political agenda as a priority. Due to structural and economic changes the demand for animal products has declined and conditions for animal production have deteriorated. The challenge is to create awareness about the importance of animal genetic resources in these conditions.

39. Participants from East Asian countries agreed that the participatory approach is the most desirable for sustainability, in addition to an increase in public awareness and technical assistance to farmers, where the government agencies are best placed to assist.

### ***Regional Priorities***

40. Regional priority actions identified were: to identify markets for already existing special traditional products, create niches for specific products based on local breeds, and develop new products with appropriate marketing schemes; to promote special product development in the rural development programmes; to improve breeds combining the use of local and exotic breeds, as well as traditional knowledge and advanced techniques; to develop exchange of the breeding material between related breeds; to develop exchange of breeding material between countries; and to establish a communication platform for the exchange of ideas and experiences among countries.

## **EUOPE**

### ***Issues***

41. Participants noted that it is necessary to identify and develop niches for specific animal products in each country, to involve specialists into development of new products and develop the marketing schemes for these products. There is also need to consider this issue in rural development programmes. Exchange the breeding material between related breeds was suggested as a measure in breed improvement programmes. In Caucasian and East European countries, it is necessary to undertake extension activities. There is a perceived lack of communication between countries in the region, and particularly between the Eastern part of the continent and members of the European Union. For Caucasian and East European countries, the main points for actions could be the creation of a communication platform for the exchange of ideas and share the experience.

### ***Regional Priorities***

42. The participants recommended the development of special products based on local and/or endangered breeds, including activities: to encourage international cooperation between breeding organizations for similar breeds; to identify possible special products (e.g. milk, cheese, meat, eggs, fat but also non-food products like tourism); to cluster breeds according to product quality and relatedness of the breed; if necessary, to recommend exchange of the breeding material between related breeds; to combine special products with the production system or area; to develop marketing schemes for special products; to involve professionals in development new products (e.g. dry meat in Europe); to include the issue of special product development and promotion in the rural development programmes; to utilize, improve and further develop markets for already existing special/traditional products; to create awareness of possibility to apply for

financial resources for this activity; to include projects related to marketing of local breed in the next call for action by European Regional Focal Point for animal genetic resources.

43. Other priority actions brought forward were: to involve hobby breeders to maintain and utilize local breeds; to mainstream local breeds to maintain genetic diversity between and within breeds; to monitor the effective population sizes of breeds; to establish optimal selection and mating schemes to control inbreeding; to build awareness on the importance of maintaining genetic diversity in commercial populations; to develop a 'code of conduct' for exchange of genetic material, i.e. including adaptation aspects when importing breed into a new environment; to develop sustainable breeding programmes (i.e. create further awareness on the need to include health and fertility in breeding objectives); to create a communication platform to exchange ideas and share experience that will include commercial breeding companies, the food processing industry and research institutions; and to develop research networks and centres of excellence.

## ***LATIN AMERICA***

### ***Regional Priorities***

44. Regional priority actions identified by the participants were: to promote niche markets and local trade of animal products derived from locally adapted animal genetic resources; to integrate the production-trade-consumption chain of animal products, specially of those derived from locally adapted animal genetic resources to promote fair benefit sharing; to explore ways to get a premium on animal products due to environmental friendly production conditions; to introduce exotic genotypes only if there are no local resources capable of meeting the specific needs and to study the interaction of exotic breeds with the environment, culture and production systems; to develop breeding programmes for locally adapted animal genetic resources in traditional production systems; to utilize the media to divulge knowledge, experiences, roles and values of animal genetic resources, underling historic and cultural values; and to promote knowledge on the importance of animal genetic resources in formal education;

45. Other priorities identified were: to promote the establishment of breeder organizations for local breeds and promote regional interaction among them (particularly national breeders associations for Creole dairy cattle); to promote the participation on local, national or regional agricultural fairs, in order to show locally adapted animal resources and their products; to develop sound breeding structures for the sustainable use of local breeds, involving the commercial sector; to develop a regional network for animal genetic resources; to continue the implementation of regional workshops organized by FAO to build capacities for the management of animal genetic resources; to develop regional projects involving several institutions and disciplines; to prepare video-conferences on successful international trading of traditional animal products; to establish centers of excellence to coordinate and undertake research and training on specific animal species and breeds (Colombia - criollo Bovines; Brazil - Indicus Bovines and Goats; Guyana - ducks and turkeys; Peru – guinea pigs, Vincuña and Alpacas; Uruguay - wool-bearing sheep; Bolivia - Llamas; Argentina - Guanacos and Taurus Bovines; Venezuela - Chigüires); to create germplasm satellite banks; to strengthen the Regional Focal Points; to develop sub-regional breeding programmes for transboundary breeds; to evaluate traditional knowledge for animal genetic resources management through scientific methodologies and promote its use, specially when women are involved; to control and eradicate diseases to be able to comply with requirements of new markets; to inform communities during sanitary campaigns about the importance of sustainable utilization of their zoo-technical resources; and to improve contact between farmers and breeders, and urban populations so as to underline the distinguishing characteristics of products of local animal genetic resources and their national historic and cultural value.

## ***NORTH AMERICA***

### ***Issues***

46. The livestock industry in North America is of significant agricultural importance. In Canada and the USA, farm gate livestock receipts are approximately 44% and 50% of total agricultural revenue. The primary livestock species contributing to the farm gate receipts are: cattle, swine, chickens, turkeys, sheep, and goats. Across the region extensive, mixed crop-livestock and industrial production systems are utilized for livestock production. Within in each of these production systems management practices and the breeds utilized are largely the same. Much of the similarity in production systems is due to the similarity between environments and the cross border marketing of livestock products, which encourages product uniformity.

47. There is sufficient genetic exchange between the two countries that some of the farm animal populations could be considered to be a single population. This is most extreme for industrial chickens and turkeys, which are selected by a very small number of companies that supply commercial birds throughout the world. Populations of dairy and beef cattle are separate but intertwined, and the main breeds are connected, to varying degrees, genetically to populations in other parts of the world. Aims and programmes for swine genetics may be different between the two countries, but there is a move towards internationalization of swine breeding, following the pattern of the poultry industry which may result in a reduction of swine genetic resources. Both countries are industrially developed and use advanced breeding and selection techniques involving extensive record keeping for most breeds of livestock. Breeding and selection programmes are supported by active research programmes.

## ***SOUTH WEST PACIFIC***

### ***Issues***

48. The establishment of centres of excellence was seen as a priority where breeds or species at high risk exist. They would be located within countries in the region. They would need to be well resourced, have defined objectives, be closely linked to government and rural communities, and their research programmes should be focused on the development of sustainable livestock development and the characterization of local breeds. The support of national, regional and international organizations is necessary for the successful implementation of programmes to improve the use and development animal genetic resources.

49. Australia has identified its strong national network of rural research and development centres, cooperative research centres, the Commonwealth Scientific and Industrial Research Organization, universities and state departments of agriculture as having a potential role in assisting countries in the region.

50. At the regional level there is a potential role for regional organizations such as the Secretariat of the Pacific Community, while at the international level the FAO, ILRI and the World Organization for Animal Health (OIE) would be expected to assist.

### ***Regional Priorities***

51. Regional priorities identified were: to characterize and make an inventory of local breeds, combined with programmes for *in situ* and *ex situ* conservation as a basis for sustainable use; to develop markets to facilitate trade in products of local breeds; to market and label organic animal products from local breeds as an incentive for maintenance; to improve the productivity of local animal genetic resources using breeding technologies that retain important characteristics such as hardiness, using participatory approaches and taking into account local conditions, government policies, available resources and community aspirations; to build local expertise in livestock breeding and development within countries in the region; to share national experiences through the use of strong National Focal Points connected through a strong Regional Focal Point.

National Focal Points would be involved in national programmes of activities that support breeding associations, develop standardized registration systems, implement sustainable programmes of genetic improvement for local and exotic breeds and increase the contribution of animal production to national economies.

### **PRIORITY AREA 3: CONSERVATION**

#### ***AFRICA***

##### ***Issues***

52. Conservation of animal genetic resources receives little attention in countries in the region. FAO can play an important role by facilitating the provision of incentives and raising awareness with governments to appreciate the role of animal genetic resources in poverty alleviation and enhancement of food security in the medium term and to conserve valuable genetic material in the long term. It was suggested to hold a conference of responsible ministers and, if possible, a summit of the Heads of State on the subject. It was also noted that policy development should adopt a process of consultation and be based on accurate and factual information on the breeds, including valuation of animal genetic resources and animal products. Participants emphasized that conservation measures should not merely prioritise emergency measures, but should be planned on a long term basis linked to sustainable use and development programmes.

##### ***Regional Priorities***

53. Regional priorities identified were: to raise awareness among policy makers by organization of regional, sub-regional and national workshops, training courses and campaigns; to apply an integrated approach to formulation of policies, strategies and legislation; to establish permanent national structures for conservation of animal genetic resources; to establish regional and sub-regional permanent structures for conservation, in which different stakeholders are represented; to conduct detailed studies on the national animal genetic resources, their unique adaptive characteristics in relation to their potential future uses and contribution to food security; to prioritise *in situ* conservation, making use of state farms, research institutes and farmers training centres; to establish *in situ* populations of the native breeds, preferably as economic units; to educate stockowners about the animal breeds and their value for food and agriculture; to ensure the availability of sufficient pasture and water throughout the year; to jointly manage diseases and pests in the region, especially along the borders; to establish strict sanitary standards for products and services rendered to unique breeds at risk of extinction; to train local experts and farmers in conservation practices, including through a regional workshop to compare country inventories of available technologies, electronic training modules such as CD-ROM and manuals for distribution to strategic stakeholders, and use ILRI and national facilities (laboratories, libraries, training modules, A.I. centres) for training technicians on the use and conservation of animal genetic resources.

##### ***Differences within the region***

54. There was no uniform position among the participants on the relative importance of *in situ* and *ex situ* measures. Some agreed that it would be both necessary and possible to establish a regional gene bank, as back-up for recovery of breeds when *in situ* conservation efforts would fail. Other participants stated that a regional gene bank is not a priority at present and indicated that priority in the region should be inventories, characterization, documentation and the development of national and regional coordinating structures. While most countries supported regional conservation efforts, some stated that conservation is a national responsibility.

## **NEAR EAST AND NORTH AFRICA**

### ***Regional Priorities***

55. Regional priorities identified by the participants were: to encourage research institutions to develop *ex situ* cryopreservation systems for semen, embryos, ova and somatic tissues; to enhance exchange of experiences between stakeholders within the region through networking, technical meetings and the establishment of a Regional Focal Point; to develop project proposals for research and development in the area of the conservation and management of animal genetic resources; to establish and enhance regional and sub-regional gene banks for animal genetic resources; to provide technical assistance from regional and international organizations to countries in need for priority actions for animal genetic resources; and to strengthen knowledge dissemination of results of research on the conservation of animal genetic resources.

## **ASIA**

### ***Issues***

56. For East Asia, participants emphasised the importance of conservation for present and future use, and for maintaining historical and cultural values. Constraints to both *in situ* and *ex situ* activities are limited financial and human resources. There are also certain technical constraints. Additionally, the lack of awareness of the need to maintain biodiversity in general is a major limitation. All East Asian countries agreed that the involvement of local communities is of great importance. They also agreed that regional cooperation is desirable and, in fact, is already happening between three countries. Japan and Korea are cooperating on molecular characterization and cryo-conservation, while Korea and China have joint work on cryo-conservation and several breeding programmes. Participants reported that in Central and South Asia there are no conservation programmes ongoing. All Asian countries agreed that breeds at risk should be treated as a global heritage to facilitate the mobilization of resources.

### ***Regional Priorities***

57. Regional priorities identified were: to enhance awareness among policy makers and find effective way to transfer information on the importance of conservation of animal genetic resources; to develop legislation on the conservation of animal genetic resources and establish national conservation strategies in all countries; to develop of sub-regional conservation programmes for transboundary breeds; to establish a regional database and a regional gene bank; to organize joint trainings in a country where the necessary technical support and equipment is available. FAO should play a key role in facilitating the preparation of regional breed conservation plans, technical projects and in coordinating research.

## **EUROPE**

### ***Issues***

58. Issues brought forward by participants were that some countries still need to establish clear national responsibilities, in addition to clarifying responsibilities between the government and the private sector. They also noted that different breeds require different approaches, also in the mobilization of resources. It was mentioned that the European Commission has reserved limited resources for the conservation of animal genetic resources. In general there is a lack of interest in the conservation of animal genetic resources among governments, breeding organizations and consumers. Other constraints derive from a lack of trained professionals and expertise, the limited advances in breed characterization, resulting in difficulties in setting conservation priorities when traits of breeds are not fully known, and a lack of cooperation between countries. It was noted that it is possible to improve local breeding and animal nutrition with simple modern measures in accordance with local people's needs, priorities and cultures. The value of traditional

knowledge was emphasized. It was also noted that the potential of creation of niche markets to support conservation is linked to the economic situation of national consumers. It, therefore, has different potential in countries at various levels of economic development.

### ***Regional Priorities***

59. Regional priorities identified were: to establish and optimize cryo-conservation activities; to harmonize quality and standards of preserved genetic materials; to establish specific regulations for use of cryopreserved material; to exchange knowledge and experience in conservation measures; to prioritise conservation of unique local breeds; to integrate the conservation of local breeds and marketing of niche products; to improve prioritization practices for conservation; to strengthen characterization, inventory and monitoring as a basis for conservation, including through molecular methods; to identify transboundary breeds; to support *in situ* conservation related to local requirements and traditional practices in order to facilitate continued adaptation; to recognize the cultural and livelihood linkages between people and animals in rural areas; to decrease risk of extinction by geographical distribution of animals; to control unrecorded and uncontrolled crossbreeding; to harmonize national legislation between countries; to establish registration of animals in breeding programmes; to make use of and improve existing databases; to explore electronic identification of animals; to train farmers and experts in conservation methods; to combine and link *in situ* and *ex situ* measures; to compile a list of recognized organizations and initiatives working with transboundary breeds in Europe to facilitate cost-effective conservation; to undertake training and awareness raising for policy makers; to create possibilities for different regulations for local and international breeds; and to intensify regional cooperation projects.

## ***LATIN AMERICA***

### ***Regional Priorities***

60. Regional priorities identified by the participants were: to enhance awareness of the public and policy makers of the need to conserve animal genetic resource, through the involvement of the scientific sector in the diffusion of experimental results, highlighting the social, environmental and economic importance of animal genetic resources, and through effective collaboration with the media; to develop practical criteria to prioritise breeds and populations for conservation and development; to establish conservation plans and mobilize resources; to strengthen institutional infrastructure, including the National Focal Points, National Coordinators and National Coordinating Committees; to strengthen transformation and commercialization of products derived from the local animal genetic resources, also through organization of cooperatives of small producers; to develop protective measures for areas of importance for various locally adapted species, to be used for research, training, and sustainable production.

61. Other priorities identified were: to enhance coordination between the agricultural and educational sectors in order to include courses on the conservation and the environmental, cultural and socio-economic significance of animal genetic resources in university curriculums and at other levels of education; to develop didactic material on conservation of animal genetic resources; to promote visits of students from urban areas to rural areas, so that they can learn about animal genetic resources within the context of their ecological and socio-cultural environments and histories; to train animal health experts in animal genetic diversity issues; to promote the inclusion of specific topics regarding the importance of animal genetic resources in food security at various levels of educational programmes; to make use of the educational infrastructure in some countries to be able to train people from other countries in the region; to present a regional proposal to establish training of experts to international financing institutions; to create regional centres of excellence; to establish an “international day for animal genetic resources”, by FAO; to increase the participation of local breeds in regional livestock fairs; to promote the exchange of common animal genetic resources among countries; and to develop

regional genebanks, including appropriate mechanisms to insure use, access and fair benefit sharing of materials.

## ***NORTH AMERICA***

### ***Issues***

62. The number of producers is decreasing in both countries. At the same time there are increases in animals per unit and an industry dependence upon 1-2 breeds or lines for production. Within the purebred livestock industry there has been a reduction in the number of people breeding purebred livestock for long periods of time. This condition has long-term ramifications on genetic diversity as it reduces potential sources of genetic diversity for future breeders entering the business and underscores the need for cryopreserved collections of germplasm.

### ***Regional Priorities***

63. Priority areas of the region include: to increase levels of private and public *in situ* conservation (regional); to enhance education and promotion of conservation with public, industry, and government (Canada); to conduct research on useful conservation technologies (Canada); to develop a system of rescue networks (Canada); to develop the National Animal Germplasm Program (U.S.A);

64. Both countries are in the process of developing gene banks. Elements of common interest include: *ex situ* conservation of germplasm for all breeds, not just those that are classified as rare or endangered; to develop sampling methods to capture genetic diversity across and within breeds; to provide back-up storage of genetic material (with built-in redundancy); to establish categories of collected material, based on ownership, disease status or other criteria; to develop protocols for cryo-preservation; and to collaboratively develop conservation and related technologies.

## ***SOUTH WEST PACIFIC***

### ***Issues***

65. The use of distance education programmes for animal health and production is a model that has already been successfully implemented in the region. However, there is a need for funding of activities after the trainings have been completed. There is also considerable training capacity available in Australia that could be made available to the region, which could involve a combination of on site training activities as well as training carried out in Australian institutions. Training needs and delivery options will vary from country to country depending on the available infrastructure and facilities, and an assessment would need to be carried out. Where countries do not have the required technologies and facilities, international and regional organizations, including FAO, will be expected to provide support.

### ***Regional Priorities***

66. Regional priorities identified by the participants were: to develop awareness raising programmes to develop and improve the knowledge of animal genetic resources at the level of local communities, focussing on the contribution of animal genetic resources to local food production and livelihoods; to promote the contribution by the commercial livestock sector to the conservation of animal genetic resources through the use of local animal genetic resources in commercial production systems and the incorporation of desirable traits from local livestock breeds; to involve environmental, research and conservation groups with an interest in conservation of breeds or species at risk within their natural environments; to enhance education and awareness raising on animal genetic resources issues, by training people directly involved in decision-making and implementation in the sector, by training farming communities on the

importance of animal genetic resources for sustainable agriculture, and by educating pupils and students at secondary and tertiary education levels.

67. Several views were brought forward on joint regional conservation activities. Joint conservation actions amongst countries in the region may not be the first priority though there are issues where joint actions would be beneficial; There are priority areas where joint actions are feasible such as the areas of training and the sharing of techniques and management tools, and possibly facilities for conservation activities. Should there be a need to establish genebanks for conservation, the establishment of a regional genebank would be a sensible option; There would be a need for a legal framework covering access to the genetic material as well as a framework covering the technical and operational (e.g. procedures, biosecurity) and financial aspects of the operations.

#### **PRIORITY AREA 4: POLICIES, INSTITUTIONS AND CAPACITY BUILDING**

##### ***AFRICA***

##### ***Issues***

68. The participating countries from Southern Africa each have a functional National Focal Point in place since the preparation of the Country Report for *The State of the World's Animal Genetic Resources*. Participants from West African countries reported that there are National Focal Points in each of their countries. These focal points functioned well during the preparation of the Country Reports, but currently their operations are limited because of a lack of resources. The East African countries did not report on their national structures. All sub-regional consultations supported the establishment of regional networks. Participants from West African countries contributed examples of the successful networking and sub-regional collaboration. Member countries of the Southern African Development Community (SADC) cooperate regionally, both formally and informally, which was facilitated by the SADC/FAO/UNDP project on the management of animal genetic resources. Individual countries and institutions also cooperate with ILRI, and the Irene Animal and Forage Production Institute in South Africa.

##### ***Regional Priorities***

69. Regional priorities identified were: to establish a Regional Focal Point; establish an electronic network through the Regional Focal Point; to establish and maintain an effective National Focal Point and full time National Coordinator in each country; to promote the importance of animal genetic resources in all relevant decision-making levels; to establish mechanisms for sustainable funding by member countries and develop a long-term regional agreement with donor agencies.

70. Participants indicated the following areas for assistance by FAO: to facilitate that FAO members make appropriate financing available for the sustainable management of animal genetic resources, nationally and internationally; to identify and provide information on other sources of funding to countries; to organize an international forum of donors to fund priority programmes on animal genetic resources; to assist in the formulation of regional projects and in the mobilization of resources; to set up a database of ideas and model approaches and programmes responding to strategic priorities; to ensure that support from FAO be managed by the national or regional FAO representatives.

71. Additionally, participants proposed: to establish, in addition to the Regional Focal Point, several sub-regional focal points; to establish a regional centre jointly with the Regional Focal Point to coordinate animal genetic resources issues. Sub-regional focal points and networks would have the following tasks: 1) to coordinate national activities and programmes 2) to carry out sub-regional and inter-country programmes in inventory and characterization of shared breeds 3) to assist in harmonizing legislation regarding animal genetic resources 4) to set up common

research programmes and a network of exchange of information and data 5) to help mobilize resources from international organizations 6) to develop and coordinate partnership with sub-regional, regional and international economic, financial and professional institutions.

## ***NEAR EAST AND NORTH AFRICA***

### ***Regional Priorities***

72. Participants emphasized the importance of the participation of national governments in the region in intergovernmental meetings addressing animal genetic resources, on a regular basis.

73. Regional priorities identified were: to enhance research on breed performance for economic traits, including disease resistance and adaptability under the prevailing production systems; to enhance awareness among policy makers and the public of the contribution of livestock to national economies, food security and poverty alleviation; to review and analyse current livestock policies and other factors impacting on animal genetic resources diversity and improve integration of policies and legislations among various sectors; to encourage the establishment of civil society organizations and networks to help establishing breed associations; and to develop funding proposals for policy research on the conservation and management of animal genetic resources.

## ***ASIA***

### ***Issues***

74. The Central Asian countries are experiencing problems in the transition of the animal production sector towards market oriented systems. In these countries, there are functional structures in charge of the sustainable management of animal genetic resources. The existing structures within the state administration are oriented mainly towards livestock improvement and increasing animal production. In these countries there is a range of professionals motivated to contribute to the establishment of institutions and programmes for sustainable management and conservation of animal genetic resources. However, there is a lack of adequate basic facilities and skills, and information.

75. In South Asia, awareness created during the process of the preparation of Country Reports resulted in a number of actions, which, however, lost their momentum because of the lack of funds and the shift of experts to new positions. Lack of professional expertise, poor institutional capacity of governments and poor linkages among institutions were identified as main constrains. There is no cooperation at the sub-regional level except for informal contacts among scientists.

76. In East Asia, the priority area for policy development is to increase in public awareness. The countries commented on the difference in public attention for wild animals compared to farm animals. Korea mentioned the need to address legal aspects of animal genetic resources, as these had not been adequately dealt with at national level. Additionally, acute disease problems and their impacts on animal genetic resources were raised, exemplified by the culling practices during the avian influenza crisis. All countries have National Focal Points and National Coordinating Committees. It was reported that, in certain countries, the National Focal Points have low political status, and, therefore, little influence on policy development. In East Asia, at present there is, generally, insufficient coordination between research and implementation institutions, with the exception of Japan. Other countries have initiated activities to build stronger linkages. The countries consider that FAO can assist with raising public awareness and noted that the International Technical Conference on Animal Genetic Resources, to be held in Switzerland in 2007, provides a major opportunity. Countries consider that FAO should provide more and better information on donors requirements. It was suggested that FAO should provide a list of relevant sources for funding and assist in the formulation of projects. All Countries support the establishment of a Regional Focal Point.

### ***Regional Priorities***

77. Regional priorities identified were: to raise awareness among policy makers also by inviting them to participate in international meetings dealing with animal genetic resources; to strengthen research to support the sustainable use and development of animal genetic resources through enhanced investment by both the public and private sectors; to train staff in advanced methodologies and technologies through short courses, study tours and through the organization of seminars and training activities in developing countries and countries with economies in transition; to strengthen and support National and Regional Focal Points, as well as the National Coordinators; and to establish centres of excellence, which could coordinate research and conservation activities and facilitate exchange between countries with similar animal genetic resources. There is a need to learn from the CGIAR experiences.

78. Additionally, it was suggested: to establish, in cooperation with National Coordinators from Eastern European countries, an inter-regional animal genetic resources network; to establish sub-regional focal points; to disseminate positive examples of the use, development and conservation of animal genetic resources; to coordinate national initiatives at regional level, and identify priorities for the mobilization of resources; and to stimulate and develop traditional farming systems of importance to animal genetic resources.

## ***EUROPE***

### ***Issues***

79. In Europe, except in few East European countries, there are functional policies, institutions and technical capacities to provide for development and implementation of strategies and plans for the sustainable management of animal genetic resources. The three sub-regional consultations held highlighted animal genetic resources issues as priorities in national political agendas. The role and importance of relevant international legislative framework, such as European Union regulations, was emphasized.

### ***Regional Priorities***

80. Regional priorities identified were: to support the prioritisation of animal genetic resources issues in national policies through the establishment of a relevant international legislative framework or treaty, as in plant genetic resources; to establish binding laws within the European Union for the management of animal genetic resources; to review the existing legislation with a view to ascertaining its adequacy and explore other possible means to meet policy objectives; to strengthen research to support the sustainable use and development of animal genetic resources through enhanced investment by both the public and private sectors; to train staff in advanced methodologies and technologies; to strengthen and support National and Regional Focal Points, and National Coordinators, particularly in countries of Eastern and South-Eastern Europe; to organize international meetings in different countries in order to consolidate national and international forces for keeping genetic variability of animal resources; to work out international projects to create conservation systems for unique breeds; to involve young specialists from developing countries to participate in various international events and projects concerning different aspects of animal breeding; to encourage and support students to undertake studies in animal genetic resources at the undergraduate and graduate levels; to promote regional cooperation in East Europe, including through sub-regional workshops with the participation of Ukraine, Belarus, Republic of Moldova and Russia; to establish sub-regional focal points; to support, technically and financially, East European countries in order to facilitate preparation of policies, guidelines, legislations and various projects; to raise awareness in countries of the results of *The State of the World's Animal Genetic Resources*; to disseminate positive examples of use, development and conservation of animal genetic resources; to monitor impacts of changes of agrarian structures and of the modernization of production capacities, technological and

economic procedures on animal genetic resources; to coordinate national initiatives at regional basis and mobilize resources; to improve communication and establish contacts to and responsibilities at administrative, policy, research, industry (breeding organizations) and civil society levels; to avoid building new institutions if responsibility can be given to existing specialized organizations and networks, and adapt the existing institutions to cope with additional tasks; to use existing legislation in the European Union (e.g. Protected Designation of Origin, Protected Geographical Indicator) to support the implementation of animal genetic resources policies; to enhance participation in the implementation of the Convention of Biological Diversity and other international relevant initiatives; to explore the need for the establishment of an international treaty on animal genetic resources; to monitor and evaluate the impact of the intellectual property rights on management, sustainable utilisation and conservation of animal genetic resources; to identify and mobilize funding to support animal genetic resources, including from the private sector; to monitor the influence of sources of funding on policies and plans in management of animal genetic resources; to strengthen the role of European Regional Focal Point in collaborative research in the field of management of animal genetic resources. FAO should mobilize policy support, sufficient funding and mobilize public support at national and global levels.

## ***LATIN AMERICA***

### ***Issues***

81. In most countries the National Focal Point exists, but in very few is it really active. Several countries do not have functional National Focal Points. The communication and coordination among main stakeholders is not adequate and there is lack of support from governments. The importance of animal genetic resources is not sufficiently recognized in a number of countries. In several countries human, physical and financial resources for the management of animal genetic resources are very limited. As a consequence of the continuous changes of the political authorities, there are no long-term sector policies.

### ***Regional Priorities***

82. Regional priorities identified were: to establish and strengthen National Focal Points; to identify human resources and institutional requirements for animal genetic resources management at country level; to identify ways to ensure continuity of the National Focal Points, after changes in government administration; to prepare national strategic plans based on the Country Reports for the management of animal genetic resources; to build a Central American network, involving national and regional institutions and breeding organizations; to establish national scientific organizations for animal production in several countries to establish mechanisms that allow cooperation and integration within countries, in order to raise awareness of animal genetic resources issues; to review and analyse current livestock policies; to regionally coordinate the efficient use of infrastructure, laboratories, technologies and human resources; to establish national consultative committees, involving main stakeholders and build national networks.

83. Additionally, the following areas were identified for assistance by FAO: to initiate regional coordination through the support of a regional network based on the internet, using the experience and organization of the Ibero-American Programme on Science and Technology for Development (CYTED); to invite donors to participate in regional workshops on animal genetic resources; to make available a list of potential donors, indicating their support priorities, project application forms and schedules for application; to support regional projects; and to collaborate with the development of regional structures through its regional offices and national representations.

## ***NORTH AMERICA***

### ***Issues***

84. The participants reported that the region has well established laws on the ownership and exchange of livestock genetic resources. As a result no further action is needed in this area. Access is controlled by the livestock owner and benefits and prices are determined by the market that responds to supply and demand pressures. There is open exchange of genetic resources across the border in the region and this type of market driven exchange has significantly benefited the livestock sector of both countries. Therefore, there is neither need nor demand for additional international instruments to control trade and or benefit sharing of animal genetic resources. The success of this regions genetic resource exchange may well serve as a model for other regions.

85. Regional priorities identified were: to increase industry involvement; to promote and encourage market driven international exchange of animal genetic resources; and to mainstream genetic diversity issues in other Federal programmes (USA only).

## ***SOUTH WEST PACIFIC***

### ***Issues***

86. Not all countries have a National Focal Point in place or functional, due to a lack of political priority or funding. There are no regional networks for research in the area of animal genetic resources. Regional networks can be established through existing regional organizations. This will require development of capacity, nationally and regionally, in the policy, institutional and technical aspects of animal genetic resources and the establishment of a Regional Focal Point, who will work with National Focal Points, requiring adequate resources to implement the agreed priorities.

### ***Regional Priorities***

87. Regional priorities identified were: to hold workshops and develop awareness raising programmes targeting policy makers at senior levels; to integrate animal genetic resources issues into existing national policies and programmes; to incorporate courses on animal genetic resources in the curriculum at various educational levels; to prioritise the establishment of National Focal Points, before a Regional Focal Point is established; to build on the considerable capacity of countries in the region in a wide range of areas such as policy, institutional development, animal genetics and breeding, information, communication and training; to fully involve farming communities and organizations in the development of policies and programmes.

88. Participants suggested that FAO should undertake activities: to complete *The State of the World Animal Genetic Resources*; to develop a Follow-Up-Mechanism to the country driven preparation of *The State of the World's Animal Genetic Resources*; to prepare the International Technical Conference on Animal Genetic Resources; to develop tools for animal genetic resources management, including information tools (DAD-IS) and technical guidelines for the characterization, use and conservation of animal genetic resources; to provide technical and financial support to National and Regional Focal Points, including capacity building; to raise awareness of the roles and values of animal genetic resources; to develop opportunities for international cooperation; and to mobilize resources from multilateral institutions, such as the Asian Development Bank.

89. The Australian participant stated that there was no need for an international treaty on animal genetic resources similar to the one for plant genetic resources.