



LEGAL AND POLICY FRAMEWORKS AFFECTING THE MANAGEMENT OF ANIMAL GENETIC RESOURCES - 2013 -

Country: Bhutan

SECTION 1: SUSTAINABLE USE, DEVELOPMENT AND CONSERVATION OF ANIMAL GENETIC RESOURCES

This section targets information on legislation and policies related specifically to the management of animal genetic resources, i.e. to:

- characterization, surveying and monitoring;
- sustainable use and development;
- conservation; and
- research and development related to animal genetic resources management.

It also includes issues related to patenting and access and benefit sharing. Instruments in these fields of action may or may not include specific provisions related to animal genetic resources or to relevant broader categories such as living organisms or genetic resources for food and agriculture.

1. Overall management of animal genetic resources

Note: In the policy field, this might include, for example, a national strategy and action plan for animal genetic resources.

Legislation Policy

Details of the measure(s)

Livestock Sector Development Policy (under development) has a mention of developing guidelines on management of AnGR in the country.

Section 3.3.2 of Biodiversity Action Plan (BAP), 2009 presents Strategies and Action Plan for Conservation and Management of AnGR. BAP 2009 is being updated as National Biodiversity Strategy and Action Plan to have a comprehensive conservation and management plan for Biodiversity including AnGR.

Impact on animal genetic resources management

The lack of conservation and management of AnGR poses a great challenge in conservation of AnGR especially the traditional breeds of livestock and poultry. The increasing demand for animal products has favored high yielding breeds of livestock to traditional breeds. Since there is no overall policy directives, different agencies are promoting own mandates. For example; Agency A promotes an exotic high yielding breed X in area with traditional breed Y to increase production while Agency B says breed Y has to be conserved. Thus, conservation and management of AnGR typically traditional breeds are less effective under such circumstances.

Future needs

Livestock Act 2001 needs to be update to include component on AnGR Conservation and Management which is currently lacking.

The Guidelines for AnGR Conservation and Management to be formulated under the Livestock Sector Development Policy of Kingdom of Bhutan which is underdevelopment needs to have more elaborate and comprehensive mechanisms for Conservation and Management of AnGR.

Biodiversity Act 2003 lacks component on Conservation and Management of AnGR and it needs to updation to include AnGR component.

The Strategy and Action plans for AnGR Conservation and Management in BAP 2009 is inadequate especially in sustainable utilization of AnGR. The next updated version of BAP should contain additional strategies and action plan for sustainable utilization.

2. Integration of animal genetic resources management with the management of other genetic resources for food and agriculture (plant, forest or aquatic genetic resources)

Legislation Policy

Details of the measure(s)

Impact on animal genetic resources management

Future needs

3. Surveying and monitoring of animal genetic resources

Legislation

No

Policy

No

Details of the measure(s)

Impact on animal genetic resources management

The lack of policy or legislation on surveying and monitoring of AnGR, the status of population, trend and risk of most breeds of AnGR remains unknown in the country.

Future needs

Guideline on Conservation and Management of AnGR framed should contain component on surveying and monitoring of AnGR. Livestock Census which is being carried out at the species level rather than breeds. Therefore, future livestock census needs to be conducted at breed level than at species level for efficient monitoring of AnGR



4. Official recognition of livestock breeds

Legislation

No

Policy

No

Details of the measure(s)

Impact on animal genetic resources management

Except for cattle, most breed and strains of livestock and poultry are classified as nondescript and less productive compared to improved exotic breeds. Since there are no direct legislation or policy in place, breed recognition especially of traditional breeds of AnGR are lacking and poses challenge in conservation and sustainable utilization of animal genetic resources in the country

Future needs

The Guidelines to be formulated under Livestock Sector Development Policy should contain component on official recognition of breed and registration. And for this the characterization and documentation of AnGR has to be undertaken at the earliest.

5. Animal breeding and genetic improvement strategies

Legislation

Yes

Policy

Yes

Details of the measure(s)

Chapter II of Livestock Act of Bhutan 2001 covers the use of Breeding, Artificial Insemination and Embryo Transfer for genetic improvement
Chapter III of Livestock Act of Bhutan 2001 mentions establishment of designated and private farms for genetic improvement programs
Section 3.2 of Livestock Breeding Policy 2007 presents elaborate breeding strategies for large ruminants for improvement of production and conservation of traditional cattle genetic resources and briefly covers other species of livestock.

Impact on animal genetic resources management

The lack of clear breeding policy with respect to species other than large ruminant has lead to intensive crossbreeding, increasing emphasis on improved breeds while traditional AnGR resources are declining in population and may be going a progressive genetic erosion. The preferences of the farmers for a breed of livestock are changing to high yielding exotic breeds and under such circumstances, the conservation and management of traditional animal genetic resources is a challenge.

Future needs

The inventory of breeds of livestock in the country has to be undertaken. Based on the available breeds and their priority for conservation, a breeding strategy and genetic improvement programs for each of the breeds has to be developed.

Do these measures address:

5.1 Animal identification and recording

Note: Sections 2 and 3 include questions on traceability and on animal identification as it relates to animal health. If relevant, please use cross-references to indicate that a given law or policy affects more than one field of action.

Legislation Policy

Details of the measure(s)

Impact on animal genetic resources management

The production performance of most traditional AnGR species and breeds remains unknown. However, identification and recording is being done in a small scale for high yielding breeds (exotic) under genetic improvement programs.

Future needs

The identification and recording of performance existing for genetic improvement programs under exotic high yielding breeds has to be extended for traditional breeds of AnGR. Further animal identification and recording has to be incorporated as component under guideline for Conservation and Management of AnGR under the Draft Livestock Sector Development Policy.

5.2 The establishment and operation of breeders' associations

Legislation Policy

Details of the measure(s)

Impact on animal genetic resources management

Future needs

6. Use of reproductive biotechnologies (excluding zoonository issues)

Note: Zoonository issues are covered in Section 3.

Legislation Policy

Details of the measure(s)

Chapter II of Livestock Act 2001 is on artificial insemination and embryo transfer technology (Reproductive technologies) Chapter II of Livestock Rules and Regulations 2008; Establishment of AI centres and Embryo production and storage units Livestock Breeding Policy 2007:

Impact on animal genetic resources management

Future needs

7. Genetic modification of animals used for food and agriculture

Legislation Policy

Details of the measure(s)

Chapter IV and V of Food Biosafety Bill 2013 contains risk assessment, management and communication with regard to any GMOs and labeling and compliance monitoring of GMOs respectively in general. There is an Executive Order from the cabinet restricting the use of GMO in any form in the country.

Impact on animal genetic resources management

Future needs

8. Suitability of imported genetic material for use in local production environments

Note: For example, rules requiring a "genetic assessment" before genetic material can be introduced.

Legislation Policy

Details of the measure(s)

Chapter II of Livestock Act 200; Use of imported animal for research.
Chapter II of Livestock Rules and Regulation 2008 procedures for import of animals, semen and embryos.

Impact on animal genetic resources management

Future needs

9. Conservation programmes for animal genetic resources

Legislation

Policy

Details of the measure(s)

Biodiversity Action Plan 2009 presents strategies, action plans and programs on AnGR conservation.

Impact on animal genetic resources management

The lack of legislation on conservation programs hampers execution of conservation especially in-situ conservation.

Future needs

Biodiversity Act of Bhutan 2003 needs to include AnGR components into it which is lacking at the moment.
BAP 2009 strategies and action plan for AnGR has to be updated with respect to in-situ conservation approaches such as promoting conservation through sustainable utilization.

Do these measures include provisions specifically related to:

9.1 *In vivo* conservation

Legislation

Policy

Details of the measure(s)

Biodiversity Action Plan 2009 presents strategy and action plan for in-vivo conservation of AnGR

Impact on animal genetic resources management

Several in-vivo conservation farms are established for critical and important breeds of AnGR sites.

Future needs

Biodiversity Act of Bhutan 2001 needs to be updated and AnGR conservation and management to be included.

9.2 *Cryoconservation*

Legislation

Policy

Details of the measure(s)

Biodiversity Action Plan 2009; Development of animal genebank and initiation of cryoconservation of germplasm

Impact on animal genetic resources management

Animal Genebank established

Future needs

Biodiversity Act of Bhutan 2001 needs to be updated and AnGR conservation and management to be included.

10. Research and development related to animal genetic resources management

Legislation

Policy

Details of the measure(s)

No specific policy or legislation related to R&D related to Animal Genetic Resources but the research in the country is be guided by Renewable Natural Resource Policy of Bhutan 2012 in general.

Impact on animal genetic resources management

Future needs

11. Patenting

Legislation

If legislation is in place or under development, does/will it include provisions (including exemptions) specifically targeting:

Animal genetic resources for food and agriculture

Living organisms in general

Details of the measure(s)

Impact on animal genetic resources management

Future needs

12. Access and benefit sharing arrangements

Note: The Secretariat of the Commission on Genetic Resources for Food and Agriculture, on 8 August 2013, invited countries to report on the conditions under which genetic resources for food and agriculture are exchanged and used (Circular State Letter C/ NRD-5). Please coordinate responses within your country.

Legislation

Policy

If instruments are in place or under development, do/will they include provisions (including exemptions) specifically targeting:

Animal genetic resources for food and agriculture

Genetic resources for food and agriculture in general

Details of the measure(s)

Chapter 2 of Biodiversity Act of Bhutan (2003) is on Access to Genetic Resources and Benefit Sharing. Access and Benefit Sharing Policy (2013) provides framework for access and benefit sharing for Biological Resources including AnGR.

Impact on animal genetic resources management

Future needs

SECTION 2: MARKETING AND CONSUMER INFORMATION AND PROTECTION

This section targets information on legislation and policies addressing the marketing of animal products, including those addressing:

- the production and marketing of organic products;
- the production and marketing of products sold under protected designations of origin or similar labels;
- production and marketing of products sold under labels indicating adherence to animal-welfare-related standards; and
- food safety.

While some policies and legislation in these fields of action may include specific references to animal genetic resources, it is likely that many will not. The latter may, nonetheless, have indirect effects on animal genetic resources and their management. Consumer demand for animal products often has a major influence on the use and development of animal genetic resources. A lack of demand may place a breed at risk of extinction. Marketing initiatives for breed-specific products, or products from production systems in which locally adapted breeds are kept, can provide a means of promoting the use of at-risk breeds and reducing the risk that they will become extinct. Legislation and policies that facilitate initiatives of this kind can have a positive effect in terms of the maintenance of animal genetic diversity. Conversely, legislation and policies that inhibit the marketing of particular types of products, or products from particular locations or production systems, may inhibit the use of animal genetic resources associated with these products, locations or production systems.

1. Marketing of animal products in general

Note: This question refers to measures that are not specifically focused on market subsectors such as organic products or products with designated labels of origin.

Legislation Policy

Details of the measure(s)

Impact on animal genetic resources management

Future needs

2. Production and marketing of organic products

Legislation Policy

Details of the measure(s)

Policy Intervention Area 2.3 of Agriculture Marketing Policy 2012 (Draft); promotion of organic products.
Objective 5 of Livestock Sector Development Policy 2012 (draft); Promotion of organic livestock production.

Impact on animal genetic resources management

Future needs

3. Production and marketing of products sold under protected designations of origin or similar labels

Legislation Policy

Details of the measure(s)

Impact on animal genetic resources management

Future needs

4. Production and marketing of products sold under labels indicating adherence to particular animal welfare-related standards

Note: For example, rules relating to the marketing of products as “free range” or under similar designations. Basic animal welfare legislation (i.e. not specifically related to marketing) is covered in Section 3.

Legislation Policy

Details of the measure(s)

Impact on animal genetic resources management

Future needs

5. Safety of food products from animals

Note: If relevant, include measures related to the marketing of products derived from genetically modified organisms.

Legislation Policy

Details of the measure(s)

Food Act of Bhutan 2005 for Food in any forms in general
Food Rules and Regulations of Bhutan 2007 for all forms of food in general
Chapter V of Livestock Act of Bhutan 2001; inspection and certification, Fresh meat Hygiene and inspection
Chapter V and VII of Livestock Rules and Regulation of Bhutan 2008; Inspection and certification, Fresh meat hygiene and

inspection

Impact on animal genetic resources management

Future needs

6. Traceability of animal-origin products

Note: Sections 1 and 3 include questions on animal identification as it relates to breeding and to animal health. If relevant, please use cross-references to indicate that a given law or policy affects more than one field of action.

Legislation

No

Policy

No

Details of the measure(s)

Impact on animal genetic resources management

Future needs

SECTION 3: ANIMAL HEALTH AND WELFARE

This section targets information on legislation and policies addressing animal health and animal welfare. While some policies and legislation in these fields may include specific references to animal genetic resources, it is likely that many will not. The latter may, nonetheless, have indirect effects on animal genetic resources and their management. Animal genetic resources and their management can be affected both by the direct effects of animal diseases and by the effects of measures taken to control animal diseases. For example, a disease epidemic may threaten the existence of at-risk breeds, particularly if their populations are concentrated geographically. Animal diseases, as influenced by the presence or absence of effective animal health services, can also influence the type of animal genetic resources that can be kept in particular locations, influence breeding objectives and/or affect the economic sustainability of livestock-keeping livelihoods. Compulsory culling measures used to control disease epidemics may pose a threat to geographically concentrated breed populations. Legal restrictions on the import of genetic material because of zoosanitary reasons may affect breeders' access to genetic resources. Legal restrictions on livestock movements, restrictions on particular husbandry practices, or onerous requirements for animal health-related actions on the part of livestock keepers (or in the food processing and marketing chain), may inhibit the keeping of animal genetic resources associated with the production systems targeted. Zoosanitary legislation related to the use of semen, embryos and other genetic materials may have implications for cryoconservation programmes. Legal and policy frameworks related to animal welfare might promote or inhibit the keeping of animals in particular production systems or the use of animals to provide specific products or services. In turn, these developments might promote or inhibit the continued use of the animal genetic resources associated with the respective production systems, products or services.

1. Delivery of animal health services and control of animal diseases

Legislation

Yes

Policy

Yes

Details of the measure(s)

Livestock Act of Bhutan 2001; Quarantine, notifiable disease and controlled disease
Chapter IV of Livestock Rules and Regulations of Bhutan 2008; Quarantine, notifiable disease and controlled diseases

Impact on animal genetic resources management

Future needs

Do these measures include provisions specifically related to:

1.1 Animal identification

Note: Sections 1 and 2 include questions on animal identification as it relates to breeding and on traceability. If relevant, please use cross-references to indicate that a given law or policy affects more than one field of action.

Legislation

No

Policy

No

Details of the measure(s)

Impact on animal genetic resources management

Future needs

1.2 Control of the import of animal genetic resources (live breeding animals and/or germplasm) for zoosanitary reasons

Legislation

Details of the measure(s)

Chapter III of Livestock Rules and regulations 2008; Import of animals, semen and embryos
Chapter IV of Livestock Rules and Regulations 2008; Quarantine

Impact on animal genetic resources management

Future needs

1.3 Control of the export of animal genetic resources (live breeding animals and/or germplasm) for zoosanitary reasons

Legislation

Details of the measure(s)

Chapter VI of Livestock Act 2001; Export of animals, genetic materials and animal products
Chapter VI of Livestock Rules and Regulations 2008; Export of animals, genetic materials and animal products

Impact on animal genetic resources management

Future needs

1.4 Zoosanitary rules related to the use of reproductive technologies

Legislation

Details of the measure(s)

Chapter III of Livestock Rules and Regulations of Bhutan 2008; Import of animals, semen and embryos

Impact on animal genetic resources management

Future needs

1.5 Control of livestock movements (within the country) for zoosanitary reasons

Legislation

Details of the measure(s)

Chapter IV of Livestock Act 2001; Quarantine, notifiable disease and controlled diseases
Chapter IV of Livestock Rules and Regulations 2008; Quarantine, Notifiable disease and controlled diseases

Impact on animal genetic resources management

Future needs

1.6 Restrictions or compulsory actions related to husbandry practices (for zoosanitary reasons)

Legislation

Details of the measure(s)

Impact on animal genetic resources management

Future needs

1.7 Compulsory culling in the event of outbreaks of specific diseases

Legislation

If legislation is in place or under development, does/will it include provisions to protect at-risk animal genetic resources from the effects of culling programmes?

Details of the measure(s)

Livestock Rules and Regulation 2008; Quarantine, Notifiable Disease and Controlled Disease

Impact on animal genetic resources management

Future needs

2. Animal welfare

Legislation

Policy

Details of the measure(s)

Chapter X of Livestock Act 2001; Animal Welfare
Chapter X of Livestock Rules and Regulations 2008; Animal Welfare

Impact on animal genetic resources management

Future needs

SECTION 4: AGRICULTURE, LAND USE AND NATURAL RESOURCES MANAGEMENT

This section targets information on legislation and policies that address the overall management of the production systems, ecosystems and environments within which animal genetic resources are used and developed. The questions address the following main topics:

- general frameworks or strategies for rural development;
- agriculture, land use and natural resources management;
- management of biodiversity;
- other aspects of environmental protection;
- overall livestock-sector development;
- management of rangelands and other grazing lands;
- establishment of livestock farms or holdings
- establishment and operation of civil society organizations in the livestock sector
- participation of livestock keepers in decision-making in livestock-sector development; and
- prevention, preparedness and response to natural or human-induced disasters

While some policies and legislation in these fields may include specific references to animal genetic resources, it is likely that many will not. The latter may, nonetheless, have indirect effects on animal genetic resources and their management. For example, policies and legislation that promote or constrain the keeping of livestock in particular production systems, for particular purposes or in particular geographical areas may promote or discourage the use of the animal genetic resources associated with these systems/uses/locations (hence possibly affecting their risk status), lead to the establishment of breeding objectives targeting the development of animals suitable for the favoured systems/uses/locations or lead to the import of genetic resources suitable for these systems/uses/locations.

1. General framework or strategy for sustainable agriculture, land use and natural-resources management

Note: This question relates to broad strategic-level instruments such as national agricultural or rural development policies, strategies or laws. Instruments related to specific aspects of agricultural and rural development should be described under other questions as and where relevant.

Legislation

Policy

Details of the measure(s)

Impact on animal genetic resources management

Future needs

2. Management of biodiversity

Note: Please use this question to provide information on the general framework for managing all aspects of the country's biodiversity (e.g. instruments related to the designation and management of protected areas). Include, for example, information on whether animal genetic resources issues are included in your country's National Biodiversity Strategy and Action Plan and on any provisions addressing potential conflicts, or perceived conflicts, between the management of animal genetic resources and the management of other elements of biodiversity. Specific animal genetic-resources-related instruments (e.g National Strategy and Action Plans for Animal Genetic Resources) should be reported in Section 1 (Question 1).

Legislation

Policy

Details of the measure(s)

Impact on animal genetic resources management

Future needs

3. Environmental protection

Note: Instruments specifically targeting the management of biodiversity are covered under Question 2. Please use this question to provide information on instruments addressing other environmental issues (e.g. addressing pollution of land and water, deforestation, climate change, water use or flood protection). If an instrument addresses both biodiversity and other aspects of environmental protection, please indicate this using a cross-reference to your answer to Question 2.

Legislation

Policy

Details of the measure(s)

Impact on animal genetic resources management

Future needs

4. Overall development of the livestock sector

Note: This question relates to broad strategic-level instruments addressing the livestock sector as a whole, such as national livestock development strategies or laws. Instruments related to specific aspects of livestock development should be described under other questions as and where relevant.

Legislation

Policy

If provisions are in place or under development do/will they include:

Particular provisions aimed at supporting livestock keeping in harsh production environments

Note: Please consider direct and indirect forms of support (e.g. grants or subsidies, favourable access to credit or livestock services, facilitation of market access).

Legislation Policy

Particular provisions aimed at supporting large-scale, high external input or export-oriented production systems or supporting management practices associated with such systems

Note: Please consider direct and indirect forms of support (e.g. grants or subsidies, subsidized inputs, favourable access to credit or livestock services, support for infrastructure development or mechanization).

Legislation Policy

Details of the measure(s)

Objective 4 of Livestock Sector Development Policy 2012 (draft); promotion of private sectors engagement and functional innovation in the livestock sector

Impact on animal genetic resources management

Future needs

5. Management of and access to rangelands or other grazing lands

Legislation Policy

Details of the measure(s)

Objective 6 of Livestock Sector Development Policy 2012 (draft); Payment of Environmental Services for improved livestock based natural resources management

Impact on animal genetic resources management

Future needs

6. Establishment of livestock farms or holdings

Note: This question relates to planning rules related to the size, location, ownership, registration, etc. of livestock farms or holdings.

Legislation Policy

Details of the measure(s)

Impact on animal genetic resources management

Future needs

7. Establishment and operation of civil society organizations in the livestock sector

Note: Instruments specifically related to organizations focused on breeding (genetic improvement) activities are covered in Section 1 (Question 5.2). Please use the present question to provide information on instruments of a more general nature (e.g. related to the operation of cooperative societies or community organizations).

Legislation Policy

Details of the measure(s)

Impact on animal genetic resources management

Future needs

8. Participation of livestock keepers in decision-making related to the development of the livestock sector

Legislation

No

Policy

No

Details of the measure(s)

Impact on animal genetic resources management

Future needs

9. Prevention, preparedness and response to natural or human-induced disasters

Legislation

No

Policy

Under development

If instruments are in place or under development, do/will they include any provisions specifically targeting:

Animal genetic resources

Note: For example, measures targeting the protection of at-risk breeds.

Legislation

Policy

Yes

Livestock in general

Legislation

Policy

Yes

Details of the measure(s)

Objective 7 of Livestock Sector Development Policy 2012 (draft); Livestock- Related Emergency Risk Management

Impact on animal genetic resources management

Future needs

SECTION 5: ADDITIONAL INFORMATION

Please provide information on any aspects of your country's legal and policy framework that affect animal genetic resources and their management but are not covered by any of the questions above.

Submit by e-mail