

MINI-ABSTRACTS OF PDF DOCUMENTS

The following is an appendix of mini-abstracts of legislative, policy, and other resources (approx 350) documents) assembled to conduct an analysis of the legal and policy frameworks and regulations related to the control of transboundary animal diseases within the five member states of the Kavango-Zambezi TFCA. In order to access these documents, please contact Shirley Atkinson satkinson@wcs.org to receive an e-invitation to the online Zotero database that houses them. Thank-you.

ANGOLA

LEGISLATION

Animal health, livestock production and trade in livestock products

Animal Health Law [Lei de Sanidade Animal: Lei no 4/2004]

The animal health law covers all aspects of animal disease prevention, border control, control of the quality and safety of all animal products and derivatives, and veterinary public health. The only diseases for which specific provisions are made within the law are rabies, cysticercosis and a short list of diseases for which compensation will be paid if the animals have to be culled in an outbreak. Control measures for other diseases are not specified. Free and infected zones are defined. Conditions for entry of livestock and livestock products into Angola are specified. Wild animals imported into Angola are subject to a quarantine period of not less than 30 days. The Annex listing all notifiable diseases is based on the Animal Health Codes of the OIE before Lists A and B of the Terrestrial code were abolished and includes aquatic animal diseases.

Consumer Protection Law [Lei de Defesa do Consumidor: Lei no 15/03]

The law covers all goods and services and therefore food of animal origin. Article 6 refers to protection of health and places the responsibility on the competent administrative entities to withdraw products that pose any risk to the consumer [in the case of food safety probably the Consumer Defence Institute and the veterinary authority].

Internal Regulation of the Executive Secretariat of the National Committee for the Codex Alimentarius in Angola [Regulamento interno do Secretariado Executivo do Comité Nacional para o Código Alimentar em Angola: Decreto executivo 1/06]

The Secretariat of the Codex-Angola is the executive organ and point of contact for the National Committee. It provides the link between Codex-Angola, the Secretariat of the FAO/WHO Joint Commission for the *Codex Alimentarius*, and the Committee for the Coordination of the *Codex Alimentarius* for Africa. The decree provides for the composition and functions of the Secretariat.

Internal Regulation of the Institute of Veterinary Services [Regulamento interno do Instituto dos Serviços de Veterinária: Decreto executivo 127/06/2006]

The internal regulation for the Veterinary services describes the functions of the various sections. The Epidemiology Section is responsible for prevention and control of animal diseases. The other relevant sections are those of Veterinary Public Health and Animal Production.

Internal Regulation of the National Directorate of Agriculture, Livestock and Forestry [Regulamento interno da Direcção Nacional de Agricultura, Pecuária e Florestas: Decreto executivo 52/06]

The internal regulation of the National Directorate of Agriculture, Livestock and Forestry details the structure and function of the directorate.

Internal Regulation of the National Institute for Consumer Protection [Regulamento Interno do Instituto Nacional de Defesa do Consumidor]

The Institute for Consumer Protection falls under the Ministry of Trade. It is constituted as a watchdog over all matters pertaining to the consumer, and is instructed to communicate where necessary with other competent authorities in order to ensure consumer protection.

Statute of the Ministry of Agriculture [Estatuto Organico do Ministério da Agricultura: 00/2009]

The Statute describes the structure and functions of the Ministry of Agriculture, which consists of three sub-sectors, namely agriculture, fisheries and forestry.

Statute of the Ministry of Agriculture, Rural Development and Fisheries [Estatuto Organico do Ministério da Agricultura, do Desenvolvimento Rural e das Pescas [1]_2010]

The Statute describes the structure and functions of the Ministry, and provides an organigram of the structure.

Biodiversity conservation and ecosystem/environmental health

Current legislation

Decree: About Environmental Impact Assessment [Sobre a Avaliação de Impacto Ambiental: Decreto nº 51/04]

The decree provides for the standards and procedures to be followed in performing environmental impact assessments, which are required for certain types of land use under the Principal Law for the Environment.

Decree: About Environmental Licensing [Sobre o Licenciamento Ambiental: Decreto nº 59/07]

The decree provides for the licensing of activities that are likely owing to their nature, location or extent to have significant environmental or social effects. Applications for environmental licences must include a non-technical summary of the environmental impact assessment. Licenses are required for both installation and operation of the facilities/activities.

Law for Associations for Protection of the Environment [Lei das Associações de Defesa do Ambiente: Lei no 3/2006]

The law makes provision for the formation, composition and functioning of Associations for the Protection of the Environment. The objective is to provide a way for citizens to participate democratically in the management of the environment in partnership with the government.

Principal Law for the Environment [Lei de Bases do Ambiente [1]: Lei no 5/1998]

The law precedes the establishment of the Ministry of the Environment and was formulated by the Ministry of Oil (Ministério dos Petróleos). The law defines the concepts and basic principles of protection, preservation and conservation of the environment, promotion of quality of life, and rational use of natural resources, in accordance with the relevant articles of the Constitutional Law.

Regulations for Hunting [Regulamento de Caça: 2873/99/1957]

The Regulations prohibit hunting in nature reserves and other categories of protected areas, stipulate which methods may or may not be used, and provide for licensing of hunters.

Statute of the Ministry of the Environment [Estatuto Organico do Ministério do Ambiente: Decreto-Lei no. 4/09]

The statute describes and provides for the structure, duties and functions of the Ministry of the Environment. *[English summary provided]*

Pending legislation

Bill for Forestry, Wildlife and Conservation Areas [Anteprojecto do Lei das Florestas, Fauna Selvagem e Áreas de Conservação Terrestres: 00/2006]

The bill makes provision for five different categories of conservation areas (integral nature reserves, parks, special nature reserves, partial nature reserves, and national monuments and protected landscapes. Section VIII is concerned with transfrontier conservation areas, providing a definition and objectives, and stating that they are constituted by international agreements approved by the competent organs of the State and should be governed according to the international agreement.

Rural development, food security and land use

General Regulations for Territorial, Urban and Rural Planning [Regulamento Geral dos Planos Territoriais, Urbanísticos e Rurais [1]: Decreto no 2/2006]

The regulations provide for the harmonious development of the country in terms of planning and land use. Detail is provided on the development of plans for land use, their objectives and content, including a description of the physical, morphological, ecological, demographic and all other relevant features of land to be used for any purpose, as well as all natural resources and other factors such as archaeological or architectural resources.

Law for the Constitution [Lei Constitucional: 0/00]

The Constitutional Law provides the basis for legislation and policy in Angola. Under this law all natural resources belong to the state, which provides for their conservation as well as their exploitation for the benefit of everyone. The land also belongs to the state but ownership may be transferred to various categories of owners, including private individuals, and will be respected under the laws of the state. The citizens have a right to live in a clean and unpolluted environment and the conservation of the environment as well as the natural fauna and flora is the responsibility of the state. The structures and functions of government are described in the law.

Law for Lands [Lei de Terras [1]: Lei no 9/2004]

The Law pertains to land use, and makes provision for the regulation of diverse types of land development and use.

Law for Ordering Territorial and Urban Development [Lei do Ordenamento do Território e do Urbanismo: Lei no 3/2004]

The Law makes provision for the regulated use of land for diverse purposes in order to prevent adverse effects on the environment or on the quality of life.

Law for the Revision of the Constitution [Lei de Revisão Constitucional [1]: Lei no 23/1992]

The revision of the Constitutional Law is concerned mainly with creating the necessary constitutional premises for a multi-party democracy, expanding the recognition and guarantees of the basic rights and freedoms of the citizens, and rendering constitutional the basic principles of the market economy.

Principal Law for Agricultural Development [Lei de Base do Desenvolvimento Agrário: Lei no 15/2005]

The law recognizes that the sustainable development of productive agricultural systems depends on safeguarding the productive capacity of soil, the availability and quality of water resources and the conservation of biodiversity associated with flora and fauna. It provides for incentives to assure compatibility between agriculture and conservation of natural resources and for compensation for loss of income if agricultural practices have to be restricted in the interests of conserving natural resources.

Statute of the State Secretariat for Rural Development [Estatuto Organico da Secretaria de Estado para o Desenvolvimento Rural: Decreto-Lei no. 1/2009]

The Secretariat is responsible for the preparation, coordination, orientation and implementation of the national policy for integrated rural development. The Statute describes the structure and functions of the Secretariat.

POLICY/STRATEGY

Animal health, livestock production and trade in livestock products

Biodiversity conservation and ecosystem health

Ministério da Agricultura e Ministério do Ambiente 2008 Política Nacional de Florestas, Fauna Selvagem e Áreas de Conservação: Discussion document [National Policy for Forests, Wildlife and Conservation Areas] www.angola.gov.ao

The purpose of the policy is to create a legal and institutional framework that can drive and strengthen the sustainable management of natural resources and thus contribute to the reduction of poverty, food security and integrated rural development.

Rural development, food security and land use

Ministério de Agricultural 2008 Estratégia Nacional de Segurança Alimentar e Nutricional [National strategy for food security [2009 - ENSAN] www.angola.gov.ao

The strategy has been developed in line with NEPAD and SADC policies for food security and forms part of the Long- and Medium-term Strategic Development Programmes. Its first objective is to increase and diversify crop and livestock production and fishery in a sustainable way to improve the food supply. The strategy goes beyond agriculture and involves a large number of ministries including health, education, environment and trade. A Council for Food and Nutritional Security is therefore proposed. The document gives a brief description of livestock production in Angola, singling out cattle and poultry. Most of the production is in the south-western provinces although Kuando-Kubango is also mentioned. There is an emergent commercial sector and a traditional sector that sometimes contributes to commercial production. The reasons for food insecurity are described in detail. The strategy for implementation of the plan includes identification of partners, composition, establishment and functions of the Council for Food and Nutritional Security, and the practical interventions required to improve food security. In terms of livestock production, support will be provided by provision of cattle, goats and sheep for re-stocking as well as to production of poultry, rabbits and pigs to provide easily available and affordable protein at local level. The sustainable use of natural resources in terms of flora and fauna is also promoted. The strategy includes providing support for processing, storage, marketing and credit as well as education and training.

Ministério da Agricultura 2008 Plano de Acção de Segurança Alimentar e Nutricional [Action Plan for Food and Nutritional Security] [2009 – PASAN]
www.angola.gov.ao

The Action Plan is the second version of a discussion document. It lists ten ministries that were involved in its development, including both agriculture and the environment. The three main sections of the plan are concerned with (1) mechanisms for implementation and the roles of the different sectors (state, local authorities, civil society, the private sector and international organizations); (2) the institutional structures responsible, namely the Secretariat for Food Security; (3) finances. The first Annex is an organigram of the National Council for Food and Nutritional Security [*provided also as a separate document*].

PROJECTS

Biodiversity conservation and ecosystem health

Roots of Peace [undated] Project summary: Pathways for peace. Restoring nature's balance in southeastern Angola
<http://www.rootsofpeace.org/documents/ElephantsPathwaysonepagerv4110305.pdf>

The project describes the initiative to open the wilderness area of Southeastern Angola to allow the Botswana elephant population to expand its distribution area. This will require de-mining the elephant pathways in the Luiana Partial Reserve.

Rural development, food security and land use

Instituto de Desenvolvimento Agrário 2007 Programa de Extensão e Desenvolvimento Rural [Programme for Extension and Rural Development]
www.angola.gov.ao

Programme for Extension and Rural Development (not dated) [Programa de Extensão e Desenvolvimento Rural]

The proposal is for a five-year programme under the auspices of the Ministry of Agriculture through the Institute for Agricultural Development to support the resumption of agricultural activity among rural populations displaced by war who have now returned to areas where they lived before. The aim of the programme is to provide inputs such as seeds, tools, traction animals and small ruminants as well as training and information in order to promote and increase productivity and encourage commercial as well as subsistence farming.

Roots of Peace [undated] Harvesting hope – fulfilling Angola's agricultural potential
<http://www.rootsofpeace.org/documents/HarvestingHope-AccessingAgricultureProgramHighlights.pdf>

The aim of the project is to undertake a coordinated de-mining and agricultural development initiative in the central highlands of Angola which were devastated by the war but where there is considerable potential for agriculture.

BACKGROUND/COMMENTARY AND OBSERVATIONS/REPORTS/PUBLICATIONS

Animal health, livestock production and trade in livestock products

Ministério de Agricultura e Desenvolvimento Rural 2007 [Information about regulations for movement of animals and plants and their products into Angola]
www.angola.gov.ao

The document provides user-friendly information to citizens and visitors in terms of how and why the entry of plants and animals and their derivatives is regulated in Angola.

Anon 2007 Encontro Nacional de Pecuária, Camabatela, 27 a 28 de Novembro de 2007 [National Livestock Meeting, Camabatela, 28 – 30 November 2007]
www.angola.gov.ao

The importance of livestock production in Angola is emphasised. The objectives of the meeting were to examine livestock production in the context of agricultural development in Angola, to reiterate the importance of livestock in the fight against hunger and reduction of poverty, and to encourage the various players in the sector to reach consensus on the rehabilitation and revitalization of the national livestock sector. The six themes of the meeting were Animal production, technology and industry (including game ranching); Animal health and veterinary public health; Livestock and veterinary research; Financing livestock development; Training for staff involved in livestock; Policies, legislation and regulation for livestock activities. The elaboration of specific regulations for the application of the Animal Health Law was one topic within the 6th theme. One of the intended outputs was a strategic plan for the National Livestock sector.

Direcção Nacional de Agricultura, Pecuária e Florestas/Departamento de Agricultura 2010 Assistência técnica a empresas agro-pecuárias emergentes.
<http://www.cidadao.gov.ao/ServicosdoGovernoD.aspx?Codigo+325>

The document is a draft information sheet indicating that the Department of Agriculture offers assistance to emerging small and medium agri-businesses, including economic viability studies. The assistance is available to all citizens and foreign residents of Angola, in particular producers of crops and livestock. The address and contact numbers are provided. Information to be added includes the costs of the service (still being worked on by the Ministry of Finance), and information relating to legal requirements and legislation. A space for questions and answers (presumably frequently asked questions) is also provided.

Rural development, food security and land use

World Food Programme 2006 Evaluation of the Angola Portfolio of activities Evaluation Brief 2006/3
<http://documents.wfp.org/stellent/groups/public/documents/reports/wfp090419.pdf>

The brief describes and evaluates the various WFP activities in Angola, describing a situation that went from acute emergency to prolonged crisis, and citing weak government involvement as a negative factor. Recommendations are made for a shift of responsibility to the national government and the actions that the government should undertake to continue the programme. *[This document is included because it likely*

influenced the development of a national strategy and action plan for food and nutritional security published in 2009]

BOTSWANA

LEGISLATION

General (Indexes)

Classified table of laws of Botswana

http://www.laws.gov.bw/Docs/INDEXES/Classified_Table_Of_Laws_Of_Botswana.pdf

The classified table of laws of Botswana provides an index to the laws of Botswana as contained in 16 volumes. They are listed under their relevant headings, for example the legislation relating to stock theft falls under Criminal Law, Procedure and Evidence, in Volume II, while most of the legislation relating to livestock is in Volume V under the heading Animal Husbandry. The chapter number and section is given for each section of the legislation. The table facilitates searches for specific laws.

Animal health, livestock production and trade in livestock products

Current legislation

Botswana Meat Commission Act, Law 22 of 1965 [as amended]

The Act provides for the establishment of a Commission to be known as the Botswana Meat Commission, and defines its duties, powers and assets and liabilities. The business of the Commission is to purchase and slaughter cattle and sell the products or to purchase and sell cattle on the hoof. The Commission can, with the consent of the Minister, promote schemes to improve the standard and condition of cattle sent for slaughter or sold on the hoof, and to promote other commercial schemes for the development and improvement of the livestock industry. Other domestic species can be included if designated by the Minister. The Act further sets out the composition, financial affairs and operation of the Commission.

Branding of Cattle Act, Law 19 of 1962 [as amended]

The purpose of the Act is to make provision for the improvement of branding of cattle. The two main sections of the Act provide for branding according to zones and for registration of brands.

Cattle Export and Slaughter Levy Act 10 of 2005

The Act repeals and re-enacts, with amendments, the Cattle Export Tax Act (which provided for a tax to be levied on horned cattle exported live from Botswana or slaughtered at the Botswana Meat Commission abattoir), to make provision for the imposition of a levy on cattle exported from Botswana, and on cattle slaughtered at the Botswana Meat Commission abattoir, municipal abattoirs, private abattoirs and butcheries.

Cattle Export Tax Act, Proclamation 10 of 1952 [as amended]

The Act makes provision for a consolidated tax to be imposed on horned cattle either exported from Botswana or slaughtered at the Botswana Meat Commission abattoir.

Control of Goods, Prices and Other Charges Act 23 of 1973 [as amended]

The Act enables the Minister to provide, by regulations, for the control of the distribution, disposal, purchase and sale, the standards and marking, and the wholesale and retail prices, of goods, whether manufactured or not, and to provide for the control of exports from and imports into Botswana.

Control of Goods, Prices and Other Charges Subsidiary Legislation

- Control of Goods (Animal feed additives and growth promoters) regulations: restriction of import of growth promoters according to a list that includes a wide range of hormones as well as antibiotic feed additives and medicated feed.
- Control of Goods (Beef prices) regulations: minimum prices are specified for selected fresh beef products in specified areas.
- Control of Goods (Import) regulations: all goods requiring import permits are specified, including a full range of animal-derived commodities and products. These are excerpted in the document provided.
- Control of Goods (Import and export of agricultural products) regulations: Importation of animal feed for poultry and livestock is prohibited without a permit.
- Control of Goods (importation of eggs and poultry meat) regulations: Restrictions are placed on the importation of eggs and poultry meat, which is by permit only.
- Control of Goods (Fresh milk) regulations: Distribution or sale of fresh milk from Zimbabwe is prohibited except in the area north of latitude 21°30' south.

Control of Livestock Industry Act, Proclamation 67 of 1941 [as amended]

The Act covers all aspects of trade in livestock including permits, licenses, abattoirs, branding, export, public sales, levies, export of meat (only permitted from designated export abattoirs), supply of stock to export abattoirs (suppliers are registered by the Director of Veterinary Services), construction of export abattoirs, purchase of livestock produce (which includes some game products e.g. hippo strips).

Control of Livestock Industry Act: Subsidiary Legislation

The subsidiary legislation comprises the following:

- Cattle Export Levy (Designation of Market) Order, in which the Pretoria abattoirs are designated as a market under Section 23 of Control of Livestock Industry Act
- Control of Livestock Regulations, in which licenses for the purchase of livestock are restricted to the district of issue, with a proviso that only one license per person may be issued
- Livestock Sales (Permits) Regulations, covering the issue of Chief's and District Commissioner's permits for the sale of livestock
- Livestock Sales (Permits) (BUCA) Regulations, making provision for the waiving of a fee for a permit to sell livestock if the entire proceeds are to be donated to the Botswana University Campus Appeal (BUCA)

Cruelty to Animals Act, Proclamation 27 of 1936 [as amended]

The Act makes provision for the prevention of cruelty to animals including ill-treatment and inflicting injury, inappropriate transport, causing animals to fight, poisoning animals, and operating on them without due care. Provision is made for the inspection of any facility where animals are kept.

Declaration of contagious bovine pleuropneumonia (lung sickness) infected area (Amendment) (No. 2) Order, 1996 [Diseases of Animals Act: Statutory Instrument No. 23 of 1996]

The Declaration increased the extent of the contagious bovine pleuropneumonia infected area and is an example of situation-responsive legislation under the Diseases of Animals Act.

Diseases of Animals Act 9 of 1977 [as amended]

The Act provides for the prevention and control of diseases of animals, regulates the import, export and movement of animals, and provides for the quarantine of animals in certain circumstances. It refers to domestic and captive animals but makes provision for any animal to be included by prescription. It provides for declaration of infected areas, provisions for infected areas, control of import and export, quarantine stations, stock free zones, fences and dipping tanks, power to order the collection of stock, stock in transit, powers of entry, slaughter of infected animals, disposal of carcass of slaughtered animal, indemnity and payment of compensation, power to order seizure of stock etc, vaccine, serum etc (permit required for all such products), proof of issue of permit, evidence of certificate by analyst etc, regulations (power of the Minister to make regulations for the control of disease), penalties. Section 8 (2) (c) [Stock free zones, fencing and dipping tanks] states that the Minister may “direct the erection and maintenance of fences on any land for the purpose of control of disease’.

Diseases of Animals Act Subsidiary Legislation

This single document contains Diseases of Animals Act: in terms of

- Declaration of stock-free zones Order 1982
- Diseases of Stock Regulations 1926 [as amended to 2001]
- Quarantine and compensation Regulations 1930 [as amended to 1966]
- Diseases of Stock (Poultry) Regulations 1941
- Stock Diseases (Semen) Regulations 1968
- Prohibition of sale of imported cattle to the Botswana Meat Commission for export to the European Union Regulations 1998
- Diseases of Stock (Inoculation) Order 1952
- Foot and mouth disease (Conveyance of products) Order 1960
- Movement of stock (Restriction) Order 1960
- Muzzling Order 1954
- BSE control (Removal of specified risk materials) Regulations 2004.
- Livestock identification and trace-back Regulations 2005
- Stock feed Regulations 2004
- Prohibition of use of anabolic hormones and thyrostatic substances Regulations 1987 [as amended in 2007]

Livestock and Meat Industries Act 1 of 2007

The Act re-enacts, with amendments, the Livestock and Meat Industries Act, to provide for the slaughter of domestic livestock, farmed game, wild game and poultry for human consumption, the control and operation of abattoirs, slaughter slabs, cold storage facilities, meat processing plants, cutting premises, canning plants and the marketing, grading and inspection of livestock and livestock products.

Matimela Act 25 of 1968 [as amended]

The Act provides for the collection and disposal of stray livestock in districts and elsewhere.

Prevention of Rabies Act 48 of 1971

The Act makes provision for the declaration of rabies control areas, destruction of stray animals, movement restrictions and compulsory vaccination, as well as quality control of products used in the control of rabies.

Registration of Livestock Act, Proclamation 10 of 1921 [as amended to 1966]

The Act makes provision for the registration of farm livestock and their pedigrees (i.e. this Act does not relate to the identification or branding of livestock).

Stock Diseases (Semen) Regulations 1968

The regulations make provision for the control of importation of semen of farm animals into Botswana. Importation is by permit only and additional requirements may be demanded to prevent the spread of animal diseases via semen.

Stock Theft Act 21 of 1996

The Act re-enacts an earlier Stock Theft Act and makes provision for a number of preventive and punitive measures. One of the preventive measures is the prohibition of delivery of stock between the hours of sunset and sunrise.

Veterinary Surgeons Act 35 of 1971 [as amended]

The Act makes provision for the establishment of a Board of Veterinary Surgeons and the registration of veterinary surgeons with the board. Requirements for registration are specified, the scope of activity of veterinary surgeons is described, and provision is made for removal of names from the register and restoration of registration.

Pending legislation

Acts since 2009

The Acts since 2009 are listed and the list includes the Livestock Improvement Act 2009, which is listed as being "On notice".

Bills since 2009

The Bills since 2009 are listed. The list includes the Pandamatenga Agricultural Infrastructure Development Project (Loan) (Authorisation) Bill, 2009.

Statutory Instruments since 2009

The list of Statutory Instruments since 2009 includes Control of Goods (Marking and Labelling of Halaal and non-Halaal Meat and Meat Products) Regulations 2009.

Biodiversity conservation and ecosystem/environmental health

Agricultural Resources Conservation Act 39 of 1972 [as amended]

The Act makes provision for the conservation and improvement of the agricultural resources of Botswana, establishes an Agricultural Resources Board and defines its powers and functions, and provides for conservation committees and subordinate conservation committees and prescribes their functions. The definition of agricultural resources includes: the animal life and fauna of Botswana including animals, birds, reptiles, fish and insects.

Local Government (District Councils) Act: Natural Resources Protection (Model) By-Laws, Statutory Instrument No. 30 of 1992

Provision is made for application for permits to use natural resources including plants, roots, fruit or tubers used for human or animal consumption or for medicinal or veterinary purposes.

Wildlife Conservation and National Parks Act 28 of 1992 [as amended]

The Act makes further and better provision for the conservation and management of the wildlife of Botswana, giving effect to CITES and any other international convention for the protection of fauna and flora to which Botswana is, from time to time, a party, and provides for the establishment, control and management of national parks and game reserves. Section 8 prohibits domestic animals from being introduced or straying into national parks; any not permitted to be there may be destroyed by a wildlife officer. The Minister can make regulations as to the conditions under which domestic animals may be allowed to be introduced into or conveyed through national parks. Under section 14 regulations can be made for the control of domestic animals in reserves and sanctuaries. Under section 40 permits may be granted for killing animals elsewhere than in a national park, game reserve or sanctuary for control of disease, preservation of public safety or protection of livestock and crops

Rural development, food security and land use

Current legislation

Town and Country Planning Act 11 of 1977 [as amended]

The Act makes provision for the orderly and progressive development of land in both urban and rural areas and to preserve and improve the amenities thereof, for the grant of permission to develop land and for other powers of control over the use of land, and for purposes ancillary to or connected with those matters. Livestock production and animal husbandry are included in 'agriculture' as a form of land use and not referred to specifically anywhere in the law.

Water Act 40 of 1967

The Act defines the ownership of any rights to the use of water and provides for the grant of water rights and servitudes. Under definitions "domestic purposes" includes the watering, spraying and dipping of stock. Public water can be freely used for watering stock. The discharge of effluent into public water is prohibited

Pending legislation

Bills since 2009

Pandamatenga Agricultural Infrastructure Development Project (Loan) (Authorisation)
Bill 27.02.09 refers

POLICY/STRATEGY

General

African Development Bank 2000 Botswana 2000 – 2002 country strategy paper
<http://www.oecd.org/dataoecd/36/8/35325612.pdf>

The paper outlines the weaknesses of the agricultural sector in general and the livestock sub-sector in particular, pointing out that about 46% of the national population and 80% of the rural population are involved in livestock. About 25% of the employed population work in the agricultural sector. Although beef exports are important about 80% of the cattle are kept in traditional husbandry systems that are characterized by low productivity, low off-take and high mortality. Some of the problems are attributed to pasture degradation and lack of water, sometimes because boreholes have broken down and the farmers do not have the knowledge to fix them. Support is therefore needed to build capacity in the livestock sub-sector. An interest in game farmer is seen as a positive development as it can involve large numbers of the rural population and encourages community participation and environmental conservation. Tourism was seen as having a high potential and in 2000 was already ahead of agriculture in terms of its contribution to GDP.

African Development Bank 2009 Botswana 2009 – 2013 country strategy paper
<http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/BOTSWANA-2009%20E2%8093%202013%20COUNTRY%20STRATEGY%20PAPER.pdf>

The paper recognises the need to identify and implement measures to offset the downturn in the economy as a result of the global recession. A pie diagram illustrating the contribution of different sectors of the economy to GDP indicates that agriculture contributed only 1.9%. Tourism is not shown as a separate entity, constituting part of the 25.4% contributed by the 'other services' sector (as opposed to the banks, insurance and business sector (10.4%). The largest contribution (39%) was derived from mining and quarrying. It is noted that the growth of that sector had facilitated a move away from dependency on beef exports and migrant labour remittances. Among challenges to trade between SADC countries that Botswana faces is the imposition of SPS measures to protect domestic industries in the region. Under the interim economic partnership agreement with the EU, it is mentioned that Botswana stands to benefit from cheaper agricultural imports like cereals but to lose revenue from beef exports owing to stiff competition. As described in National Development Plan 10, both tourism and agriculture have been targeted as major potential sectors for diversification.

Republic of Botswana/European Commission [not dated] Country strategy paper and national indicative programme 2008 – 2013
http://ec.europa.eu/development/icenter/repository/scanned_bw_csp10_en.pdf

The paper indicates that although the contribution of agriculture to GDP is low (2%), it contributes a substantial part of rural income and 20% of total employment. It is driven by the livestock subsector and beef exports, and is constrained by climatic, socio-economic and technical factors. Tourism is identified as important growth sector. It is recognised that wildlife numbers have declined over the years owing to 'poaching, drought, human/wildlife conflicts and cordon fences, although fences are not included in a long list of major threats to biodiversity. Although previous EC funding programmes have supported wildlife conservation, tourism and sustainable use of natural resources through community based natural resource management it is admitted that success has been limited, largely by lack of capacity to sustain the activities. The Beef Protocol is singled out for discussion. On one hand it is considered to have benefited Botswana since coming into being in 1975 by allowing a quota of 18916 tonnes of beef to be exported to EU. On the other hand cattle farming has had a negative impact on wildlife owing to competition for grazing and water and fences to separate cattle from wildlife, sometimes with disastrous consequences especially during droughts. It is suggested that detailed studies are needed to determine the future economic impact of the protocol in order to design and implement suitable policies for economic partnership agreements. It recognises that the EU requirements for foot and mouth disease control have negative effects on the environment. The main focus for the period will be human resources development.

Ministry of Finance and Development Planning, Botswana 2007 Macroeconomic Outline and Policy Framework for National Development Plan 10, First Draft, October 2007 (approved March 2008)
http://www.ub.bw/lip/documents/2007_Macroeconomic%20Outline%20and%20Policy%20Framework%20for%20NDP10.pdf

The paper reviews the first half of NDP 9 and provides projections of government's revenue and spending limits for NDP 10. Higher than projected growth of the non-mining private sector will be necessary to reach the Vision 2016 targets for growth of GDP (includes both livestock production and tourism). In the paper service exports like tourism are seen as more profitable than goods exports like beef with their concomitant costs in terms of infrastructure and transport. Export of goods to the Johannesburg area is profitable and competitive but nowhere else. Building of a bridge at Kazangula and recovery of the Zimbabwean economy would allow profitable exports to those countries but will be too late for ND 10. Strong emphasis is placed on the need to promote private sector investment and the fact that the sector is over-regulated, so that to export any item requires at least 6 forms to be filled in and the average time to register a business is 108 days is criticised because it is seen as a strong disincentive to private investors.

Ministry of Agriculture, Botswana 2006 National biosafety framework Final Draft
http://www.dar.gov.bw/national_biosafety_framework_report_feb06.pdf

The National Biosecurity Framework provides the background to the development of the Biosafety Policy for Botswana, the Policy and Strategy, and the Biosafety Draft Bill. The policy in broad terms is to encourage the development and application of biotechnology in several fields, in the case of agriculture to improve productivity and food security, but to put measures in place that will ensure biosafety and prevent harm to human and animal health, biodiversity or the environment. Biotechnology includes agricultural/livestock practices such as selective breeding, hybridization, tissue culture and artificial insemination.

Ministry of Finance and Development Planning, Botswana [not dated] National Development Plan 9 Part 1 Policies and Objectives (Document obtained during site visit)

The NDP (2004) covers all aspects of development in all sectors in Botswana. Chapter 10 is devoted to agriculture. The achievements of the period that has been completed are reviewed. The plan emphasises the success of cordon fences and strict animal movement control in maintaining the FMD-free status necessary for exporting beef to the EU. A new 646 km double electric cordon fence was erected at Ngamiland and Bobirwa/Zimbabwe border. The implementation of the LITS is also noted as an achievement. Chapter 13 (pp. 236 - 254) covers Wildlife, National Parks and Tourism. It is noted that the establishment of wildlife management areas is perceived to inhibit agricultural uses of land and that further work is needed to ensure that communities will benefit from the Community-based Natural Resource Management Programme.

Ministry of Finance and Development Planning, Botswana 2009 National Development Plan 10 Volume 1
<http://www.finance.gov.bw/templates/mfdp/file/File/NDP%2010%20final%2016th%20Dec%202009%20edit%20in&2019%20Jan%20%202010.pdf>

A new, integrated, results-based approach is adopted and the plan will run over seven years as opposed to six as was previously the case. NDP 9 is reviewed and it is noted that economic growth was slower than projected. There was a decline in all the traditional exports (diamond, copper-nickel and beef). A number of constraints are identified and it is stated that the policy is to liberalise beef markets and expand the export base for agricultural products. Skills development and infrastructure development

will be provided to facilitate business. There are also strategies to improve and expand tourism and increase citizen participation.

Ministry of Finance and Development Planning, Botswana 2009 National Development Plan 10 Volume 2

<http://www.finance.gov.bw/templates/mfdp/file/File/FINAL%20NDP%2010%20TNS%2010%20Feb%202010%edited.pdf>

The document lists and describes projects to be undertaken, including in the agricultural sector and in the environmental/wildlife/tourism sector. Most of the projects are concerned with building capacity in both sectors. Improving animal disease control (chiefly tsetse fly and FMD) including by constructing further fences where necessary to restrict animal movements is one of the projects mentioned to benefit the livestock sector. Skills development for communities to enable them to benefit from employment in the tourist industry is one of the projects to be undertaken by the Ministry of Environment, Wildlife and Tourism.

Animal health, livestock production and trade in livestock products

Gaolathe B 2002 Budget Speech 2002: Minister of Finance and Development Planning <http://www.gov.bw>

Policy for the livestock sub-sector follows the lines of the National Policy on Agricultural Development, 1991, and the budget speech for 2002 urges the implementation of the policy to fence communal farms in order to make them more productive. The speech also comments on the introduction of the LITS for traceability and indicates that it is very expensive. Some of the actions to increase tourism are also mentioned.

Biodiversity conservation and ecosystem health

Ministry of Trade, Industry, Wildlife and Tourism, Botswana 2002 Game Ranching Policy for Botswana Government Paper No 5 of 2002, Republic of Botswana <http://www.eis.gov.bw/.../Policies/Environmental%20Policies/Game%20Ranching%20Policy.pdf>

The policy is aimed at developing a game ranching industry that will provide a commercially viable and sustainable alternative for livestock enterprises either on its own or in mixed livestock/game ranches. It only deals with game ranching – game farming is to be dealt with in a separate policy document. [Game farming = more intensive production like ostriches, crocodiles, snakes, rabbits, guinea fowl etc]. Major constraints for game ranching are lack of freehold land, capital and know-how. The National Policy on Agricultural Development (1991) provides for a shift from communal to leasehold land tenure in tribal areas. The game ranching industry is seen as an opportunity for economic diversification in rural areas.

Motsumi S 2008 Botswana National Biodiversity Strategy and Action Plan (NBSAP) – Highlights on its implementation NBSAP Workshop Rustenburg, South Africa, 21 February 2008 <http://www.cbd.int/doc/meetings/nbsap/nbsapcbw-seafr-01/other/nbsapcbw-seafr-oi-bw-nbsap-en.pdf>

The 2008 power point presentation made at the NBSAP Workshop in Rustenburg, South Africa, in February 2008 summarises the relevant national legislation, policies and plans relevant to the biodiversity strategy and action plan and the institutional structures involved in its implementation. Achievements in terms of implementation and challenges to achieving full implementation are listed.

Rural development, food security and land use

Ministry of Agriculture, Botswana 1991 National Policy on Agricultural Development Government Paper 1 of 1991, Republic of Botswana

http://www.moa.gov.bw/downloads/national_policy_on_agric_development.pdf

The policy forms the basis for NDP 8 agricultural development; the policy objectives are identical to those reflected in NDP 9. Recommendations for Livestock Sub-sector include an artificial breeding programme to improve quality, a continued focus on control of diseases and eradication of tsetse fly, fencing of land for ranching and development of land use plans, and support for dairy production and animal traction.

Frimpong K 1995 A review of the Tribal Grazing Land Policy in Botswana Pula: Botswana Journal of African Studies 9 (1): 1 – 16

<http://archive.lib.msu.edu/DMC/African%20Journals/pdfs/PULA/pula009001/pula009001002.pdf>

The policy was developed to attempt to address the problem of pasture degradation owing to uncontrolled grazing by an ever-increasing number of cattle. The aim was to enable producers with 400 or more head of cattle to obtain 'commercial grazing areas' that would be demarcated and for which they would be responsible in terms of pasture management. This would remove large numbers of cattle from the remaining communal grazing land, which would be protected from degradation by supporting relatively small numbers of cattle. While the policy was partially successful in that some well managed commercial ranches were established, its success was limited by the fact that (1) the amount of communal land available for commercial ranches was over-estimated and (2) that there were producers who obtained commercial land but continued to use communal land as well. Finally, some commercial ranchers overstocked their land and caused severe overgrazing. One of the problems identified was that fencing commercial ranches was not a requirement, enabling the cattle to have access to both commercial and communal land. Lack of authority to enforce the requirements was a problem but the reviewer pointed out that the necessary legislation exists under the Agricultural Resources Conservation Act of 1972 which provides for Stock Control Orders to be issued. *[The policy itself was not available electronically as far as could be ascertained but the review provides a good summary of what it entailed].*

PROJECTS

Biodiversity conservation and ecosystem health

Okavango Delta Management Plan:

- 1. ODMP 2002 Project Proposal, April 2002 Okavango Delta Management Plan National Conservation Strategy (Coordinating) Agency, Gaborone, Botswana [Source: Ecosurv]***

The proposal identifies the different types of land use in the Delta and the various stakeholders. It notes that livestock (cattle) numbers are building up in Ngamiland after the loss of 320 000 cattle as a result of contagious bovine pleuropneumonia control measures. Concerns are expressed about tsetse control in the Delta which is largely achieved by aerial spraying, and mentions that disease control programmes with broad ecological, social and political implications need to be considered in long term planning.

**2. ODMP 2005 Inception Report Volume 1 Main Report February 2005
Okavango Delta Management Plan Project Secretariat, Gaborone,
Botswana [Source: Ecosurv]**

The inception report is a voluminous document that covers all aspects of the Okavango Delta. The main reference to livestock is on pages 54 – 57 (subsection 3.4.9).

A number of constraints for livestock production are identified that could provide strong motivation to move it away from the delta to mitigate interface problems. Epidemics are mentioned as a major constraint. The contagious bovine pleuropneumonia epidemic in Ngamiland is cited as an example although it is clearly not an interface problem since the disease is restricted to cattle and has nothing to do with wildlife at all. It noted that the Government had commissioned a study on the viability of the livestock sub-sector with a view to developing a viable, competitive and sustainable sub-sector taking into account risk issues. The communities with livestock requested water points away from the delta to minimise the conflict between livestock and wildlife. Tsetse control by sequential aerial spraying was successful and the flies appeared to have been eradicated but it was noted that recruitment may occur from neighbouring infected territories.

Steps to be taken:

- The Department of Animal Health and Production was to undertake a study of its fence maintenance programme and make proposals for improving this in the future, and to implement a series of educational programmes on its disease control measures, what they are designed to achieve and why.
- A study on the effectiveness of placing boreholes away from the delta to reduce livestock wildlife contact would be undertaken.
- The tsetse control department was to develop rigorous baseline data to assess the effects of any future tsetse control programmes.

**3. ODMP 2005 Inception Report Volume 2 Project Components 2005
Okavango Delta Management Plan Project Secretariat, Gaborone,
Botswana [Source: Ecosurv]**

The document sets out the activities to be undertaken to address the problems identified in the various components in the Delta. Component 12 is Sustainable Livestock Management. The plan outlines the activities to be undertaken by the Department of Animal Health and Production to implement recommendations of the Tsetse Environmental Monitoring Report and continue with the tsetse fly monitoring programme, assess the current veterinary fence maintenance programme with a view to improving it, undertake studies on the effectiveness of providing watering points away from the Delta area to reduce wildlife/livestock interaction and conflict, undertake a programme of educational visits to stakeholders to elucidate the disease control measures implemented, and to undertake training and capacity needs assessments. Table 12.4

sets out a monitoring and evaluation plan for the Sustainable Livestock Management Component.

4. ODMF 2006 Final Framework Management Plan Executive Summary February 2006 Okavango Delta Management Plan Project Secretariat, Gaborone, Botswana [Source: Ecosurv]

The Executive Summary provides a succinct resumé of the management plan in which the three subsystems (institutional, biophysical and socio-economic) are described and action plans for each of them are provided.

5. ODMF 2006 Final Framework Management Plan February 2006 Okavango Delta Management Plan Project Secretariat, Gaborone, Botswana [Source: Ecosurv]

The plan provides the figures for livestock in the Delta, with 193 937 cattle as well as goats, sheep, horses and donkeys, all of which are extensively kept. Anthropogenic factors seen to threaten the Delta include possible overstocking that will lead to overgrazing, and the fact that the successful control of tsetse fly will enable livestock owners to move into new areas that were previously not grazed and will then come under grazing pressure. Several other anthropogenic threats not related to livestock are also identified. In a section on wildlife-livestock conflict it is reported that communities living along the buffalo fence complain that it prevents access to good grazing land for their cattle, while people involved in tourism see the fence as a blessing that saved the Delta from the cattle industry. Farmers further more resent the fact that should their cattle cross the fence they are killed, while buffalo that break through are guided back to the reserve. There is a perception among farmers that the government cares more about wildlife than about cattle because they put such large tracts of land aside for wildlife conservation. This perception is exacerbated by the fact that predation of livestock by wildlife results in inadequate compensation and the existence of a moratorium on killing lions after predation. In addition to paragraphs on the effects of drought, environmental degradation and recurrent epidemics on livestock production, there is a detailed subsection on veterinary fences in which their negative effects on wildlife and apparent positive effects on Botswana's ability to export beef are discussed. It concludes that the long term decisions about the alignment, the design and the need for the veterinary fences will only be taken after a Government-commissioned study on the viability of the livestock sub-sector. The report notes that the delays in taking these decisions are an example of a political constraint for the management plan. Numerous other constraints are identified and strategies and action plans proposed to address them.

6. ODMF 2006 Draft Management Plan Executive Summary July 2006 Okavango Delta Management Plan Project Secretariat, Gaborone, Botswana [Source: Ecosurv]

The general approach is summarised and Objectives and Action Plans are supplied as an Appendix. In the Conclusions the importance of securing the necessary level of commitment from all the relevant authorities and stakeholders to ensure sustainable management of the site is emphasised.

7. ODMF 2006 Draft Management Plan July 2006 Okavango Delta Management Plan Project Secretariat, Gaborone, Botswana [Source: Ecosurv]

The report recognises the potential and contribution of livestock but highlights the negative aspects such as over-grazing and the measures required to control diseases. Foot and mouth disease and contagious bovine pleuropneumonia are cited as diseases that result from interaction between wildlife and livestock [the latter incorrectly because it is strictly a cattle disease with no wildlife involvement]. Concerns are expressed about the control measures for tsetse fly and the fear that they will have to be repeated as neighbouring territories harbour healthy populations. Major environmental and social issues arise from the fences that provide boundaries for three disease control zones in Ngamiland, and there are controversies about their utility and effectiveness. The environmental and social issues include increased predation as wildlife are forced to concentrate in certain areas and prevention of access to continuous water sources in drought years.

8. Arntzen J, Mpho T, Nyalugwe K 2006 Policy, planning and strategic component Final Report Review and streamlining of national policies, plans, regional protocols and international conventions in relation to the Okavango Delta Okavango Delta Management Plan Strategic Environmental Assessment Policy Framework IUCN/Department of Environmental Affairs, Botswana (Source: Ecosurv)

The report concludes that ‘the viability of livestock ranching is doubtful given present market conditions. Switching towards game farming could benefit the tourism sector.’ However, later, on page 16, it is mentioned that livestock grazing (among other activities listed) is important for the local economy in the delta. Veterinary fences vis-à-vis wildlife migratory routes and proximity of livestock to wildlife are seen as policy challenges. Maintenance of carrying capacity for both livestock and wildlife is recommended. Comments on National Policy for Agricultural Development (1991):

- The policy could lead to more fencing and livestock expansion in Ngamiland and the Okavango Delta. The authors note that increased productivity could reduce the need to designate more land for the livestock sector.

Comments on National Policy on Tribal Grazing Land (1975):

- The policy had a profound effect on land use in Ngamiland through establishment of the Hainaveld ranches (outside ODM area).

There is a brief discussion of relevant points in Diseases of Animals Act and listing of the different veterinary fences (p. 66).

A national policy statement (Tribal Grazing Lands Policy) that Ngamiland should be considered for livestock ranching given its vastness is queried because Barnes et al (2001) state that livestock ranching is probably uneconomical in Ngamiland because of distance to market. The policy may not be considering results of recent research e.g. livestock ranching policy. The statement is made that land use zones should be based on comparative advantages.

9. Department of Animal Health and Production Botswana/ODMP 2007 Sustainable Livestock Management Component 12 – Assessment of the feasibility of providing watering points in the sandveld areas to reduce livestock and wildlife interactions in the Okavango Delta RAMSAR Site, Botswana Final Report 2007 Geotechnical Consulting Services (PTY) Ltd, Gaborone, Botswana (Source: Ecosurv)

The study concludes that providing the water points will not be sufficient on its own to prevent wildlife/livestock conflict but must be combined with improved management of livestock including kraaling at night and providing a shepherd to reduce predator contact.

10. ODMP 2008 Okavango Delta Management Plan 2008 Department of Environmental Affairs, Gaborone, Botswana [Source: Ecosurv]

Much of the information contained in the previous management plan documents is reiterated. Among unsustainable land usages, overgrazing of cattle and the presence of large numbers of donkeys are again identified as problematic. In subsection 3.3.7 on livestock, in addition to the problems of recurring droughts, disease outbreaks, tsetse control and the disease control fences, mention is made that because the sandveld is infested with *Dichapetalum cymosum* [gifblaar, a highly toxic plant], the livestock are further restricted in terms of the area available for grazing. Prioritised issues and interventions in terms of sustainable livestock management planning (Table 3-1) are to mount public education on disease control strategies, assess the buffalo fence maintenance programme, and assess the feasibility of providing livestock watering points away from the Delta to reduce livestock/wildlife interactions. Under priority issues to be addressed during the implementation of the plan only the need to reduce wildlife/livestock interactions and the need to reduce the risk of re-introduction of tsetse fly are identified under livestock management, while under vegetation resources management the need to address overgrazing by livestock is prioritised as well as degradation of vegetation by wildlife (Table 3-2). These two priorities are clustered together with fire control as priorities for restoration of the ecosystem (Table 3-3), while the reduction of livestock/wildlife interactions is one of seven priorities in the Livelihoods improvement cluster. A tool is proposed for evaluating and ranking land use options. In terms of the strategic goal to maintain or restore the wetland habitats and ecosystems of the Okavango Delta (Table 4-4), two of the operational objectives are for the Department of Animal Health and Production to reduce overgrazing developing and implement range carrying capacity guidelines and to reduce the risk of tsetse re-infestation by initiating dialogue with Angola, Namibia and Zambia to create a tsetse free zone. To address the strategic objective to develop socio-economic opportunities to improve livelihoods, the department is tasked with developing programmes to reduce livestock/wildlife conflicts. In the chapter entitled Management plan and implementation strategy, policy harmonization is flagged as crucial. It is noted elsewhere in the document as well as in preceding documents that landuse planning in the delta has been haphazard in the extreme. Table 5-1 identifies Hainaveld as a cattle ranching area and the Western Communal area as suitable for cattle ranching, wildlife and veld products.

11. Department of Environmental Affairs, Botswana 2006 Okavango Delta Ramsar Site Shared and Common Vision for 2016 [Source: Ecosurv]

The vision is: A carefully-managed well functioning ecosystem that equitably and sustainably provides benefits for local, national and international stakeholders. The importance of stakeholder participation in developing the vision and the need to address their concerns is emphasised.

12. Anon 2006 Okavango Delta Ramsar Site Land use and land management plan 2005 – 2029 Final report Prepared for Tawana Land Board and

Northwest District Land Use Planning Unit by Plantec Africa (Pty) Ltd in association with MTK Planning Solutions (Pty) Ltd and Lesedi Consulting Engineers (Pty) Ltd [Source: Ecosurv]

Important findings reported include:

- Presence of gifblaar in the sandveld; most of the boreholes are in the sandveld; water in the sandveld is often very salty; nevertheless general agreement that cattle should be moved to the sandveld; zones should also be gazetted in NG 11 for livestock farming to accommodate people in the inner delta area who have cattle
- Buffalo fence serves no purpose because it is not intact and is easily crossed by cattle and buffalo
- Livestock owners want water points away from the delta and electrification of the buffalo fence; also relocation of the buffalo fence from NG12 to NG 22
- Nearly 50% of the land in the delta area is used for farming
- Fences are a key management tool especially veterinary fences: major environmental issue
- Disease control and cordon fences lead to reduced wildlife movement
- Evidence of overgrazing: major environmental issue
- Haphazard land use; conflict between livestock producers and crop farmers as well as both with wildlife
- Livestock predation, veterinary cordon fences and competition between wildlife and livestock for grazing are important issues
- Document explores existing policies and legislation and also institutional and administrative frameworks for planning and managing land use
- Farmers dislike the fences which keep their cattle away from the best grazing while the tourist operatives like it because it keeps the cattle out of the reserve
- Plenty of negative perceptions about tourism
- Different scenarios developed for making land use zoning decisions
- Guidelines provided for regulation of land use management

13. Turpie J, Barnes J, Arntzen J, Nherera B, Lange G-M, Buzwani B 2006 Economic value of the Okavango Delta and implications for management IUCN/Department of Environmental Affairs, Botswana [Source: Ecosurv]

Livestock production is considered to be the most important agricultural activity. The overall value of cattle is estimated at some P29 million, estimated direct economic value P34 million; 88 % of net income and 83% of economic value derived from cattle posts.

14. ODMP 2006 Policy, planning and strategic component Final Report Review and streamlining of national policies, plans, regional protocols and international conventions: Strategic Environmental Assessment Policy Framework Prepared by Ecosurv (Pty) Ltd for Department of Environmental Affairs, Botswana and IUCN (Source: Ecosurv)

The document explains the Strategic Environmental Assessment approach to making planning and policy decisions. Staff of the Department of Environmental Affairs received training in implementing the approach.

Rural development, food security and land use

Zambezi Agro-commercial Integrated Development Project (Pandamatenga:

1. African Development Bank 2008 Pandamatenga Agricultural Infrastructure Development Project: Appraisal Report

<http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/BW-2008-116-EN-ADB-BD-WP-BOTSWANA-PANDAMATENGA-APPAISAL-REPORT.PDF>

The report is mainly concerned with water supply for crop production, and there are only marginal references to dairy production and ostriches in terms of livestock issues.

2. Anon 2009 Environmental impact assessment: Zambezi Agro-commercial Integrated Development Project Phase I Volume 1: Environmental Impact Statement Executive Summary [Source: Ecosurv]

The executive summary describes the nature of the project and lists a large number of major impacts that the large agro-industrial development will have on what is a sensitive area with rich biodiversity. The impacts are described in detail and recommendations are put forward for their mitigation, which will depend on developing and implementing an integrated land use plan as well as an environmental management plan. Apart from pointing out that the development could have serious impacts on wildlife, tourism and the environment, there are also socio-economic implications. Some of the impacts such as the envisaged use of very large amounts of water raise concerns about sustainability.

3. Anon 2009 Environmental impact assessment: Zambezi Agro-commercial Integrated Development Project Phase I Volume 1: Environmental Impact Statement Prepared for TAHAL by CAR, Geoflux and Ecosurv [Source: Ecosurv]

The probable impacts of the project are explored in detail and recommendations for mitigation are put forward as set out in the executive summary. The project raises serious concerns about the impact it will have on wildlife, tourism, and on the local population owing to the inevitable migration of large numbers of people into the area, the possibly unsustainable use of natural resources and the necessity to manage waste effectively in order to avoid widespread pollution.

4. Anon 2009 Socio-economic assessment – Draft final report: Zambezi Agro-commercial integrated Development Project Phase I Volume 2 Prepared for TAHAL by CAR, Geoflux and Ecosurv [Source: Ecosurv]

The report explores the probable impacts of the urbanization of the area on a vulnerable and generally poor rural population and makes recommendations for the mitigation, as far as possible, of the negative impacts.

5. Zambezi Agro-commercial Integrated Development Project Reports Volume 3 Appendices 2, 3, 6 and 8

Volume 3 consists of the specialist reports, of which four are of relevance to the study:

- a. *Motsemme M 2009 Appendix 2: Environmental health Zambezi Agro-commercial integrated Development Project Phase I Volume 3 Specialist reports [Source: Ecosurv]*

The appendix refers mainly to human health and environmental pollution. The expected proliferation of vectors such as mosquitoes and vermin could have an impact on animal health as well.

- b. *Mogae K N 2009 Appendix 3: Land use and settlement Zambezi Agro-commercial integrated Development Project Phase I Volume 3 Specialist reports [Source: Ecosurv]*

Livestock production in the Chobe area is limited by the fact that it is in the FMD infected area and markets are therefore restricted to a small local market, as well as lack of grazing land, conflict with wildlife, flooding – but there are many applications for land that demonstrate a strong desire among the populace to farm livestock. Cattle figures from 1994 – 2001 are 963 – 1161 (1093) for Pandamatenga (fluctuant), 298 – 673 (504) for KM256 (steady growth), 186 – 377 (294) for Lesoma (upward trend), 119 – 325 (245.5) for Kazungula (upward trend, peak in 1999). There are 7 cattle posts and 4 small stock farms in the development area. The livestock farmers in KN256 are to be re-located and will receive compensation for boreholes drilled for watering livestock, but the author believes that no other land is available for the Chobe East communities and expropriation will therefore have a negative effect. The land use study showed that pastoral farming is the primary subsistence in Chobe district despite FMD restrictions.

- c. *Tyler N 2009 Appendix 6: Poultry Production Zambezi Agro-commercial integrated Development Project Phase I Volume 3 Specialist reports [Source: Ecosurv]*

Disposal of large amounts of waste from the poultry production units as well as from hatchery and abattoir waste water and waste products are identified as major problems. Either composting or anaerobic biodigestion or both might be employed as well as incineration.

- d. *Perkins J S 2009 Appendix 8: Identification of impacts, mitigations and monitoring requirements relating to faunal biodiversity, wildlife and ecology Zambezi Agro-commercial integrated Development Project Phase I Volume 3 Specialist reports [Source: Ecosurv]*

The report identified 14 negative and significant impacts on the very rich wildlife of the area and stated that they would be difficult to mitigate. A major impact is the fragmentation of a key wildlife habitat and dispersal area. Legislation for conserved ecotones and movement corridors into the area and actively safeguarding them will be very important to mitigate the negative impacts of the project. The lack of synergy between the project objective, to maximise food production through intensive farming on one hand and the wildlife conservation objectives for the Chobe National Park on the other is emphasised.

BACKGROUND/COMMENTARY AND OBSERVATIONS/REPORTS/PUBLICATIONS

Animal health, livestock production and trade in livestock products

Anon 2004 Botswana using digital bolus to trace stolen cattle Practical Action – EA Peace Bulletin September 2004

http://practicalaction.org/peace5_cattle_tracking_botswana

The bulletin explains the advantages of the cattle identification and traceability system applied in Botswana. Those highlighted are the management of records including vaccination, the ability to access international markets, and a marked reduction in cattle theft.

Derah N & Mokopasetso M 2005 The control of foot and mouth disease in Botswana and Zimbabwe *Tropicultura* 23: 3 – 7 Special issue
<http://tropicultura.org/text/v23ns/3.pdf>

Abstract: Foot and mouth disease is an OIE List A disease that seriously constrains livestock production in southern Africa. Two important livestock producers and beef exporting countries, Botswana and Zimbabwe, have put in place an effective FMD control system. The system is based on the division of the country in risk zones and appropriate disease surveillance, livestock identification and movement restriction and control in the different risk zones. Vaccination is carried out in the designated vaccination zones.

Fanikiso M 2009 Animal identification and traceability Public Sector Perspective and Experience from Botswana International Conference on Animal Identification and Traceability – From farm to fork La Rural, Buenos Aires, Argentina, 23 – 25 March 2009
http://www.oie.int/eng/traceability-2009/documents/speakers_presentations/4.3.Fanikiso.pdf

The presentation on the Livestock Identification and Traceability System (LITS) that was introduced to comply with EC820/1997 for computerised traceability was presented at an International Conference on animal identification and traceability. The advantages and problems of the system adopted in Botswana are highlighted, the latter including the difficulty of sourcing equipment locally.

Mapitse N 2008 Botswana's foot-and-mouth-disease and beef trade policy. Transboundary animal disease and market access: future options for the beef industry in southern Africa Working Paper 3 2008 Institute of Development Studies, Brighton
http://www.steps-centre.org/PDFs/VetScience_Working%20Paper%203.pdf

The paper describes in detail the foot and mouth disease (FMD) control strategy in Botswana which dates back to colonial times and is now very strongly linked to the beef export industry. It is based on the erection of veterinary cordon fences to ensure separation of cattle from African buffalo and achieve zone-free status for FMD, with vaccination only carried out in the protection zone around the areas where there are buffalo. Although the importance of the beef trade to rural livelihoods is emphasised, it is stated that the contribution of the industry to national GDP has reduced drastically since independence. Its average annual growth has also fallen owing to endemic droughts, disease outbreaks, poor infrastructure and poor organisation of local markets.

MIFUGO Project: 2009 Feedback Workshop and Seminar on Livestock Identification and Traceability Systems (LITS) Hotel Boulevard, Nairobi, 4 – 7 May 2009 – Event Summary <http://www.iss.co.za/uploads/LITSSUM.PDF>

The workshop provided feedback on a regional study on livestock Identification and traceability systems (LITS) that was aimed at addressing pastoralist conflicts, cattle rustling and insecurity in the Greater Horn of Africa and Eastern Africa. The Botswana experience was selected as an example for the participants to learn from.

Anon 2009 Summary on rapporteur notes on oral presentations National Meat Workshop, Kanye, Botswana 17 – 18 November 2009
<http://www.naftec.org/news/tpy..>

The notes provide useful indicators of the role of beef and Botswana Meat Commission (BMC) and the problems caused by foot and mouth disease and movement restrictions. A question was raised about the re-opening of the Maun abattoir in the light of continued foot and mouth disease outbreaks in the area, and posed the question whether China would be willing to buy meat from the infected area. In reply it was stated that meat from the infected area could not be transported through the free zone so could not be exported even if countries were willing to buy it. In a group exercise that performed SWOT analyses on the different stages of beef production, the veterinary cordon fences were named as a strength from the point of view of the producers. In reply to a question, the speaker from BMC indicated that legislation was in process to allow competitors to participate in the meat export market and that BMC would welcome this.

Sehularo K 2010 Animal identification, livestock and product traceability Regional Information Seminar for recently appointed OIE Delegates, Gaborone, Botswana, 9 – 10 March 2010 <http://www.rr-africa.oie.int/docspdf/en/2010/DEL/SEHULARO.pdf>

The comprehensive presentation on animal identification and livestock and product traceability provides an overview of the need for and the requirements of the systems and provides a description based on the system in place in Botswana.

Biodiversity conservation and ecosystem health

Klein R 2007 Cheetah Status Report Botswana 2007 Cheetah Conservation Botswana
http://www.predatorconservation.com/library/ccb/botswana_cheetah_status_report_jan_2007.pdf

The status report highlights the threat to wildlife and ecosystem integrity posed by overstocking of livestock, range partitioning, deep boreholes and cordon fences.

Mbaiwa JE & Mbaiwa OI 2006 The effects of veterinary fences on wildlife populations in Okavango Delta, Botswana. International Journal of Wilderness 12: 17 – 23, 41 http://www.wilderness.net/library/documents/IJWDec06_mbaiwa.pdf

The study evaluates the effect on wildlife of the veterinary cordon fences erected to support the beef export trade and concludes that the effects are negative, contribute to the decline of wildlife species and that the integration of wildlife production with other sectors like agricultural sector should be given priority at national and local policy level.

NAMIBIA

LEGISLATION

General (Indexes)

Legal Assistance Centre 2010 NAMLEX Index to the Laws of Namibia 2010 update
<http://www.lac.org.na/laws/pdf/namlex/Intro.pdf>

The NAMLEX Index is published by the Legal Assistance Centre at regular intervals to make the law more accessible to the citizens of Namibia. The introduction consists of explanatory sections, a section on the legal history of Namibia, and a section on parts of Namibia, including the Eastern Caprivi, that were integrated into pre- and post-independence. An alphabetical subject index is followed by an alphabetical list of statutes, including pending legislation not yet in force at the time of publication, and an alphabetical list of international agreements. The body of the publication provides, under the subject headings, a summary of each statute, its amendments, and other relevant information including relevant court findings.

Animal health, livestock production and trade in livestock products

Current legislation

Animal Diseases & Parasites Act No 13 of 1956 [Law of the RSA]

The Act empowers the veterinary authorities to take all necessary measures for the prevention and control of animal diseases and parasites. It is amended by the following:

Government Notice No 114 of 1995: Amendment of the Animal Diseases and Parasites Act Standing Regulations 1995 and Government Notice No 136 of 1996: Promulgation of Animal Diseases and Parasites Amendment Act (Act 3 of 1996) and Animal Diseases and Parasites Amendment Act 1996 (Act No 3 of 1996)

Various administrative terms are amended in the Standing Regulations. Annexure D provides an amended list of diseases regulated by law and the susceptible species. The Amendment Act provides for changes in terminology, additional conditions relating to construction and maintenance of roads and fences by the veterinary department, and transport of animals. A useful Compendium of the legislation to this point is provided by Schneider (1997).

Government Notice No 111 2005: Promulgation of Animal Diseases and Parasites Amendment Act (Act No 10 of 2005) and Animal Diseases and Parasites Amendment Act No 10 of 2005

The Animal Diseases and Parasites Act, 1956, is amended so as to redefine certain expressions; to prohibit the searching of homes of individuals without a warrant; and to increase penalties.

Animal Diseases and Parasites Act: Government Notice No 29 of 2009: Animal Identification Regulations

The purpose of these regulations is to support the prevention, control and eradication of animal disease and parasites by implementing a livestock identification and traceability system through requirements that create the capacity to trace the origin, movements and fate of designated animals. The regulations establish the requirements for devices to be used for identification of animals and make provision for the identification of carcasses and meat. Provision is made for a central register for cattle. There are regulations for movement of designated animals. Abattoirs are required to notify government of all designated animals slaughtered.

Animals Protection Act No 71 of 1962 [Law of the RSA]

The Act consolidates and amends existing legislation relating to the protection of animals. It provides for the protection of animals from a wide range of offences including bad conditions when being transported. Abattoir slaughter is not specifically covered.

Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act No. 36 of 1947 [Law of the RSA] [as published 1996]

This is the South African law and has been amended by a series of amendments of which the most recent one is the General Law Amendment Act 49 of 1996. Section 12 prohibits the manufacture or sale of any farm feed containing bone or any other matter derived from the carcass of an animal unless it has been processed according to a prescribed method or imported from a designated country. A Bill to replace this act is under development but is not yet in the public domain. It will provide for the registration of pesticides, animal feeds, animal feed establishments; fertilisers, fertiliser establishments, pet foods, pet food establishments, pest control operators and sterilising units in order to promote human, animal and plant safety, to promote animal production and performance and to enhance agricultural production.

Meat Industry Act No. 12 of 1981 [as amended by the Meat Industry Act No 21 of 1992]

The Act makes provision for the establishment of the Meat Board, its composition and powers, and repeals previous legislation relevant to the control of the meat industry. The amendment Act of 1992 does not substantially change the provisions but extends the composition of the board and its powers, extends certain powers of the inspectors, and adjusts certain provisions in view of the independence of Namibia.

Medicines and Related Substances Control Act No. 13 of 2003

The Act provides for the establishment of a Namibia Medicines Regulatory Council, for the registration of medicines intended for human and for animal use, and for the control of medicines and scheduled substances.

Medicines and Related Substances Control Act, 2003 Classification of medicines and other substances as scheduled substances: Government Notice 2004

Medicines and related substances are classified under five Schedules (S1, S2, S3, S4, and S5). The substances are listed alphabetically under each schedule and veterinary products are not separated from substances intended for human use.

Prevention of Undesirable Residues in Meat Act 21 of 1991 as amended by Prevention of Undesirable Residues Amendment Act 11 of 1994

The purpose of the Act is to provide for control over the administration of certain products to animals which may cause undesirable residue in meat and meat products, and to further regulate the slaughtering of animals and the marketing of meat and meat products. The products are grouped into three groups (I, II and III). Group I consists of products not permitted to be administered to animals at all, and groups II and III contain products for which the specified withdrawal period must be respected before the animal can be slaughtered.

Prevention of Undesirable Residues in Meat Act 21 of 1991: Commencement, Regulations and Declaration of prohibited substances (Proclamation No. 29 and Government Notices No. 219 and No. 220 of 1994)

The Regulations provide for limited use of certain substances by veterinarians for purposes of treatment or fertility improvement. Annexures A – D list the prescribed animal species, slaughter/processing facilities and countries referred to in Act 21 of 1991 as amended by Act 11 of 1994. Prescribed abattoirs include the Windhoek Game Abattoir and prescribed species, in addition to cattle, sheep and goats, include kudu, oryx, ostrich and springbok. Prescribed countries refer to member states of the EU.

Schneider H (compiler) 1997 Compendium of Veterinary Acts, Proclamations and Regulations as applicable in Namibia

The compendium synthesises all the legislation pertaining to the Animal Diseases and Parasites Act 13 of 1956 up to and including the Animal Diseases and Parasites Amendment Act 3 of 1996.

Stock Brands Act No 24 of 1995

The Act is promulgated by Government Notice No 242 of 1995 and provides specifically for branding of stock using a branding iron.

Stock Brands Act and Regulations: Meat Board Covering Note and Memo with proposed amendments, February 2002

The Memo contains proposed amendments relating to the delegations in order to legalise the fact that the Meat Board performs and which in law can only be delegated to staff of the Registrar of brands. An important amendment proposed provides for a shift of focus from branding to identification of animals to permit tattooing as a legal form of identification and to pave the way for other methods of identification to be legislated.

Stock Brands Act: Declaration of sheep and goats to be stock, Government Notice No 72 of 2004 and Stock Brands Act: Regulations in terms of the Stock Brands Act, 1995 Government Notice No 73 of 2004

Sheep and goats are declared to be stock for the purposes of the Stock Brands Act with the implication that they must also be branded.

The Regulations support the Stock Brands Act of 1995 and make provision for sheep and goats to be 'branded' by the application of a tattoo or tag bearing the specified brand mark to the ear.

Stock Brands Act 1995: Amendment of Regulations Government Notice No 39 of 2007

The amendments are concerned with fees payable to service providers in terms of the Stock Brands Act regulations.

Stock Theft Act 12 of 1990

The Act makes provision for the control and punishment of stock theft. Under the definition 'stock' includes domesticated ostrich and domesticated game as well as domestic livestock and the carcasses or portions of carcasses of the species described.

Stock Theft Amendment Act 19, 2004

The amendments relate to sentencing, jurisdiction of the magistrate's courts and compensation.

Stock Theft Act 12 of 1990: General Law Amendment Act 14, 2005 [includes amendment to Stock Theft Act]

The definition of 'Minister' is replaced with another definition.

Pending legislation

Animal Health Bill (as read for the first time) 2010

The Bill will when enacted replace all previous animal health legislation. The stated objectives of the Bill are to provide for the prevention, detection and control of animal disease and for the maintenance and improvement of animal health. Sections are devoted to the import and export of animals, animal products and restricted materials; disease prevention and control; and animal movement control and traceability. There are no remarkable differences from previous legislation and a subsection is devoted to the erection of fences for disease control purposes. Stray animals are also dealt with in a subsection. The current Animal Diseases and Parasites Act and the subsequent Amendment Acts are repealed under the new law.

Biodiversity conservation and ecosystem/environmental health

Environmental Management Act No 7, 2007

The purpose of the Act is to promote sustainable management of the environment and the use of natural resources by establishing principles for decision making on matters affecting the environment; to establish the Sustainable Development Advisory Council; to provide for the appointment of the Environmental Commissioner and environmental officers; and to provide for a process of assessment and control of activities which may have significant effects on the environment. There are sections on environmental plans, environmental assessments, and the environmental assessment process.

Environment, NAMLEX Index to the Laws of Namibia, 2010

The document is extracted from the NAMLEX Index to the Laws of Namibia and provides useful summaries of all the laws relating to the environment, including the Nature Conservation Ordinance 4, 1975, which is not available in electronic form.

Nature Conservation General Amendment Act 31 of 1990

The Act amends previous legislation (Nature Conservation Ordinance 4, 1975, and Controlled Game Products Proclamation, 1989) in order to increase certain penalties that may be imposed.

Nature Conservation Amendment Act 5 of 1996

The Act amends the Nature Conservation Ordinance (4, 1975) so as to provide for an economically based system of sustainable management and utilisation of game in communal areas, as well as to delete references to representative authorities.

Rural development, food security and land use

Communal Land Reform Act 5, 2002

The Act makes provision for communal land boards, use of communal land and power to grant right of leasehold.

POLICY/STRATEGY

Animal health, livestock production and trade in livestock products

Ministry of Agriculture, Water and Forestry, Namibia 2010 Draft strategy for the eradication of trans-boundary animal diseases in the Northern Communal Areas of Namibia (Document acquired during site visit)

The document details the strategy for having the NCA with the exception of the Caprivi and two eastern districts recognised as a zone free of FMD with vaccination (limited) with a view to having it upgraded to a zone free of FMD without vaccination. What is striking about the proposal is that its objectives seem to be to reduce but not completely eliminate the current restrictions on movement of cattle and products from the NCA.

Government of Namibia 2010 Draft media release from Cabinet Chambers, 13/6/26, 18 February 2010

http://209.88.21.36/opencms/gmnet/modules/news/news_0019.html?uri=/gmnet/highlights/index.html

The media release announces the decision taken by the cabinet to approve the policy for the eradication of transboundary animal diseases in the Northern Communal Areas and directed that measures and strategies be put in place for the application for international recognition of designated areas in the NCAs as free of foot and mouth disease and contagious bovine pleuropneumonia. Cabinet also approved the creation of a livestock database in the NCAs to support a comprehensive traceability, surveillance and disease control system.

Heita D 2010 Moves to declare North FMD free. (Press Release)

<http://allafrica.com/stories/20108040115.html>

The press release announces that the government hopes soon to be able to declare the NCA a 'disease-free' area especially with respect to foot and mouth disease. The first step is an awareness campaign that had already started to sensitize livestock owners to the imminent introduction of the livestock identification and traceability system that will bring the NCA a step closer to free trade in livestock and also enable better outbreak response.

Joubert F 2009 Foot and mouth disease and other transboundary diseases in Namibia Presentation 13 October 2009

http://www.nammic.com.na/pdf/Foot_Mouthdisease.pdf

The document consists of a well illustrated power point presentation by the Directorate of Veterinary Services dated 13 October 2009 showing current FMD control measures and outlining the proposed strategy for achieving disease freedom from FMD and CBPP in the greater part of the NCA. The aim is stated to be improvement of animal health in the area through disease surveillance and controls so that free movement of livestock and livestock products will be possible within Namibia. This would enable access to a wide variety of markets in Namibia as well as to international markets. The aim will be achieved through establishing new control zones for FMD and CBPP, inspection, sero-surveillance and vaccination, and reliably implementing the LITS. A commodity based approach is not excluded.

Ministry of Agriculture, Water and Forestry 2010 Policy for the eradication of transboundary animal diseases in the Northern Communal Areas of Namibia 2010 (Flier obtained during site visit)

The flier provides a summary of the policy for eradication of transboundary animal diseases, specifically foot and mouth disease and contagious bovine pleuropneumonia, in the Northern Communal Areas of Namibia. A list of stakeholders and a list of the telephone numbers of the state veterinary offices to be contacted for information and advice are provided.

Ministry of Agriculture, Water and Forestry 2010 Policy for the eradication of transboundary animal diseases in the Northern Communal Areas of Namibia 2010 (Booklet obtained during site visit)

The booklet sets out the policy for the eradication of transboundary diseases, with a focus on foot and mouth disease and contagious bovine pleuropneumonia, in the Northern Communal Areas of Namibia. The foreword explains the need to eradicate the diseases in order to enable the livestock producers north of the veterinary cordon fence to farm more effectively and participate fully in the livestock trade of Namibia, which is focused on export. The introductory section provides a background to the zoning system in Namibia and the role of livestock production, which accounts for 6% of GDP and contributes 25% of receipts from export. The livestock producers themselves are identified as the most critical factor for the success of the policy. The roles and identity of stakeholders and those responsible for implementation of the policy are described. Improved disease surveillance and emergency response will be the basis for enabling declaration of freedom from specific diseases of parts or the whole of the target area. The policy includes cooperation with neighbouring countries in terms of animal disease control.

Biodiversity conservation and ecosystem health

Weaver C & Petersen T 2008 Namibia communal area conservancies, Best Practices in Sustainable Hunting 2008:48 – 52

<ftp://ftp.fao.org/docrep/fao/010/aj114e10.pdf>

The article sums up the national hunting and wildlife policy and legislation of Namibia and provides an evaluation of the conservancies with a focus on trophy hunting with return of revenues to the communities managing the conservancies. The positive results of the policy as well as possible future challenges are discussed.

Rural development, food security and land use

Ministry of Agriculture, Water & Rural Development, Namibia 1995 National Agricultural Policy White Paper presented to parliament

<http://www.met.gov.na/Documents/nat%20agri%20policy.pdf>

The policy was presented as a White Paper to parliament October 1995. The aim is to provide an enabling environment for increased food production by smallholder producers, in order to improve employment opportunities, incomes, household food security, and the nutritional status of all Namibians. At the same time it aims to continue to support and strengthen the large-scale farming sector that contributes significantly to agricultural exports and food security as well as employing a substantial number of people. There is a focus on conservation of natural resources including water, which is increasingly a scarce resource in Namibia.

National Drought Task Force, Namibia 1997 National drought policy and strategy

<http://www.mawf.gov.na/Documents/app.htm>

The policy aims to replace *ad hoc* declaration of droughts and provision of relief with a long-term strategy that will enable farmers and communities to manage resources in such a way as to minimise the need for intervention to 'disaster droughts'. In other words

the plan is to move away from regular financial assistance provided by government to measures that support on-farm management of risk. Two of the eight major objectives of the policy are to preserve adequate reproductive capacity in livestock herds in affected areas during drought periods and to minimise the degradation of the natural resource base during droughts.

BACKGROUND/COMMENTARY AND OBSERVATIONS/REPORTS/PUBLICATIONS

Animal health, livestock production and trade in livestock products

Bamhare C & Bishi A 2006 Contingency plan for foot and mouth disease Updated November 2009 (Document obtained during site visit)

The contingency plan supports control of foot and mouth disease (FMD) outbreaks and maintenance of FMD free status. It makes provision for the application of either stamping out or vaccination or both but it is pointed out in the introductory section that stamping out is only practical in small outbreaks involving relatively small numbers of animals and that in practice vaccination will usually be part of the strategy.

Bishi A S & Kamwi J A 2008 Veterinary science, transboundary animal diseases and markets: pathways for policy in Namibia Transboundary animal disease and market access: future options for the beef industry in southern Africa Working Paper 4 Institute of Development Studies Brighton http://www.steps-centre.org/PDFs/VetScience_Working%20Paper%204.pdf

The paper provides an overview of the beef export industry and foot and mouth disease control in Namibia, with an emphasis on the exclusion of cattle producers in the Northern Communal Areas (NCA) from higher priced markets in spite of measures that have been taken to improve infrastructure, provide high grade abattoirs with a quarantine system that enables beef from the area to move out of it, and introduce technologies to improve productivity and move towards a more commercial type of production. The need to address this by transforming the NCA into a disease free zone by moving the veterinary cordon fence to the Angolan border is discussed. It is noted that by moving the fence to the border age-old trading customs will be disrupted.

Bishi A & Samkange A [no date] Lessons from FMD Outbreak in Kavango and Eastern Caprivi (Document obtained during site visit)

The document refers to the two outbreaks that occurred in November 2007 and October 2008 in East Caprivi and Kavango respectively. The previous outbreak in Kavango in the buffer zone occurred in 1992. Issues related to preventing and coping with an outbreak are discussed including efficacy of vaccination and movement control. Problems were identified in terms of both vaccine potency and vaccine delivery, while movement control was complicated by the need for animals to access shared watering points and the impossibility of preventing local movement that avoided road blocks. It was also estimated that farmers suffered severe financial losses as a result of inability to get the animals to markets and some form of compensation for loss of earnings was recommended.

**Anon 2010 Contingency plan for contagious bovine pleuropneumonia April 2010
Directorate of Veterinary Services, Ministry of Agriculture, Water and Forestry,
Namibia (Document obtained during site visit)**

The contingency plan has been developed mainly for an outbreak of contagious bovine pleuropneumonia (CBPP) in the free zone south of the cordon fence. CBPP is endemic in the Northern Communal Areas where there is uncontrolled movement of cattle across the Angolan border owing to ancient socio-cultural links between people on either side of the border. The contingency plan makes provision for movement control and stamping out without vaccination in order to regain free status as rapidly as possible. The plan also contains a strategy for control of an outbreak north of the cordon fence, which would entail more limited culling and ring vaccination to prevent spread.

**Dondona A C, Jago M, Lelli R, Marais A & Scacchia M 2010 Preliminary report of
transfrontier disease surveillance in free-ranging buffalo in the Caprivi Strip,
Namibia Veterinaria italiana 46: 267 – 275
http://www.izs.it/vet_italiana/2010/46_3/277.pdf**

The article describes the capture and sampling of the free-ranging buffalo and the preliminary results of the tick collections made. Buffalo were selected for the study because they are the major wildlife reservoir for foot and mouth disease in the area but they were sampled for other diseases of cattle (brucellosis, infectious bovine rhinotracheitis and contagious bovine pleuropneumonia) and for external and internal parasites. The capture operation and the foot and mouth disease investigation accounted for two thirds of the costs of the operation. The results of the sampling, apart from the tick identifications, were not available at the time of publication.

**Government of Namibia 2010 Media release from Cabinet Chambers 13/6/28
http://209.88.21.36.opencms/export/sites/default/gmnet/GRNpress/2010/download/Welwitschia_leased_for_Angolan_acoustic_fishery_survey.pdf**

The first item of the media release for the cabinet meeting held on 9 March 2010 was an update on emergency measures taken in response to the outbreak of foot and mouth disease in the Northern Communal Areas in 2007/2008. The measures included deployment of mobile electric fences as well as the erection of a permanent electric fence on the western frontier of the Bwa Bwata Game Park, with bush clearance for the fence cut line. The report noted that the audit by the European Union for Consumer Protection and Animal Health commended the Namibian authorities for their professional handling of the outbreak.

**Marais A 2009 Veterinary Council of Namibia: Registration of veterinarians and
veterinary para-professionals in Namibia. OIE Seminar, Arusha, Tanzania,
September 2009 <http://www.rr-Africa.oie.int/docspdf/en/2009/VSB/MARAIS.pdf>**

The presentation lists the pertinent legislation which will be superseded by a draft bill, the Veterinary and Veterinary Para-Professionals Bill. The conditions for registration are described and the statistics on the veterinary complement in Namibia provided. The presentation highlights problems that are experienced owing to the fact that Namibia does not have a facility for training veterinarians. More than half of the veterinarians registered in Namibia are not Namibian citizens, and some Namibian citizens have to do the Council Examination in order to register because they have graduated from faculties

that are not recognised under the law. Recommendations to improve the situation are provided.

Anon (not dated) Risk Analysis in Relation to the importation of beef from the Caprivi region of Namibia (Document obtained during site visit)

The risk analysis refers to the importation of beef into South Africa from the Caprivi abattoir, which is situated in the Northern Communal Areas outside the free zone. It provides an example of the recommended procedure for countries to undertake to evaluate the level of risk posed by imported products. In the risk analysis it is stated that the last foot and mouth disease outbreak in the area occurred in 2001. Since 2007 repeated outbreaks have occurred that would likely modify the conclusion that the beef would pose a negligible risk and in fact the abattoir has been closed as a result of the outbreaks.

Toto A 2009 An enhanced animal identification and traceability information system in Namibia. OIE Conference on Animal Identification and Traceability, Buenos Aires, Argentina, 24th March 2009 http://www.oie.int/eng/traceability-2009/documents/speakers_presentation/5.2.Toto.pdf

The presentation on the Namibian livestock identification and traceability system (LITS) provides an overview of the livestock industry in terms of cattle, sheep and goats, with the export statistics from 2005 – 2008. Figures are provided that show the Namibian share of extra-EU imports of beef. An account is given of the stakeholder consultation and the incentives that enabled the establishment of the system. There is a reference to www.namlits.com where more information can be obtained.

Toto A & Thalwitzer S [not dated, ca 2010] EU sanitary demands for red meat trade: impact on sustainable development in Namibia A summary policy brief http://www.iisd.org/tnk/pdf/rtea_namibia_red_meat.pdf

The policy brief discusses the importance of the beef export sector in the Namibian economy but warns against a mono-sectoral approach as adopted in the past and suggests that policy makers must ensure harmonisation between animal disease control, wildlife conservation and tourism and other appropriate land use options. The EU requirements for the red meat trade are considered to offer some advantages but also to be capable of impacting negatively on development. More participation by Namibia in standard-setting is urged.

Rural development, food security and land use

SADC 2008 Analysis of the Agricultural Technologies and Dissemination Situation in Namibia: Draft consultancy report, March 2008 <http://www.sadc.int/fanr/agricresearch/.../Namibia%20workshop%20report.pdf>

The document is the report on the situation analysis undertaken in Namibia to facilitate the designing of the SADC Multi-country Agricultural Productivity Programme (MAPP). It pertains to the entire agricultural sector and focuses on the need to improve productivity and income in the subsistence farming sector. In terms of livestock production, it notes that while commercial livestock production in good years accounts for more than 70% of agricultural total output, there is a need to improve the income from livestock production

in the Northern Communal areas, which are currently excluded from the main markets by the veterinary cordon fence. It is stated in the report that by 'upgrading the provision of animal health service and disease surveillance activities and (ii) intensifying joint disease control measures with Angola's veterinary service, the Northern Communal Areas (NCA) needs to be declared a disease free zone' (p. 17, 3.1.5). Expansion of beef exports to the NCA is seen as an opportunity to increase productivity in the area. Removal of the cordon fence to the Namibia/Angola border is cited as part of the strategy to declare the zone disease free [this does not form part of the current strategy for the disease free zone].

ZAMBIA

MINI-ABSTRACTS OF PDF DOCUMENTS: ZAMBIA

LEGISLATION

General (Indexes)

Anon 2006 Laws of Zambia Volume 1 Chronological table of proclamations, ordinances, acts and applied acts

<http://www.parliament.gov.zm/downloads/VOLUME%201.pdf>

The chronological table of Zambian legislation provides two indexes to the laws of Zambia as contained in 26 volumes. The first is the complete chronological list of laws according to date of publication and their current status. The second is an alphabetical subject index of current law indicating the chapter and volume where they are to be found.

Animal health, livestock production and trade in livestock products

***Agricultural Credits Act 23, 1995 and
Agricultural Credits (Registration) Regulations, Statutory Instrument 91 of 1996***

The purpose of the Act is to facilitate the borrowing of money on the security of charges created upon farming stock, additional assets or other agricultural assets and to provide for the registration of such charges. Farming stock includes domestic livestock and wild animals in captivity.

***Agricultural Products Levy Act 19, 1957 [as amended] and
Agricultural Products Levy (Cattle) Order, Federal Government Notice 245, 1959,
and Agricultural Products Levy (Withdrawal) Order, Statutory Instrument 47, 1966***

The Act provides for the payment and collection of levies on certain agricultural products including livestock if so designated and commodities derived from animals. A levy was placed on cattle by government order in 1959 and was withdrawn in 1966.

***Agriculture (Fertilisers and Feed) Act 51, 1966 [as amended by Act 13 of 1994] and
Agriculture (Farm Feed) Regulations, Statutory Instrument 197 of 1970***

The Act provides the requirements for quality assurance of fertilisers and animal feeds by provision of warranties and by laboratory testing. Provision is made for the regulation

and control of the manufacture, processing, importation and sale of agricultural fertilisers and farm feed and for minimum standards of effectiveness and purity. No fertiliser or farm feed may contain bone or any other substance derived from animal carcasses unless it has been sterilised in the manner prescribed by the Act and is certified to have been so sterilised in the prescribed manner. The same restriction applies to the importation of bone or other animal-derived material for use in fertilisers or farm feed. The purpose is to prevent such material from containing any pathogens. Methods for laboratory testing are prescribed.

Animal Health Act 27, 2010

The Act provides for the appointment of the Director responsible for veterinary services and other staff and defines their powers and functions; provides for the prevention and control of animal diseases; provides for the quarantine of animals; regulates the importation and exportation of animals, animal products, animal by-products, articles and animal feed; establishes the Animal Disease Control Fund; and repeals and replaces the Stock Diseases Act 1961. It replaces the Stock Diseases Act of 1961 as well as the Tsetse Control, Cattle Cleansing and Cattle Slaughter (Control) 1948 Acts.

Brands Act 12, 1913 [as amended]

The Act provides for the registration of brands and for a Registrar of Brands and Deputy Registrars. The definition of 'cattle' includes any domesticated eland or eland hybrid; 'horse' includes any domesticated zebra or zebra hybrid. This Act will be superseded when the new Bill on Animal Identification and Traceability becomes law.

Cattle Cleansing (Repeal) Bill, 2010

The Bill is a single page document repealing Cattle Cleansing Act 15 of 1930 and its subsequent amendments.

Cattle Slaughter (Control) (Repeal) Act, 2010 [not numbered]

The Act is a single page document repealing Cattle Slaughter (Control) Act 28 of 1959 and its subsequent amendments.

Control of Dogs Act 17, 1929 [as amended]

The Act amends and consolidates the law relating to the registration and control of dogs and the prevention of rabies. The definition of 'dog' includes 'any tame or partly tame carnivorous animal in captivity'. The Act authorises the destruction of dogs that are seriously diseased, suspected of rabies or stray; game guards, scouts of the Department of Wildlife, and forest rangers and guards are specifically listed as persons authorised to destroy dogs if necessary. This Act will be replaced by new legislation but there is no bill as yet as very wide stakeholder consultation is required.

Dairies and Dairy Produce Act 16, 1929 [as amended], Dairies and Dairy Produce Regulations, Government Notice 32, 1931 [as amended] and Dairy Produce Marketing and Levy Act 27, 1961 [as amended] and Dairy Produce Board (Establishment) Act 3, 1964 [as amended]

The legislation provides for establishment of a Dairy Produce Board and for the regulation and control of the production and trade of milk and dairy products.

Dairy Industry Development Act 22, 2010

The Act makes provision for the development of the dairy industry to benefit smallholder farmers and provide household food security, employment and poverty alleviation. Provisions are made for milk quality and safety. The only reference to animal health is that the board must assure access to efficient clinical services.

Pig Industry Act 28, 1959 [as amended] and Export of Pigs Act 24, 1925 [as amended]

The Pig Industry Act makes provision for the development of the pig industry including the imposition of levies and the grading of carcasses. The Export of Pigs Act makes provision for the export of pigs from Zambia.

Prevention of Cruelty to Animals Act 20, 1920 [as amended]

The Act provides for the prevention of cruelty to animals, specifies acts and omissions that amount to cruelty and penalties therefore, and prescribes the powers of police officers in cases of cruelty to animals. The definition of 'animal' includes any wild animal, fowl or bird in a state of captivity. Cruelty to wild animals e.g. in the course of poaching is not covered in this Act.

Public Pounds and Trespass Act 2, 1920 [as amended]

The Act provides for the impounding of strayed animals and their subsequent management and relocation or disposal, and the measures to be taken in the case of trespass by animals.

Stock Diseases Regulations, Government Notices 443, 1963; 497, 1964; 13, 1994

The Regulations, based on the Stock Diseases Act of 1961 as amended, remain in force until new regulations under the Animal Health Act have been developed. They make provision for veterinary districts, quarantine stations; importation of stock and specified articles; conditions of quarantine; disposal of carcasses; inoculation and branding; movement permits; manufacture and import of virus and vaccine. Specific regulations are provided for control of trypanosomosis, East Coast fever, and foot and mouth disease.

Tsetse Control (Repeal) Bill, 2010

The Bill is a single page document repealing Tsetse Control Act 35 of 1941 and its subsequent amendments.

Veterinary Surgeons Act 12, 1964 [as amended]

The Act provides for the registration of veterinary surgeons and for the regulation of the practice of the profession of veterinary surgery and medicine.

Pending legislation

Agriculture (Fertilisers and Feed) (Amendment) Bill, 2010

The Bill provides for a list of amendments to the Principal Act 51 as previously amended. All of the changes refer to fertilisers. *[Farm feeds are provided for under the new Animal Health Act].*

Animal Identification Bill, 2010

The bill is to become law before the end of 2010 if it has not done so already. In it captive wild species are included as domestic livestock but there is no legislation relating to non-captive wildlife.

Veterinary and Para-veterinary Professions Bill, 2010

The objectives of the Bill are to establish the Veterinary Association of Zambia; to continue the existence of the Veterinary Board of Zambia and to re-name it as the Veterinary Council of Zambia; to provide for the registration of veterinary and para-veterinary professionals and regulate their professional conduct; to provide for the licensing of laboratories and animal health facilities; to provide for the recognition and approval of training programmes for veterinary and para-veterinary professionals; and to repeal and replace the Veterinary Surgeons Act, 1964.

Biodiversity conservation and ecosystem/environmental health

Current legislation

Biosafety Act 10, 2007

One of the objectives of the Act is to ensure that activities involving the use of any genetically modified organism or product of a genetically modified organism will not have any adverse socio-economic impact or do harm to human or animal health or cause any damage to non-genetically modified crops, the environment or biological diversity, and to provide for liability and redress should any such damage occur. The Bill establishes the National Biosafety Authority and prescribes its powers and functions, and makes provision for the establishment of a Scientific Advisory Committee and institutional biosafety committees.

Environmental Protection and Pollution Control Act 12 of 1990, 13 of 1994 12 of 1999 and Statutory Instrument 20 of 1994, Act 13 of 1994: The pesticides and toxic substances regulations

The Act makes provision for proper disposal of effluents and wastes, registration and labelling of pesticides, prevention of air pollution, noise abatement, and natural resources conservation.

The Regulations for pesticides and toxic substances establish the withholding period for treated animals from slaughter for human consumption and also for grazing land treated with pesticides. They cover registration; labelling and packaging, general handling, use and safety, and storage and disposal.

Zambia Wildlife Act 1998

The Act makes provision for the establishment of the Zambia Wildlife Authority, for Community Resources Boards, for National Parks, for Game Management Areas, for game animals and protected animals, for licenses, for hunting of wild animals, for prevention of killing, wounding or molesting wild animals, for sale and transfer of wildlife animals and meat of wildlife animals, for import and export of wild animals, meat and trophies, and for enforcement, offences, penalties and forfeitures. It also provides the regulations for the Act.

Pending legislation

Environmental Management Bill, 2010

The objectives are to re-name the Environmental Council as the Zambia Environmental Management Agency; to provide for integrated environmental management and the protection and conservation of the environment and the sustainable management and use of natural resources; provide for the preparation of the State of the Environment Report, environmental management strategies and other plans for environmental management and sustainable development; to provide for the conduct of strategic environmental assessments of proposed legislation, policies, plans and programmes likely to have an impact on environmental management; to provide for the prevention and control of pollution and environmental degradation; to provide for public participation in environmental decision-making and access to environmental information; to establish the Environment Fund; to provide for environmental audit and monitoring; to facilitate the implementation of international environmental agreements and conventions to which Zambia is a party; and repeal and replace the Environmental Protection and Pollution Act, 1990.

Zambia Wildlife (Amendment) Act 2009 (draft)

The amendment makes provision for the establishment and management of Partnership Parks. A prohibition on domestic animals in Partnership Parks, with certain exceptions, is included.

ZAWA Draft Act 2008 (amended version)

The Act is intended to repeal the Zambia Wildlife Act of 1998. The provisions are substantially similar, with the addition of the establishment of bird and wildlife sanctuaries, a section on Community Partnership Parks, the management of wildlife in open areas, and to provide for the implementation of certain international conventions including the RAMSAR Convention. The purpose of the Community Partnership Parks is to conserve and restore 'the native elements of biodiversity and their underlying ecological structure for non-consumptive forms of recreation and environmental education'.

Rural development, food security and land use

Current legislation

Agricultural Lands Act 57 of 1960 [as amended]

The Act provides for the establishment of the Agricultural Lands Board, prescribes the composition and membership thereof, prescribes its powers and functions, and provides for tenant farming schemes. Under the definitions, “agricultural purposes” includes grazing and stock raising.

Fencing Act 19, 1949 [as amended]

The Act refers only to fences that divide properties of different owners and does not refer to fences erected for animal disease control purposes.

Lands Act 29 of 1995, Lands (Amendment) Act 20 of 1996

All land is vested in the President. The Act provides for the continuation of leaseholds and leasehold tenure, the continued vesting of land in the President and alienation of land by the President, the statutory recognition and continuation of customary tenure, the conversion of customary tenure into leasehold tenure, to establish a Land Development Fund and a Lands Tribunal, and to repeal previous legislation.

Lands Acquisition Act 2 1970 [as amended]

The Act makes provision for the compulsory acquisition of land and other property by the President in the interests of the country.

Water Act 34 1948 [as amended]

The Act consolidates and amends the law in respect of the ownership, control and use of water.

Pending legislation

Lands (Amendment) Bill, 2010

The objective of the bill is to repeal the provisions relating to the Lands Tribunal.

POLICY/STRATEGY

Animal health, livestock production and trade in livestock products

FAMIS/COMESA, 3rd February 2010 Zambia: Government to establish livestock disease-free zones. <http://famis.comesa.int/>

The press releases that a disease-free zone will be established later in 2010 and that feasibility studies are being carried out including on how the area can best be demarcated.

Government of Zambia 2010 President Rupiah Banda's Opening Speech to Parliament, 19th September 2010 <http://timeszambiapost.com/zambia-president-rupiah-banda-8217-s-speech-at-the-opening-of-parliament-22164.htm>

On page 4 of the speech under the heading Livestock the President announced the establishment of a new Ministry of Livestock and Fisheries, as well as the creation of a disease-free zone and the provision of new bills for veterinary and para-veterinary legislation.

The Post, 31st January 2010 Govt in process of creating a disease free zone
<http://www.postzambia.com/>

The news bulletin quotes from a report by the Permanent Secretary for Livestock and Fisheries, Professor Isaac Phiri, to the parliamentary committee on progress on the creation of the disease-free zone in Central and parts of Copperbelt and Lusaka Provinces. Activities included the creation/rehabilitation of laboratories, check points and a disease control and quarantine centre. While some necessary fencing was erected, after consultation with the World Organisation for Animal Health (OIE) it was decided that management systems other than fencing would be used. The amount of money made available for the creation of the zone was K23 billion.

Biodiversity conservation and ecosystem health

Ministry of Science, Technology and Vocational Training, Zambia (not dated) Biotechnology and Biosafety Policy [not dated but arises from ratifying the Convention on Biological Diversity in May 1993]
http://www.mstvt.gov.zm/index.php?option=com_docman&task=doc...

The policy is concerned with the safe and judicious use of biotechnology to improve Zambia's socio-economic and environmental well-being and outlines the measures needed to regulate, control and monitor the use and spread of genetically modified organisms to prevent any harmful effects on human or animal health or the environment and biological diversity.

ZAWA 2008 (Draft) Policy for National Parks and Wildlife in Zambia, June 2008
<http://www.zawa.org.zm/Downloadables/Draft%20Policy>

The policy recognises the responsibility of the government to conserve wildlife and that this might entail the conservation of entire ecosystems and special provisions for rare and threatened species. It makes provision for the sustainable use of wildlife through tourism as well as consumptive activities. National Parks, Game Management Areas and Partnership Conservation Areas are defined and described. The fact conservation activities may be more viable economically than other forms of land use in particular areas is recognised. A major aim of the policy is community participation and the beneficiation of Zambian citizens through wildlife conservation.

Ministry of the Environment and Natural Resources, Zambia, 1997 Preliminary First Draft National Report on the implementation of the Convention on Biological Diversity, Ministry of the Environment and Natural Resources, December 1997
<http://www.cbd.int/doc/world/zm/zm-nr-01-en.pdf>

The report lays the foundations for the National Biodiversity Strategy and Action Plan. The report recognises Zambia's dependence on its natural resources and admits that owing to a declining socio-economic situation there has been considerable degradation of natural resources, in particular forests, wildlife and fish. Among the contributors to loss of wildlife resources, tsetse control is cited. Zambian legislation for control of tsetse makes provision for destruction of wildlife and clearing of vegetation, although the former has been dropped from the pending draft legislation.

Ministry of the Environment and Natural Resources, Zambia (not dated) National Biodiversity Strategy and Action Plan [not dated but plan refers to 2000 – 2004]
<http://www.cbd.int/doc/world/zm/zm-nbsap-01-p1-en.pdf>

The plan was developed to comply with the requirement of the Convention on Biological Diversity for signatory countries to develop a Biodiversity Strategy and Action Plan. The aim of the BSAP is to provide for conservation of biological diversity at all levels and planning for the sustainable use of biological resources for the benefit of the population while ensuring their long-term conservation. The plan makes provision for the conservation of wildlife, forestry and water resources as well as crops and livestock. Tsetse control activities and conflict over land use including for livestock production are noted to be threats to biodiversity conservation. Conservation of indigenous genetic livestock resources is seen as part of biodiversity conservation.

Rural development, food security and land use

Times of Zambia 2010 Zambia: Government Agro Vision to focus on food security 30 August 2010 <http://allAfrica.com/stories/201008310071.html>

The press release states that the government aims to support increased and sustainable production in the fisheries, crop and livestock sectors. Particular support will be given to the fisheries and livestock sectors. The main focus is on conservation of fisheries resources as well as support for aquaculture. Livestock activities mentioned are the improved control of diseases as well as re-stocking and improving production. While the emphasis is on smallholder farmers, large-scale commercial farming is also to be encouraged and the synergies between the two sectors improved.

Ministry of Agriculture and Co-operatives, Zambia, 2004 National Agricultural Policy (2004 – 2015) <http://www.acf.org.zm/pdf/NAP2004-2015.pdf>

The policy recognises the importance of livestock production in Zambia. Problems in the sector include low productivity, particularly in the traditional sector, which has poor access to services and markets; environmental degradation due to poor husbandry practices (overgrazing) and improper effluent disposal; and loss of indigenous biodiversity due to indiscriminate cross-breeding and disease. The overall objective is to improve the productive efficiency of the livestock sub-sector in a sustainable manner, support the marketing of livestock and livestock products and contribute to food security and income. Specific objectives include improving animal health through better disease

control and more producer participation in control programmes, improving animal production and extension through training and awareness, promotion of small stock production, quality control and water provision, and carrying out the necessary research to support the livestock sub-sector. There is an emphasis on strengthening and updating legislation.

PROJECTS

Animal health, livestock production and trade in livestock products

IFAD 2005 International Fund for Agricultural Development (IFAD) Smallholder Livestock Investment Project 2005: Report and Recommendation of the President to the Executive Board on a proposed loan to the Republic of Zambia for the Smallholder Livestock Investment Project , 86th session, Rome, 12 – 13 December 2005 <http://www.ifad.org/gbdocs/eb/86/e/EB-2005-86-R.21-REV-1.pdf>

The aim of the project is to control contagious bovine pleuropneumonia (CBPP) and East Coast fever (ECF) to ensure restoration of draught power and manure as well as cattle for production. Heavy losses as a result of the two diseases had left many smallholder farmers with few or no cattle, and they were thus deprived of draught power for their agricultural activities. The strategy was to strengthen animal health service delivery and ability to control and manage the two diseases, with a view to eradicating CBPP. It supports research to improve management of ECF and the aim is also to eventually attain full cost recovery for the interventions from the farmers. A loan of 7 million USD was approved.

European Development Fund 2009 Technical Cooperation Facility (TCF) III – (FED/2009/021-433) http://ec.europa.eu/documents/aap/2009/af_aap_2009_zmb.pdf

The project provides European Commission funding for development in the livestock sector including funding support for establishment of disease free zone and study for animal traceability. Specific interventions will be preparatory studies and training and awareness campaigns for the establishment of the disease free zone, with a view to prepare a more substantial programme that will support Government's efforts to develop the export potential sector.

World Bank 2010 Project Information Document: World Bank Livestock Development and Animal Health Project Report No AB5873
http://www.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/07/21/000020953_2010072113.pdf

The project, for which approval is expected in September 2011, focuses on the improvement of productivity of key livestock production systems for targeted smallholder producers in identified areas and the improvement of the safety of meat and milk products in slaughterhouses, markets and milk collection centres supported by the project. The specific objectives are to increase the yield of targeted production systems by participating smallholder producers in the target areas; to decrease the incidence of key animal diseases in the project areas; and to build the capacity of the animal health system and the veterinary services. The intention is to roll out the project in the Eastern, Southern and Western Provinces and the designated disease free zone if financially feasible.

Biodiversity conservation and ecosystem health

World Bank 2007 Zambia: Support for Economic Expansion and Diversification (SEED) Project, 2007 Data sheet

http://www.worldbank.org/external/default/WDSP/IB/2007/06/26/000090341_2007062614.pdf

The project aims to improve the business environment for sustainable tourism in the Greater Livingstone area and the gemstone sector. The Global Environment objective is to reverse biodiversity erosion in the Kafue and Mosi-oa-Tunya National Parks, i.e. to improve the security of critical habitats and wildlife species in the two national parks. The project was initiated in 2004 and the document reflects a revision of the project objectives and components for the remainder of the project and a time extension into 2011. The necessary actions for Mosi-oa-Tunya were completed during the initial phase of the project and the focus would therefore be on Kafue National Park to build capacity for ZAWA to manage the park.

ZAWA [not dated] Research and monitoring programme for Kafue National Park and adjacent game management areas

http://www.zawa.org.zm/Downloadables/RESEARCH_PLAN%5b1%5d.rev_fxm2.pdf

The objective of the programme is to facilitate scientific studies designed to provide solutions to wildlife management problems in Kafue National Park and the adjoining game management areas. The programme document was prepared with assistance from the World Bank under the Support to Economic Expansion and Diversification (SEED) project and the Royal Norwegian Government.

Rural development, food security and land use

World Bank (not dated) The World Bank Group in Zambia [not dated] Accelerating and sharing growth through improved competitiveness

http://siteresources.worldbank.org/INTZAMBIA/Resources/Zambia_Brochure_V3

The document describes the World Bank's Country Assistance Strategy for Zambia for 2008 – 2011. Assistance to Zambia includes contributions to infrastructure (roads, energy and water), health, education, improving agricultural productivity and improving financial management and private investment. Under the Support for Economic Expansion and Diversification (SEED) Project rehabilitation has been carried out in Mosi-oa-Tunya National Park and work to build capacity and improve management in Kafue National Park is ongoing.

BACKGROUND/COMMENTARY AND OBSERVATIONS/REPORTS/PUBLICATIONS

Animal health, livestock production and trade in livestock products

Hichaamba M, Haantuba H & Nawiko M 2007 Small scale producers in modern agri-food markets, Information sheet, Regoverning Markets,

www.regoverningmarkets.org

Livestock production is an important economic activity in Zambia but it is hampered by animal diseases and low production, particularly in the traditional sector. The information

sheet gives a useful overview of beef marketing chains in Zambia and mentions that an insignificant amount of beef is exported, but exports are severely restricted by the presence of diseases.

Lungu J C N 2003 Animal genetic resources policy issues in Zambia Workshop Meeting to strengthen capacity for developing policies affecting generic resources, Rome, Italy, 5 – 7 September 2003 <http://www.eli.org/pdf/africa/lungu.pdf>

The paper provides a useful overview of the importance of livestock production in terms of sustainable livelihoods and food security in Zambia and the constraints facing small scale livestock producers in terms of animal diseases, low productivity and barriers to trade. Livestock production is of considerable importance and has increased because crop production has reduced owing to lack of suitable animals to provide traction. Productivity is generally low as a result of poor management, little available finance, lack of access to veterinary services and use of unsuitable breeds that are unable to survive under harsh conditions. Animal health constraints include theileriosis, particularly Corridor disease¹ and Newcastle disease. Smallholder livestock producers are becoming more market orientated as they are required to pay for services but although there are potential export markets they are excluded from these by non-tariff trade barriers largely due to animal diseases. There is also lack of infrastructure and market information. Conservation and utilization of indigenous genetic resources and improving market access and access to animal health services are policy issues that need to be addressed.

Mudenda D 2005 Zambia's trade situation: implications for debt and poverty reduction Debt and Trade Project, Jesuit Centre for Theological Reflection, Lusaka www.jctr.org.zm/downloads/tradesitu0707.pdf

The main conclusions from the study are that debt, trade and poverty are strongly linked; that Zambia's main comparative or competitive advantage in non-traditional exports lies mainly in the agriculture sector, and that full trade reciprocity with the European Union will be very costly for Zambia. It recommends that there should be a strong lobby for fair trade. The report provides a useful overview of trade in Zambia and the factors that constrain it, and point out that in order to improve export trade better negotiating capacity needs to be developed. In a SWOT analysis of NGOs currently involved in trade, a single threat is identified: The fact that government is the final authority on trade issues.

Sinyangwe P G, Clinch N J L 2003 Increasing the efficiency of livestock service delivery – the experience of the livestock sector in Zambia. In Sones K, Catley A (eds) Primary Animal Health Care in the 21st Century: Shaping the Rules, Policies and Institutions, International Conference held in Mombasa, Kenya, 15 – 18 October 2002. Theme Two: Sustainability and Privatisation http://www.eldis.org/fulltext/cape_new/mombasaconference/Sinyangwe&Clinch_IncreasingEfficiency.pdf

The attempt to move towards privatisation of veterinary service delivery is described. The change has been part of an effort to move from a state monopoly to a liberalised market with greatly increased participation of the private sector. Although policy reforms

¹ East Coast Fever and Corridor Disease are often used interchangeably in Zambia

have supported privatisation of veterinary services in order to provide a more cost-effective animal health service to producers, in practice very little has changed, there has been no improvement in service delivery and both the producers and the service providers are disillusioned. Fear of retrenchment on the part of public servants and resentment at being expected to pay for some of the animal health services that have traditionally been free are major obstacles to change. The prevailing economic climate is also not conducive to change. At a technical level a shift to a sanitary mandate set up with longer term contracts is crucial, with a higher emphasis on community activities. More cost effective services will only be achieved through a wide range of improvements in service delivery.

World Bank/USAID 2006 Zambia: SPS management Recommendations of a joint World Bank/USAID Assessment Team, 12 July 2006

http://vle.worldbank.org/bnpp/files/TF03504zambia_summary_final_11Jul.pdf

Inability to comply with sanitary and phytosanitary requirements has been recognised as placing restrictions on Zambia's ability to trade in agricultural products. As far as trade in livestock and livestock products are concerned, SPS requirements include veterinary drug residue limits and microbiological standards (food safety), disease free zones, disease surveillance, restrictions on veterinary drugs and animal traceability, as well as codes for organic practices and certification and disposal of animal waste. The report notes that livestock production is hampered in Zambia by a number of serious diseases, which affect commercial producers less on account of better control. Exports are mainly confined to day-old chicks and hides and skins. While Zambia shows an interest in exporting beef to South Africa, the 2006 report suggest that although there might be 'a modest potential in the future' for such export, which would require disease free zones as well as improved abattoirs, attention should focus on improving animal health for the sake of improving income from local markets. A feasibility study would be needed to determine whether investment to enable beef export would be worthwhile.

Biodiversity conservation and ecosystem health

Fernández A 2010 Wildlife conservation in Zambia Impact of game management areas on household welfare, Master of Science Thesis, Michigan State University

http://www.aec.msu.edu/fs2/zambia/fernandez_ms.pdf

The research explores the impact of wildlife conservation policies on the welfare of communities living in Game Management Areas. The study confirmed that living in a Game Management Area increased household income through extra opportunities for both wage labour and self employment, and this effect was most significant in well stocked (prime) Game Management Areas. Wealthier members of the community benefited more than poorer members. While it was evident that the policy could contribute to poverty reduction, a note of caution was sounded that the significantly higher crop damage experienced in Game Management Areas was a negative factor that needed to be addressed because negative perceptions about wildlife would reduce the enthusiasm of the communities for conservation.

Fernández A, Richardson RB, Tschirley D & Tembo G 2009 *The impacts of wildlife conservation policies on rural household welfare in Zambia. Policy Synthesis, Food Security Research Project – Zambia Ministry of Agriculture and Cooperatives, Agricultural Consultative Forum and Michigan State University No 33* <http://www.aec.msu.edu/agecon/fs2/zambia/index.htm>

The policy brief reflects the conclusions of the thesis that gives a full description of the study, namely that well-stocked Game Management Areas do increase household income in communities, but only significantly in the wealthier 40%, and that damage to crops can increase poverty in the poorer sector of the community. Policy changes are therefore required to mitigate the negative effects of this conflict because the sustainability of the areas depends on the commitment of communities to conserving wildlife.

Lungu R M 2008 *Implementation of Zambia's National Biodiversity Strategy and Action Plan. NBSAP Workshop Rustenburg, South Africa, 21 February 2008* <http://www.cbd.int/doc/meetings/nbsap/nbsapcbw-seafr-01/other/nbsapcbw-seafr-01-zm-nbsap-en.pdf>

The power point presentation delivered at the NBSAP Workshop in Rustenburg, South Africa, in February 2008 describes the implementation of Zambia's National Biodiversity Strategy and Action Plan. Priority needs and strategic goals for biodiversity management were identified. Structures for implementation were identified including an inter-ministerial steering committee. Various initiatives were undertaken including the reclassification of protected areas, formulation of the national policy on environment, and community based natural resources management. Challenges to implementation are difficulty in forming public/stakeholder partnerships, integrating biodiversity issues into other policies e.g. poverty reduction, and difficulty of sustaining biodiversity conservation activities owing to the fact that they are largely project driven. The lessons learned were the key role of stakeholder participation, the need for a coordinated approach, and the fact that reliance on donor funds for implementation is not sustainable.

Metcalfe S, Kepe T 2008 *Your elephant on my land: The struggle to manage wildlife mobility on Zambian communal land in the Kavango-Zambezi Transfrontier Conservation Area. Journal of Environment and Development 17: 99 – 117* (Accessed via University of Pretoria library)

The interface conflict is discussed in terms of crop destruction by elephants on Zambian communal land. The authors conclude that an equitable resolution of the problem is unlikely unless policy reform and changes to the organizational arrangements in the communal areas allow for community – private sector business contracts and relationships.

Tembo G, Bandyopadhyay S & Pavy J-M 2009 *Impact of natural resource conservation policies on household consumption around Zambian national parks Policy Synthesis, Food Security Research Project – Zambia Ministry of Agriculture and Cooperatives, Agricultural Consultative Forum and Michigan State University No 35* <http://www.aec.msu.edu/agecon/fs2/zambia/index.htm>

The study concluded that in the Game Management Areas around the parks there are benefits to participating communities but in general the richer members of the

communities benefit much more than the poorer ones, who are sometimes worse off due to issues like crop destruction.

Rural development, food security and land use

Anon 2006 Observing poverty reduction: A compilation of participatory poverty assessment summary reports 2002 – 2005, 2006 Civil Society for Poverty Reduction Secretariat, Zambia www.csrp.org.zm

The study notes the importance of livestock and the fact that wealth is measured in livestock possession.

Zambia Vulnerability Assessment Committee, 2009 In-Depth Vulnerability and Technical Needs Assessment Report
http://www.preventionweb.net/files/11734_1173020092VACIndepthAssessmentReport.pdf

The report reflects the findings of a survey to evaluate the effects on income, nutritional status and human health of 2008/2009 flooding in a number of districts in Zambia. The report notes that livestock production, in particular cattle production, is a major livelihood activity among small scale farmers, with most production occurring in the Western, Southern and Central Provinces. In the prevailing farming systems, livestock normally acts as a form of insurance against poor weather (drought or floods) and subsequent crop failure. However, outbreaks of disease, in particular foot and mouth disease (FMD), contagious bovine pleuropneumonia (CBPP) and East Coast fever (ECF) severely disrupt cattle production, and bans on movement disrupt trade, affecting farmers, beef traders and consumers. The farmers' vulnerability to drought and floods is exacerbated by these disruptions to the cattle trade, which is one of their most reliable sources of income. It also affects access to draught power. Outbreaks of FMD in some districts of the southern province following floods in early 2008 were attributed to increased wildlife/cattle contact when the cattle moved from their traditional grazing lands into the upland forests to escape the flooding. Movement bans were imposed but examination of cattle prices between December 2008 and May 2009 showed that they either rose or remained stable, indicating that owners were not desperate to sell, and goat prices showed the same trend. No formal recommendations with regard to livestock were made but in the introductory section where the livestock diseases were discussed it was recommended that vaccination should be carried out effectively and timeously to prevent outbreaks.

ZIMBABWE

LEGISLATION

Animal health, livestock production and trade in livestock products

Agricultural Products Marketing Act 10 of 1997 [as amended]

The Act provides for the establishment of a fund for the development of the agricultural industry and the administration and disbursement of the monies therein; the imposition and collection of levies on producers, buyers and processors of agricultural products; the fixing of standards of quality and other matters relating to agricultural products produced in Zimbabwe. It amends the Dairy Act and repeals the Agricultural Marketing Act, the Dairy Produce and Marketing Levy Act and Chapter 18.06 of the Cold Storage Commission Act, among others.

Agricultural Products Marketing (Livestock) (Carcass Classification and Grading) Regulations, Statutory Instrument 182, 2000

Provision is made for the classification and grading of cattle carcasses and the grading of sheep and goat carcasses, as well as the marking of carcasses and the sale of ungraded carcasses.

Animal Health Act No 5 of 1960 [as amended]

The Act provides for the eradication and prevention of the spread of animal pests and diseases in Zimbabwe and for the prevention of the introduction into Zimbabwe of animal pests and diseases. Sections 15 and 16 refer to the power to destroy wild animals if necessary for disease control and to erect veterinary fences.

Animal Health Act Subsidiary Legislation (Statutory Instruments)

The subsidiary legislation consists of regulations and amendments to regulations related to anthrax; branding of cattle; cattle cleansing; destruction of buffalo; foot and mouth disease; game carcasses; general regulations (specifying notifiable diseases); import; movement of game animals, cattle and pigs; Newcastle disease; poultry; quarantine areas; rabies; specified animals, diseases and pests; stock register; theileriosis; trypanosomosis; tsetse fly; and vehicle sanitisation.

Brands Act (Ord. 4 of 1900) [as amended]

The Act amends previous legislation and makes provision for the branding of stock.

Brands Act Subsidiary Legislation (Statutory Instruments)

The subsidiary legislation consists of the Regulations and a Notice. The regulations provide specifications for brands. They prohibit the use of a hot brand on any sheep or goats and on cattle and horses younger than 6 months of age, which must be tattooed instead. Previous regulations under the Brands Act are repealed. The notice specifies types of brands that are not considered brands within the meaning of the Act.

Cold Storage Commission Act 9 of 1960 [as amended]

The Act provides for the establishment of a commission for the purpose of operating abattoirs, refrigerating works and factories; to control the export of chilled and frozen beef; to regulate the sale, distribution, consignment and delivery and to provide for the grading of carcasses of certain livestock; to provide for the fixing of the prices to be paid for certain livestock delivered to the works of the commission.

Cold Storage Commission (Registration of Abattoirs) Regulations, Statutory Instrument 37, 1993

The Regulations provide for the registration of abattoirs and prohibit the operation of non-registered abattoirs.

Control of Goods Act Revised Edition 1996

The Act enables the President to provide by regulation for the control of the distribution, disposal, purchase and sale, and the wholesale and retail prices, of any manufactured or un-manufactured commodity or of any animal or poultry specified by the President by order or of any class of any such commodity, animal or poultry, for the control of imports into and exports from Zimbabwe.

Control of Goods Act Subsidiary Legislation (Statutory Instruments)

The subsidiary legislation consists of statutory instruments that regulate the distribution of beef within the country, import and export of livestock and livestock derivatives, and the import and export of wildlife and wildlife derivatives². A wide range of goods not covered by licence including wild animals and their derivatives is specified. The importation, distribution, disposal, purchase or sale of livestock hormones as specified is prohibited, with the exception of veterinarians for therapeutic use only.

Dairy Act 28, 1937 [as amended]

The Act provides for the regulation of production and sale of dairy products in Zimbabwe.

Factories and Works Act Revised Edition 1996

The Act provides for the registration and control of factories, the regulation of conditions of work in factories, supervision of the use of machinery, and precautions against accident to persons employed on structural work. Abattoirs are included in the Act.

Fertilizers, Farm Feeds and Remedies Act Revised Edition 1996

The Act provides for the registration of fertilizers, farm feeds, sterilizing plants and certain remedies; regulates and restricts the importation and sale of fertilizers, farm feeds and certain remedies, and substances of animal origin intended for the manufacture of fertilizers or farm feeds.

² A section referring to inspectors is corrupted

Fertilizers, Farm Feeds and Remedies Act, Subsidiary legislation (Statutory Instruments)

The fees for registration and renewal of registration for fertilizers, farm feeds and remedies are specified. The feeding of ruminant by-products to ruminants is prohibited. In 2001 the definition of ruminant, for the purposes of the regulations, is changed to 'any cloven-hoofed cud-chewing animal'.

Meat Statistics Regulations 1968 (Federal Act 10/55)

The Regulations make provision for the collection of statistics related to the slaughter statistics for a range of specified domestic and captive wild animals.

Pig Industry Act 28 of 1959 [as amended]

The Act makes provision for the establishment of a Pig Industry Board to regulate and develop the pig industry.

Prevention of Cruelty to Animals Act 5 1960

The Act 'amends and consolidates' previous legislation and makes provision for a wide variety of situations but does not cover the slaughter of animals in abattoirs.

Prevention of Cruelty to Animals Amendment Act 22 1983

Amendments to the Prevention of Cruelty to Animals Act 5 1960 are detailed. The Act makes provision for the prevention of cruelty to animals during the slaughter process as well as for animals that are exhibited and captive wild animals.

Produce Export Act Ord. 4 1921 [as amended]

The Act provides for the grading of agricultural produce (including produce derived from animals) and any such processed produce which is to be exported from Zimbabwe for the purpose of sale, for the prohibition and regulation of the methods of processing for the prohibition and regulation of the export of such produce.

Produce Export Act Subsidiary Legislation (Statutory Instruments)

The subsidiary legislation consists of three statutory instruments. The Regulations of 1984 provide for the registration of export establishments, the requirements in respect of construction and facilities for export establishments, the handling and humane slaughter of animals including stunning and bleeding, the handling, dressing and inspection of carcasses and by-products, the packing, marking, storage and transport of carcasses, the health and hygiene requirements of personnel and the cleaning and disinfection of the facility, and poultry slaughter and hygiene. An amendment in 1990 provides for all meat products destined for export to be identified with a health mark and to be accompanied by a veterinary health certificate³. Regulations in 1995 relating to animal and bird slaughter and meat hygiene

³ The document is partially corrupted but mostly legible

Public Health (Abattoir, Animal and Bird Slaughter and Meat Hygiene) Regulations, Statutory Instrument 50, 1995

The Regulations make similar provision for all abattoirs as those made for export establishments in 1984.

Public Health (Port Health) Regulations, Statutory Instrument 121, 1995

The Regulations are mainly concerned with human health but provision is made for the sanitary disposal of materials such as food waste and the control of pests and vectors.

Scientific Animal Experiments Act 17, 1963

The Act makes provision with respect to the regulation of the performance, for the purposes of scientific research and higher education, of painful experiments on living vertebrate animals. Painful experiments are excluded for the purpose of training

Stock Remedies Regulations, Rhodesia Government Notice 11, 1977 and Stock Remedies (Amendment) Regulations (No. 1), Rhodesia Government Notice 47, 1978

The Regulations provide for the registration and control of stock remedies; the definition of stock remedy in the Regulations is amended in 1978 by deletion of "and any substances dispensed or which may be supplied by a veterinarian only on prescription".

Stock Theft Act 21, 1959

The Act provides for matters related to stock theft, which includes the theft of uncooked produce from stock, and stipulates the keeping of registers by butchers and dealers in hides and skins.

Stock Trespass Act 6, 1991

The Act provides for the protection of land and property against trespass by stock, for the impoundment of trespassing stock and the disposal of stock that has been impounded.

Veterinary Surgeons Act 36 of 1973

The Act provides for the establishment of a Council of Veterinary Surgeons, for the registration of veterinary surgeons, and for the regulation of the practice of the profession of veterinary surgery and medicine in Zimbabwe.

Veterinary Surgeons Act Subsidiary Legislation (Statutory Instruments)

The subsidiary legislation consists of six statutory instruments, four of which are amendments that refer to fees payable. The Regulations of 1974 provide for the registration, temporary registration and suspension of registration of veterinary surgeons. In regulations of 1990 The degree of Bachelor of Veterinary Science from the University of Zimbabwe is recognised as an acceptable qualification for registration

without the need to pass the local examination set by the Council of Veterinary Surgeons.

Biodiversity conservation and ecosystem/environmental health

Environmental Management Act 13, 2002

The purpose of the Act is to provide for the sustainable management of natural resources and protection of the environment; the prevention of pollution and environmental degradation; the preparation of a National Environmental Plan and other plans for the management and protection of the environment; the establishment of an Environmental Management Agency and an Environment Fund; to amend references to intensive conservation areas and committees and associated matters in various Acts; to repeal earlier legislation (four acts relating to natural resources, atmospheric pollution, hazardous substances and articles, and noxious weeds).

Parks and Wildlife Act 14, 1975 [updated]

The Act establishes a Parks and Wild Life Board, confers functions and imposes duties on the Board, provides for the establishment of national parks, botanical reserve, botanical gardens, sanctuaries, safari areas and recreational parks, makes provision for the preservation, conservation, propagation or control of the wild life, fish and plants of Zimbabwe and the protection of her natural landscape and scenery, confers privileges on owners or occupiers of alienated land as custodians of wild life, fish and plants, and gives certain powers to intensive conservation area committees.

Protection of Wildlife (Indemnity) Act 21, 1989

The purpose of the Act is to indemnify and protect certain persons against criminal liability in respect of acts or things advised, commanded, ordered, directed, or done or omitted to be done by them in good faith for the purposes of or in connection with the suppression of the unlawful hunting of wildlife. Persons eligible to be indemnified are the Director, employees and honorary officers of National Parks and Wildlife Management, police officers and members of the armed forces, and anybody else designated by the President.

Trapping of Animals (Control) Act 34, 1973, Revised Edition 1996

The Act provides for control, restriction and regulation of the making, possession and use of certain traps for the purpose of trapping animals, and controls the sale and disposal of certain animals.

Rural development, food security and land use

Fencing Act 45, 1976 [updated]

The Act refers to dividing fences and does not cover veterinary cordon fences.

POLICY/STRATEGY

Biodiversity conservation and ecosystem health and Rural development, food security and land use

Ministry of the Environment and Natural Resources, Zimbabwe 2010 Wildlife Based Land Reform Policy Draft 4, 4th May 2010 [Document obtained during site visit]

The purpose of this policy is to provide guidelines on the progressive development of conservancies in Zimbabwe, and to encourage local participation in all aspects of the sector. This policy also aims to promote the sustainable use of wildlife as a resource, to ensure that all wildlife based resources are fully utilized to achieve their greatest sustainability and profitability. To encourage both Zimbabwean and foreign participation in the wildlife and other related sectors and to highlight that although wildlife is a national resource it is also a global heritage and hence there is need to preserve our wildlife for future generations.

BACKGROUND/COMMENTARY AND OBSERVATIONS/REPORTS/PUBLICATIONS

Animal health, livestock production and trade in livestock products

Purchase N & Foggin C 2006. Veterinary considerations for the Kavango-Zambezi TFCA - Zimbabwe's perspectives, Prefeasibility Study of the proposed Kavango-Zambezi Transfrontier Conservation Area, Final Report, Annexes, Volume 2, Annex C [extracted as binder from original volume]

The document is an outline of the current situation with regard to animal disease control and what additional requirements there will be if the KAZA TFCA is established. It suggests that increased wildlife/livestock interaction will occur and will lead to more disease transmission with possible introduction of new diseases. This will require intensified disease surveillance and additional fences.

Sibanda R 2008 Market access policy options for FMD-challenged Zimbabwe: a re-think. Transboundary animal disease and market access: future options for the beef industry in southern Africa Working Paper 6 Institute of Development Studies Brighton http://www.steps-centre.org/PDFs/VetScience_Working%20Paper%206.pdf

The paper provides an overview of the beef industry in Zimbabwe from its historical development and the factors that led to suspension of its export trade to the European Union to the current situation, where informal trade locally and to the region accounts for revenues from trade in meat. The question is raised whether the resources needed to establish zones free of foot and mouth disease in order to resume export trade will ever be available again and what alternative options Zimbabwe has for trade in animal products.

REGIONAL, INTERNATIONAL, GENERAL

REGIONAL BODIES (AFRICA)

AFRICAN UNION – INTERNATIONAL BUREAU FOR ANIMAL RESOURCES (AU-IBAR)

Animal health, livestock production and trade in livestock products

AU-IBAR 2009 Strategic Plan – Executive Summary 2010 – 2014 <http://www.au-ibar.org/index.php/en/knowledge/publications/sp?format=pdf>

The mandate of AU-IBAR is to 'support and coordinate the utilization of animals (livestock, fisheries and wildlife) as a resource for human wellbeing in the Member States of the African Union and to contribute to economic development'. Two specific areas of the mandate are the control and possible eradication of transboundary animal diseases and improving the management of the animal resources and the environment on which they depend. A focus area is to 'translate technical recommendations into national, regional and continent-wide policies and practices'. There are six programmes of which the first is to reduce the impact of transboundary diseases and zoonoses on livelihoods and public health. The second programme focuses on conservation of biodiversity.

AU-IBAR 2004 Pan African Animal Health Yearbook 2003 <http://www.au-ibar.org/index.php/en/knowledge/index.php...>

The yearbook provides information and statistics about outbreaks of disease among animals, including wildlife, that were reported to the organisation in 2003. There is also an analysis of the level and accuracy of reporting. The role of livestock in the economy of African countries is described. There are graphs showing the contribution of livestock to agricultural GDP in the member countries as well as the percentage of the population engaged in the livestock sub-sector. An update on the progress of rinderpest eradication is provided.

AU-IBAR 2009 Pan African Animal Health Yearbook 2008 <http://www.au-ibar.org/index.php/en/knowledge/index.php...>

The 2008 edition of the yearbook is devoted to animal disease information, both general and specific. Progress on rinderpest eradication is updated.

COMMON MARKET FOR EASTERN AND SOUTHERN AFRICA (COMESA)

Animal health, livestock production and trade in livestock products

COMESA 2009 Regulations on the application of sanitary and phytosanitary measures http://about.comesa.int/attachments/062_SPS%20Regulations-%20Adopted%20by%20Council%20-FINAL.pdf

There are 27 regulations. The principles do not differ from those of the WTO SPS agreement, but the regulations make provision for the institution and maintenance of the

COMESA 'Green Pass' system of certification which will enable agricultural products to be traded freely between member countries.

COMESA 2007 Report on the workshop on non-tariff barriers. First Workshop on the Development of a Monitoring Mechanism for the Elimination of Non-Tariff Barriers to Trade, Nairobi, 27 – 28 June 2007 CS/TCM/NTBS/1/2⁴
<http://ntb.africonnect.com/media/ntbworkshop.pdf>

Sanitary and phytosanitary measures (SPS) had been identified as one form of non-tariff trade barrier. The workshop focused on developing an action plan for the elimination of non-tariff barriers to intra-regional trade. Agricultural products were one of the focus areas.

COMESA 2007 Final report on the first meeting of COMESA enquiry points for non-tariff barriers, Blantyre, Malawi, 27 – 29 September 2007, CS/TCM/NTBS/1/8⁵
<http://ntb.africonnect.com/media/ntbblantyre.pdf>

The workshop examined non-tariff barriers applied in the region and made recommendations on how to eliminate them. It was noted that there was a low level of reported misuse of sanitary and phytosanitary measures as a non-tariff barrier to trade and the period for their elimination was determined to be medium to long term, as it required policy review, capacity building and harmonization of standards.

PACAPS 2008 Commodity-based trade in livestock products – New opportunities for livestock trade in the COMESA region. COMESA CAADP Policy Brief No 1
[http://www.nepad-caadp.net/pdf/COMESA%20CAADP%20Policy%20Brief%201%20Livestock%20Commodities%20\(2\).pdf](http://www.nepad-caadp.net/pdf/COMESA%20CAADP%20Policy%20Brief%201%20Livestock%20Commodities%20(2).pdf)

Commodity-based trade is explained in simple terms to assist decision-makers to understand and accept the principle and take it further with stakeholders. The brief explains how it can be used to overcome the problems posed by the necessity to prove area freedom from certain diseases before products originating in those areas are considered safe to trade.

Rural development, food security and land use

COMESA (not dated) COMESA Agricultural Programmes
http://programmes.comesa.int/index.php?view=article&id=23%3Acomesa-agricultural-programmes&format=pdf&option=com_content&itemid=16&lang=en

The document emphasises the importance of agriculture in the COMESA region. The agricultural programmes are in line with the Comprehensive African Agriculture Development Programme (AU – NEPAD). The whole range of agricultural production is included in the various programmes, among which there is also an Action Plan for the Environment.

⁴ Marked Distribution limited but available on the COMESA web site

⁵ Marked Distribution limited but available on the COMESA web site

SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC)

Animal health, livestock production and trade in livestock products

Hoffmann J A H 2007 Fostering trade through Private – Public Dialogue Expert Meeting on SADC – EPA Negotiations, 11 – 12 June 2007, Stellenbosch, South Africa http://www.intracen.org/btp/wtn/expert_meetings/south_africa/hoffmann2.pdf

Salient matters raised in the context of compliance with SPS measures as required in order to export agricultural products to the EU are:

- Application of the “precautionary principle” e.g. Namibia only being able to export de-boned meat to the EU
- Down-grading of countries’ disease status to that of their trading partners in the region that will occur if SADC becomes a free trade area
- High costs of compliance to both the public and private sectors – several countries with a preferential quota under the Cotonou Agreement could not take advantage of this because it was not cost-effective
- Commercial producers (in Namibia) have been able to comply with ever more stringent measures and in some cases this has resulted in better production with higher off-take as well as job creation, but small scale producers are usually excluded from high value markets because they cannot attain the necessary management level
- SPS measures are not intended to impede trade but in practice this often happens

Imani Development for Regional Trade Facilitation Programme (RTFP), 2007 Final Report: 2007 update survey of non tariff barriers to trade: Botswana <http://ntb.africonnect.com/media/botswana.pdf>

The report states that Botswana did not place any non-tariff trade barriers since 2004 but that certain non tariff measures (aimed at regulating trade) had become virtual barriers because they are administered by inexperienced staff. For example, because the drug registration process under the Drugs and Related Substances Act of 1993 is cumbersome, until 2004 waivers were granted, but this was stopped in 2004. The backlog had become so great that more than half of the drugs available in South Africa were no longer available in Botswana. The top ten regional imports and exports for Botswana are listed and both hides and skins and meat and meat products are among the top 10 exports to the region.

Imani Development for Regional Trade Facilitation Programme (RTFP), 2007 Final Report: 2007 update survey of non tariff barriers to trade: Namibia <http://ntb.africonnect.com/media/namibia.pdf>

The report indicates that inherent factors in the Namibian economy constitute more of an obstacle to trade than tariff or non-tariff barriers, Some non-tariff barriers to trade are listed, none of which appear to be more than generally applicable to livestock and livestock products. Meat and edible meat offal and live animals are listed among Namibia’s top exports to the region.

Imani Development for Regional Trade Facilitation Programme (RTFP), 2007 Final Report: 2007 update survey of non tariff barriers to trade: Zambia
<http://ntb.africonnect.com/media/zambia.pdf>

The report noted that Zambia has imposed many non tariff barriers to trade, including on animal products, which need to be removed to stimulate imports from SADC and COMESA countries. Livestock/livestock products did not feature among Zambia's ten top exports to SADC or COMESA or among Zambia's ten top imports from either of the two blocs. This may be partly due to non tariff barriers as these are applicable to all products derived from animals.

Imani Development for Regional Trade Facilitation Programme (RTFP) 2007 Final Report: 2007 update survey of non tariff barriers to trade: Zimbabwe
<http://ntb.africonnect.com/media/zimbabwe.pdf>

Non tariff barriers to trade based on SPS measures did not feature in the report. No animal products were included in either the top ten exports or imports to SADC countries. Dairy products, eggs and honey were among the ten top exports to COMESA countries.

Imani Development for Regional Trade Facilitation Programme (RTFP), 2007 Inventory of regional non tariff barriers: Synthesis report
http://ntb.africonnect.com/media/ntb_synthesis_final_2007.pdf

Misuse of measures concerned with food safety, plant and animal health (SPS) and technical standards falls into the first category of non tariff barriers listed in the report. Unnecessary inspection of adequately certified products was identified as one obstacle to trade in the region [*i.e. non-acceptance of credible certification*]. The report notes that the biggest barriers for regional trade concern agricultural commodities. Recommendations are made for the reduction/elimination of non tariff barriers.

SADC 1996 SADC Protocol on Trade

<http://www.sadcstan.co.za/Secure/downloads/protocol.pdf>

The protocol makes provision for development and regulation of intra-regional trade between member countries.

SADC 1970 (updated 2008) Annex 1 Concerning the rules of origin for products to be traded between the member states of the Southern African Development Community <http://www.sadc.int/attachment/download/file/6>

The document updates and supersedes Annex 1 to the SADC Protocol on Trade. It provides details on certification of the origin of products traded to ensure that products originating from SADC countries can be recognised as such and receive preferential treatment in terms of tariffs.

SADC 2008 Sanitary and Phytosanitary (SPS) Annex to the SADC Protocol on Trade <http://www.sadc.int/attachment/download/file/439>

The SADC SPS Annex does not digress from the SPS Agreement of the WTO. There are 16 Articles and two Appendices.

SADC 2008 Technical barriers to trade (TBT) Annex to the SADC Protocol on Trade

http://www.givengain.com/cause_data/images/1694/SADC_TBT_ANNEX_Approved_July_2008-ENGLISH.pdf

The document constitutes Annex IX to the SADC Protocol on Trade. Technical barriers are for example applicable to livestock products in terms of traceability of products post-harvest, as well as animal welfare standards, which are not covered by the SPS Agreement. The annex provides a framework to assist member states to achieve compatibility of technical requirements for trade and establishes structures to oversee the harmonisation of the requirements.

SADC (not dated) The SADC trade protocol [4-page guide for Namibian importers]

<http://www.namibweb.com/sadctp.pdf>

The document is a 4-page guide for Namibian importers. There are three sections. The first one introduces the SADC Trade Protocol and explains its objectives. The second describes Namibia's trade within the region except for trade with South Africa, of which the volume is too high to be comparable with the rest. The third provides information on relevant points for Namibian exporters.

SADC 2003 Rules of Origin Exporters Guide Manual

<http://www.sadc.int/attachment/download/file/77>

The document provides a guide for traders to the SADC Rules of Origin, which are designed to prevent non-SADC goods from benefiting from the preferential tariffs that apply to member countries.

Flatters F 2002 The SADC Trade Protocol: Outstanding issues on rules of origin, Updated version of background paper, 2nd SADC Roundtable on Rules of Origin, Gaborone, Botswana, 24-26 October 2001

http://qed.econ.queensu.ca/pub/faculty/flatters/writings/ff_sadc_roo_tnf.pdf

The paper sounds a warning that using rules of origin to protect regional activities that are not competitive or cost-effective is dangerous. If regional producers of goods for trade are not allowed to source raw materials from low-cost international sources the result will be high prices and loss of competitiveness in wider markets. It also points out that attempting to address social and environmental issues through rules of origin is costly and inappropriate. Various examples are provided that indicate that the rules often lay down excessively high percentages for locally sourced material. Comparisons are made with COMESA, where a more liberal approach is adopted.

Southern African Global Competitiveness Hub 2008 Draft Business Guide to the SADC Protocol on Trade

http://www.satradehub.org/assets_filesReports/Business_Guide_to_SADC_Protocol_on_Trade.pdf

The business guide was developed to inform the business community in the SADC region about the SADC Protocol on trade which has been in force since 2000. All aspects of the protocol that businesses need to know to trade better with each other in terms of the agreement are covered in the guide, which explains the SADC framework in simple language.

SADC FMD Project/FAO-ECTAD 2009 Achievement of freedom from FMD in vaccinated areas and requirements for proving to the OIE that freedom has been achieved. Report, Training Workshop, Gaborone Sun Hotel, Gaborone, Botswana, 21 – 23 October 2009 http://www.fao-ectad-gaborone.org/en/IMG/pdf/Final_report_OIE_FMD_freedom.pdf

The report details the proceedings of the third of a series of training workshops aimed at building capacity to manage foot and mouth disease in endemic and outbreak situations and how to achieve recognition of free status with vaccination from the OIE.

Rural development, food security and land use

SADC Secretariat 2004 Enhancing agriculture and food security for poverty reduction in the SADC region. Key Issues Paper for Extra Ordinary Summit, Dar es Salaam, Tanzania, 15 May 2004 and Short-term plan of action – Short term measures to revamp agricultural production (season 2004 – 2006) SADC/EOS/2004/3b and Long term action plan for food security: SADC/EOS/2004/3b
http://www.sadc.int/fanr/food_security/docs/Issues%20Paper%20Final%20Draft%201st%20May%202004%20-EOC-1-5-2004-21.pdf

In terms of livestock, the threats identified are the high level of subsistence farming, the effects of transboundary diseases, and the threat of erosion of indigenous genetics. Regional efforts to control and eradicate transboundary diseases like foot and mouth disease and contagious bovine pleuropneumonia are seen as a priority. In the short term action plan ten objectives are identified with a time frame each for their achievement at national and regional levels. The long term plan has nine objectives. The constraints and the actions to be taken at national and regional level to mitigate them are listed for each objective.

SADC 2009 Measures to address food security in the SADC region A background paper
http://www.sadc.int/fanr/food_security/docs/Measures%20to%20Address%20Food%20Security%20in%20the%20SADC%20Region%20.pdf

The report examines all the factors that contribute to food insecurity in the SADC region, which is a net importer of food. The report focuses mainly on cereals as they are the basic staples, but it recognises that livestock can contribute substantially to food security, in particular the short cycle species (poultry, pigs and small ruminants). The short- and long-term action plans developed at the 2004 Extraordinary Summit on food security in the region in Dar es Salaam are critically analysed and new action plans are developed to 2015. Improved control of crop pests and animal diseases primarily to improve production is recommended, as well as improving intra-regional trade through harmonisation of SPS measures.

INTERNATIONAL BODIES

EUROPEAN UNION (EU)

Legislation

Bovine spongiform encephalopathy

Commission Directive 2003/1/EC, 6 January 2003

The directive modifies certain provisions with regard to risk materials for BSE in cosmetic products.

Commission Regulation (EC) No 999/2001, 22 May 2001

The Regulation sets out the rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies. Five risk levels for countries are established with the procedure required to receive a classification. Feeding of ruminant tissues to ruminants is prohibited. Specified risk materials to be removed and destroyed at slaughter are defined.

Commission Regulation (EC) No 657/2006, 10 April 2006

The Regulation amends a previous regulation (No 999/2001) and repeals two Council decisions (98/256/EC and 98/351/EC), which relate to the prevention of bovine spongiform encephalopathy through intra-regional trade. The description of specified risk materials is modified to include the mesentery and to exclude certain solid parts of bone.

Commission Regulation (EC) No 21/2008, 11 January 2008

The Regulation amends Annex X of Regulation 991/2001 with regard to the rapid tests for transmissible spongiform encephalopathies for bovine, ovine and caprine animals.

Commission Regulation (EC) No 357/2008, 22 April 2008

The Regulation amends Annex V of Regulation (EC) No 991/2001 with regard to the age limit for removal of specified risk materials, which is raised from 24 to 30 months.

Commission Regulation (EC) No 571/2008, 19 June 2008

The Regulation amends Annex III to Regulation No 999/2001 with regard to the criteria for revision of the annual monitoring programme for bovine spongiform encephalopathy. The amended annex stipulates the requirements to be fulfilled when a country applies to revise its monitoring programme for BSE.

European Commission 2001 Effectively enforced feed ban (Guidance Note, revision of April 2004)

The note explains the indicators for an effectively enforced feed ban. These are national legislation for the feed ban, credible structures of the animal feed manufacturing, distribution and use chain, convincing surveillance, monitoring and inspection systems,

and persuasive knowledge and awareness of the risk of transmitting spongiform encephalopathies via feed. In a footnote Botswana and Namibia are listed among the countries that are not required to provide certification of proof of an effectively enforced feed ban.

Foot and mouth disease

Council Directive 85/5111/EEC, 18 November 1985

The Directive defines the measure to be undertaken by any and all Member States in the event of an outbreak of foot and mouth disease within their territory, regardless of the type of virus concerned. *[The Directive is referred to in Council Directive 2002/99/EC but does not contain provisions for prevention of introduction from third countries].*

General

Council Decision 79/542/EEC, 21 December 1976 [amended]

The Decision provides the conditions for the importation of certain live animals and their fresh meat from third countries. The countries from which these may be imported and the conditions under which they may be imported are listed in tables in Annexes I and II. Botswana, Namibia and Zimbabwe are included in the table with the free zones specified for Botswana and Namibia.

Council Directive 2002/99/EC, 16 December 2002

The Directive establishes the rules governing the production, processing, distribution and introduction of products of animal origin for human consumption. Although Article 3 specifies that products of animal origin must not be derived from an area subject to animal health restrictions applicable to the animals or products concerned, Article 4 provides for the entry of such products provided that they have been treated in such a way as to ensure that the animal health problem has been eliminated.

Regulation (EC) No 853/2004, 29 April 2004

The Regulation lays down the specific hygiene rules for the hygiene of foodstuffs. Products of animal origin are included but Regulation (EC) No 854/2004 provides specific rules for the organisation of official controls on products of animal origin.

Regulation (EC) No 854/2004, 29 April 2004

The Regulation lays down specific rules for the organisation of official controls on products of animals intended for human consumption.

Regulation (EC) No 882/2004, 29 April 2004

The Regulation provides rules for official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules. It defines the duties and responsibilities of the laboratories involved in the verification process. Various types of reference laboratories are listed and described. The document includes the corrigenda dated 30 April 2004.

Commission Regulation (EC) No 2074/2005, 5 December 2005

The Regulation covers aspects of food safety and hygiene of animal products for human consumption and includes compliance with feed and food, animal health and animal welfare rules.

Other

European Community, Directorate-General for Health and Consumers, 2008 Guidance document on the implementation of certain provisions of Regulation (EC) No 853/2004 on the hygiene of food of animal origin
http://ec.europa.eu/food/food/biosafety/hygienelegislation/guidance_doc_853_2004_en.pdf

The document is aimed at food businesses in member countries but indicates that Third countries might find the information useful as well. Various products are covered including meat from animals that were slaughtered on-farm.

European Community 2007 A new animal health strategy for the European Union (2007 – 2013) where “Prevention is better than cure”
http://ec.europa.eu/food/animal/diseases/strategy/animal_health_strategy_en.pdf

The new strategy has four pillars, briefly prioritisation of EU intervention, a modern and appropriate animal health framework, better prevention, surveillance and crisis preparedness, and science, innovation and research. The strategy includes wildlife. In terms of setting standards, the EU accepts the OIE/Codex standards but reserves the right to set higher standards if scientifically justifiable, and will continue to promote its standards in the OIE/Codex to ensure their adoption at international level. Key to animal threat prevention are on-farm biosecurity, animal identification and traceability, better border biosecurity, surveillance and emergency preparedness. Intentions are expressed to assist less developed countries to achieve the necessary standards of animal disease control to be able to trade with EU.

European Medicines Agency 2006 CVMP strategy on antimicrobials 2006 – 2010 and Status report on activities on antimicrobials EMEA/CVMP/353207/2005
www.emea.europa.eu/docs/en_GB/document_library/Report/2009/10/WC500005154.pdf

The Committee for Medicinal Products for Veterinary Use (CVMP) developed a strategy based on a previous risk management strategic plan to maintain the efficacy of antimicrobials and prevent the development of resistance, recognising that this should not lead to unnecessary restriction of the use of veterinary medicines for indications for which there are no alternatives for efficacious treatment.

European Union, 13 March 1998 Measures concerning meat and meat products (hormones) http://trade.ec.europa.eu/doclib/docs/2003/november/tradoc_114726.pdf

The document announces that the European Union will comply with the findings of the World Trade Organization’s Appellate Body and provide a risk assessment regarding the effects of hormones used as growth promoters on human health in support of their complete ban on the use of hormones as growth promoters, which had been disputed at WTO by the United States of America and Canada.

Allen, D. 2005 Hormone growth promoters in cattle, Note prepared for BSAS by Dr David Allen, Beef Industry Consultant

http://www.bsas.org.uk/about_the_bsas/issue_papers/hormone_growth_promoters_in_cattle/

The note was prepared for the British Society of Animal Science (BSAS). It describes the total EU ban on the use of any hormones as growth promoters and the dispute between the EU and USA. In response to the request for a risk assessment the EU published evidence that it claimed raised fresh concerns about beef from treated cattle. The independent Veterinary Products Committee reviewed the EU evidence and reported that they were unable to support the conclusion. The note mentions that the ban led to misuse of illegal implants in some EU member states resulting in dangerous practices where the implant might be eaten whole by the consumer, as well as the use of β -agonists. The author concluded that the issue had passed beyond science into consumer and trade politics.

Food Standards Agency UK (not dated) Consultation on the application of EU Regulation 882/2004 in the United Kingdom

<http://www.food.gov.uk/multimedia/pdfs/bkgrdfeedcont.pdf>

The regulation concerns arrangements for the enforcement of feed and food law requirements and animal health and welfare rules. In the UK this involves a number of agencies and the document explains how the regulation will be applied in a stepwise manner.

UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)

Regulatory

National Association of State Departments of Agriculture Research Foundation 2001 The Animal Health Safeguarding Review – Results and recommendations

http://www.aphis.usda.gov/vs/pdf_files/safeguarding.pdf

It is noted that the document does not necessarily reflect the policies or positions of the USDA or NASDARF. The report indicated that while APHIS is doing an excellent job of keeping foreign animal diseases out of the country and controlling animal diseases in-country, the increasing threats of introduction of foreign animal diseases require pre-emptive action. A lengthy list of recommendations is made for building capacity and forming partnerships to support the efforts of APHIS to prevent incursion of foreign animal diseases. The ever-increasing number of people, live animals and products crossing the borders of the USA is largely responsible for the increased threat, but bioterrorism also has to be borne in mind.

USDA APHIS 2010 Animal Product Manual Chapter 3 Foreign origin meat and meat products, ruminants

http://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/apm_pdf/03_12foreignmeatrumin.pdf

The manual provides guidelines to the regulations and procedures for the importation into the USA of animal products. Chapter 3 relates to meat and meat products derived from ruminants.

USDA APHIS 2009 Bovine spongiform encephalopathy – Countries/regions affected with bovine spongiform encephalopathy (BSE)
http://www.aphis.usda.gov/import_export/animals/animal_import/animal_imports_bse.shtml

The countries are placed in four categories:

- Countries where BSE exists (23 countries, all European except Israel, Japan, Oman)
- Countries presenting an undue risk for BSE (13 European countries)
- Countries considered minimal-risk with regard for BSE (Canada)
- Countries with indigenous BSE cases that may export whole cuts of boneless beef (Japan)

USDA APHIS 2010 Foot-and-mouth and rinderpest – Countries/regions free of foot-and-mouth disease (FMD) and rinderpest
http://www.aphis.usda.gov/import_export/animals/animal_import/animal_imports_fmd.shtml

The only African country listed as free of foot and mouth disease and rinderpest is Namibia (excluding the region north of the Veterinary Cordon Fence). However, Namibia is placed in a special category (with several other listed countries) because one or more of the following conditions occur:

- They import fresh, chilled or frozen meat (ruminants and/or swine) for domestic use from countries not rated as free of FMD and rinderpest
- They share land borders with countries not rated free of FMD or rinderpest
- They import live ruminants or swine from countries not rated free under less restrictive conditions than would be applied in the USA

[This presumably explains why Namibia is not listed by FSIS as a country from which meat can be imported].

USDA APHIS 2010 Countries/regions affected with African swine fever (ASF)
http://www.aphis.usda.gov/import_export/animals/animal_import/animal_imports_asf.shtml

A list of countries regarded as affected with ASF is provided. *[The countries listed include Brazil, Cuba, Haiti and Malta, all of which eradicated ASF before the turn of the century, some long before it, and the information is readily available. On the other hand the list has been updated to include several countries that were infected during or after 2007. This document was included to demonstrate that sometimes the criteria applied may be a bit unfair.]*

USDA FSIS Office of International Affairs 2010 Countries/products eligible for export to the United States

http://www.fsis.usda.gov/pdf/Countries_Products_Eligible_for_Export.pdf

The information is provided as a table. The countries eligible to export the specified products of animal origin to the United States are listed. The products are raw or processed beef/veal, mutton/lamb, goat, pork, poultry, equine meat and processed egg products. No African countries are included in the list. *[This effectively excludes meat imports from all African countries in spite of the fact that Namibia south of the veterinary*

cordon fence is listed as free of foot and mouth disease by APHIS, because according to Chapter 3 of the Animal Product Manual on the importation into the USA of foreign origin meat and meat products (ruminants), the first point of reference is whether the country appears on the FSIS, not the APHIS, list).

FOOD & AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO)

Animal health, livestock production and trade in livestock products

EMPRES 1997 Concept paper on the emergency control of contagious bovine pleuropneumonia (CBPP) in Southern and Eastern Africa
<http://www.fao.org/docrep/004/W3737E/W37373E12.htm>

In order to control contagious bovine pleuropneumonia after its re-introduction to Tanzania in 1994 – 5 and Botswana in 1996, it was proposed that a cordon sanitaire should be established consisting of an eastern buffer zone covering the international borders between Tanzania and Malawi, Zambia and DRC immediately west of Lake Tanganyika and a western buffer zone stretching from the Atlantic coast across northern Namibia, northern Botswana and western Zambia. The buffer zones would consist of a control zone and a surveillance zone. *[Fences are not mentioned and it is unclear how movement of cattle out of the cordon sanitaire would be prevented; it would apparently depend on control points on main routes. It is likely that this concept has been carried over to Zambia's proposed disease-free zone].*

EMPRES 2007 Focus on foot-and-mouth disease – situation worldwide and major epidemiologic events in 2005 – 2006. No 1 2007 FAO, Rome
<http://www.fao.org/docs/eims/upload/225050/ai339e00.pdf>

The paper gives an overview of FMD worldwide with emphasis on the events that occurred in 2005 and 2006, and the viruses that have been involved. In the section on Africa it is stated that FMD is endemic in most sub-Saharan African countries. It is effectively controlled in South Africa, Botswana, Namibia, Swaziland and Lesotho. This is achieved by control zones in which there is routine vaccination and cordon fences to prevent entry from the wildlife reservoir *[African buffalo and other species that may be infected e.g. impala]*. Outbreaks occurred in Zambia in 2004 and Zimbabwe reported more than 300 foci in 2004 – 2005. An outbreak in the free zone in Botswana in 2006 resulted in suspension of their status of 'free without vaccination'. *[This was regained in 2007]*.

EMPRES 2009 Keeping the food chain safe. FAO, Rome
<http://www.fao.org/docrep/fao/011/i0756e/i0756e03.pdf>

The document is a two-page information sheet about the activities of the Crisis Management Centre for the Food Chain. Threats to food safety are highlighted and the importance of prevention and early warning is emphasised. The information covers protection of plants and animals including aquatic animals as well as keeping forests healthy.

FAO [not dated but earlier than 1996] FAO strategy for international animal health
<http://www.fao.org/AG/aga/agap/frg/FEEDback/war/v8108b/v8108b0d.htm>

The paper provides guidelines for countries to eradicate epizootic diseases and gain recognition as free from the OIE as well as guidelines for control of endemic diseases. *[It is included to demonstrate that little has changed in the recommended approaches].*

FAO [not dated] Chapter 2: General principles of animal health services
<http://www.fao.org/docrep/u2200e/u2200e03.htm>

Guidelines are provided for the development of animal health policies and strategies by governments of developing countries, as well as for priority-setting when developing the policy and strategy. There are also sections on the organization and structure of veterinary services.

FAO [not dated, post 2006] Transboundary animal diseases, FAO, Rome
<http://www.fao.org/reliefoperations>

The 2-page information document describes the importance of livestock in the SADC region, the damaging effect of transboundary animal diseases, and the FAO projects to control transboundary diseases in the SADC region, in particular foot and mouth disease, contagious bovine pleuropneumonia and others such as anthrax. Beneficiaries of the projects included the Caprivi region of Namibia as well as Zambia and Zimbabwe. The development and application of digital pen technology is described.

FAO 2005 Report of the informal meeting of African institutions on livestock policy making for Africa, Rome, 8 – 9 March 2005 PPLPI Meeting Report
http://www.fao.org/ag/againfo/programmes/en/ppipi/docarc/mrp_informalafrica.pdf

The objectives of the meeting were to develop a common understanding of key policies and strategies for livestock sector development in the main livestock-producing regions, to identify the main constraints for their implementation and to define the role of the Pro-Poor Livestock Policy Facility in overcoming the constraints identified. The importance of livestock for economies and food security, the need to increase productivity and trade within the continent and to prepare conditions for access to international markets, and the various constraints to production and trade were outlined by the AU-IBAR Director. Improving animal disease control was noted to be extremely important. Three priority areas in terms of policy were identified: Trade negotiation, livestock policy harmonization, and legislation for land tenure. The establishment of a livestock policy forum was seen as a way forward.

FAO 2008 Climate-related transboundary pests and diseases, Technical Background Document, Expert Consultation, 25 – 27 February 2008, HLC/08/BAK/4, for Climate change, energy and food, High level conference on food security: the challenges of climate change and bioenergy, 3 – 8 June 2008, FAO, Rome <ftp://ftp.fao.org/docrep/fao/meeting/013/ai785e.pdf>

Possible transboundary expansion of pests and diseases that affect both plants and animals due to climate change are discussed. For animal diseases those that are arthropod vector-borne are considered to be of particular importance as the distribution of vectors is influenced by climate. A list of other factors that influence transboundary spread includes ecosystem diversity, function and resilience.

Fingleton J 2004 Legislation for veterinary drugs, FAO Legal Papers Online #38, August 2004 <http://www.fao.org/legal/prs-ol/po39.pdf>

The paper reviews some existing legislation on veterinary drugs and aims to provide a helpful background to countries wanting to revise their legislation on veterinary drugs. Botswana, Zambia and Zimbabwe are included in the countries sampled. *[This paper is included because legislation that reflects adequate regulation of veterinary drugs is a prerequisite for export of meat to higher priced markets].*

Otte M J, Nugent R & McLeod A 2004 Transboundary animal diseases: Assessment of socio-economic impacts and institutional responses. Livestock policy discussion paper No 9, FAO, Rome

<http://www.fao.org/docrep/fao/meeting/010/ag273e/ag273e.pdf>

The paper examines the socio-economic effects and other impacts of transboundary diseases and focuses on the economy of control interventions, who should be responsible and how to determine the most cost-effective interventions.

Perry B D & Dijkman J 2010 Livestock market access and poverty reduction in Africa: the trade standards enigma. A discussion paper. PPLPI Working Paper No 49, FAO, Rome <http://www.fao.org/ag/againfo/programmes/en/pplpi/docarc/wp49.pdf>

The paper examines the opportunities for developing countries in Africa to access export markets for livestock products and the effects of public and private standards. The conclusion is that for most countries the best opportunities are local and regional, not only because of stringent standards imposed by high value markets but also due to lack of sufficient quantity and quality of animals to satisfy those markets and an inability of many producers, in particular smallholders, to afford the costs required to provide the necessary quality. In addition lack of infrastructure, exacerbated by lack of information and networks, constrains export of livestock products. Private initiatives are most likely to be successful and some examples of vertically integrated exporting businesses that include smallholder producers are noted. In order to export, compliance with the requirements of the importer in terms of standards is necessary; in some cases private standards have helped producers in developing countries to reach agreement with importers and consequently to export their products.

Rivière-Cinnamond A 2005 Animal health policy and practice: Scaling-up community-based animal health systems, lessons from human health, PPLPI Working Paper No 22, FAO, Rome

<http://www.fao.org/ag/againfo/programmes/en/pplpi/docarc/wp22.pdf>

The paper examines the differences between community-based animal and human health systems, with the latter forming an integral part of the national health programme, whereas community-based animal health systems are usually undertaken by NGOs. It is recommended that, as for human health, community-based animal health services should be integrated in the national animal health policy. *[Community involvement in both animal and human health management should be part of the One Health approach. TFCAs could offer an opportunity for working together in this respect].*

Rooij R de, Rushton J, McLeod A & Domenech J 2007 Public and private sector roles in addressing animal health issues, Technical Meeting on Highly Pathogenic Avian Influenza and human H5N1 Infection, 27 – 29 June 2007, FAO, Rome
<http://www.fao.org/docs/eims/upload/229385/ah664e.pdf>

The need to involve the private sector, in particular private veterinary service providers, in disease control programmes, particularly when there is an outbreak, is discussed. It is stated that there should be a strong public veterinary service to provide leadership.

Sarkar S 2007 Global animal health communication strategy to support prevention and control of H5N1 HPAI, Technical Meeting on Highly Pathogenic Avian Influenza and human H5N1 Infection, 27 – 29 June 2007, FAO, Rome
<http://www.fao.org/docs/eims/upload/229381/ah660e.pdf>

The importance of appropriate communication for the control of disease outbreaks is emphasised. In order to make sure that the messages are appropriate to the target audience a multi-disciplinary approach is needed. Although communication for avian influenza was the main topic, the communication approach could be applied to any other emerging and re-emerging animal diseases.

Biodiversity conservation and ecosystem health

Cirelli M T & Morgera E 2009 Wildlife law and the legal empowerment of the poor in sub-Saharan Africa FAO Legal Papers Online #77, May 2009
<http://www.fao.org/legal/prs-ol/po77.pdf>

The paper examines how legislation can be used to support sustainable wildlife management for the empowerment of the poor and for environmental stability. The first part of the study provides an overview of international legal instruments related to wildlife management and the legal empowerment of the poor in wildlife management. The second part comprises case studies of legislation related to wildlife in 12 southern African countries including Angola, Botswana, Namibia, Zambia and Zimbabwe.

Cirelli M T & Morgera E 2010 Wildlife law in the Southern African Development Community Joint Publication of FAO & CIC, Budapest <http://www.fao.org/prs-ol/po84.pdf>

The document provides general information useful to guide harmonized legislation for wildlife management in the KAZA region consequent upon the SADC Protocol on Wildlife Conservation and Law Enforcement being adopted. Human-wildlife conflict and the sustainable use of wildlife by communities are covered but there are no references to animal disease control or wildlife-livestock conflict. Case studies that provide an overview of the legislation pertaining to wildlife in all 15 SADC member states provide useful and up to date coverage of legislation in Angola, Botswana, Namibia, Zambia and Zimbabwe.

WORLD ORGANISATION FOR ANIMAL HEALTH (OIE)

Animal health, livestock production and trade in livestock products

Disease prevention and control

OIE/FAO 2004 Global framework for the progressive control of transboundary animal diseases (GF-TADS) <http://www.oie.int/eng/oie/accords/GF-TADS-approved-version-24May2004.pdf>

The framework is the result of a joint agreement between OIE and FAO on a six year plan (2004 – 2009) to progress towards the improved control of transboundary animal diseases which are seen as a global threat to livestock producers. One of the outputs was to be the establishment of regional support units. The goals of the programme are to safeguard the livestock industry of developed and developing countries from repeated incursions of infectious diseases, to improve the food security and economic growth of developing countries by reducing the damaging effects of epidemic diseases, and to promote safe trade in livestock and animal products at all levels. The statement is made that 'countries or zones that are certified disease-free are seen as progressive, well developed, technically advanced regions deserving of foreign investment'. *[The regional support centres, at least in Africa, are being phased out due to lack of funds. The concept that countries with certified disease free zones are seen as progressive may underpin the desire for disease free zones at least as much as the imperative to export meat].*

OIE/FAO 2009 Final recommendations: Global Conference on Foot and Mouth Disease – “The way towards global control”, Asunción, Paraguay, 24 – 26 June 2009 http://www.oie.int/eng/press/en_090706.htm

The recommendations do not differ greatly from the Global Framework for progressive control of transboundary animal diseases, but are specific for foot and mouth disease. Among the recommended strategies are the achievement of country or zonal freedom from FMD recognised by the OIE and the separation of sub-populations of animals with different disease status owing to the persistence of FMD virus in wildlife and feral populations.

OIE 2010 Devising import health measures for animal commodities http://www.oie.int/eng/normes/EN_2010_commodity-based%20approach.pdf

The document provides guidelines for animal health import measures for beef, pig meat, poultry meat and milk. The principles governing safe trade in animal commodities are described and the Terrestrial Animal Health Code references for a number of important diseases are provided for each commodity in a table. *[This facilitates obtaining information on the code guidelines without paging through the chapter on each disease but does still require the reader to refer to the various chapters rather than summarizing the information].*

OIE 2010 Fact sheet: Animal diseases prevention and control www.oie.int *[no longer accessible on web]*

The fact sheet briefly describes the measures that need to be in place for effective animal disease prevention and control. Stamping out to control outbreaks with compensation to owners of animals killed for control purposes is strongly advocated as the best way to eradicate outbreaks. Compartmentalisation is described as a new approach to enabling international trade to continue in countries 'that still have areas affected by diseases'.

OIE 2010 Veterinary controls must be enhanced to control the spread of animal diseases including at border and importation checkpoint controls. Press release: 24th Conference of the OIE Regional Commission for Europe, Astana, Kazakhstan, 24 September 2010 www.oie.int [no longer accessible]

The Commission urged OIE to review its standards covering import, transit and export to include rules on veterinary border checks in areas excluded from customs inspections. The Director indicated that in addition to improving import controls, more rigorous animal disease control must be achieved in the countries where transboundary diseases originate. The urgent call to improve controls was largely in response to the introduction and spread of African swine fever in the Caucasus with spread to several countries including the Russian Federation, which is perceived as a threat to Europe. *[ASF was apparently introduced into Georgia by contaminated galley waste that was disposed of in a landfill and fed on by scavenging pigs. After that spread occurred in various ways but one route of spread was by Eurasian wild boars crossing international borders in the mountains so it is difficult to see how improving border controls would have stopped that.]*

Paton D J, Sinclair M & Rodriguez R 2009 Qualitative assessment of the commodity risk factor for spread of foot-and-mouth disease associated with international trade in deboned beef. OIE ad hoc Group on Trade in Animal Products, October 2009 http://www.oie.int/eng/normes/ENG_DFID_paper_fin.pdf

The risk assessment concludes that deboned beef could pose a negligible risk for transmission of FMD virus provided that either upstream measures to ensure that the cattle slaughtered were not infected with FMD were in place or that the amount of residual tissues that could harbour FMD virus was insufficient in deboned beef to cause transmission. It recommended quantification of the amount of such residual tissue and determination what constitutes a 'safe' level of contamination.

Private standards

OIE 2009 Ad hoc Group on private standards and international trade in animals and animal products, Paris, 9 – 10 November 2009 http://www.oie.int/eng/normes/A_AHG_PS_NOV09_1.pdf

The meeting made a number of recommendations to various role players to work towards harmonisation of standards; to ensure that standards kept pace with global trends and concerns; to identify standards that were in conflict with OIE standards if any such existed; and to attempt to establish a forum that would facilitate harmonisation of standards.

OIE 2009 Final report – OIE questionnaire on private standards. Executive summary http://www.oie.int/eng/normes/en_executive%20summary.pdf

The results are briefly summarised and respondents indicated that private standards can be beneficial but can also make access to markets difficult. Problems identified included lack of transparency and costs of compliance. In general, developed countries had fewer problems with private standards than developing countries. There was agreement that harmonisation with international standards must be encouraged.

OIE 2009 Final report – OIE questionnaire on private standards [Full report]
http://www.oie.int/eng/normes/A_AHG_PS_NOV09_1.pdf

The report provides the detailed results of the responses to the questionnaire and further discussion of the key issues identified in the executive summary.

OIE 2008 Implications of private standards in international trade of animals and animal products. Resolution No XXXI
http://www.oie.int/eng/normes/en_resolution%20No%20XXXII.pdf

The resolution reaffirms that the OIE is the WTO-appointed standard-setting body for animal health and welfare and asks the Director General to undertake negotiations to ensure that any private standards do not conflict with the standards of the OIE, and to continue strengthening the OIE's standing setting and reinforce capacity building programmes to assist members to comply with OIE standards.

OIE 2009 Implications of private standards in international trade of animals and animal products – Update 15 December 2009
http://www.oie.int/eng/normes/en_Implications%20of%20private%20standards.htm

After consideration of the report of the *ad hoc* group on private standards and discussions between the Director General and some private standard setting bodies it was agreed that one of the technical items of the 2010 General Assembly would be devoted to private standards, with a presentation by the coalition for the Supply of Safe Affordable Food Everywhere.

OIE 2010 Roles of public and private standards in animal health and animal welfare. Resolution 26, 27 May 2010
http://www.oie.int/eng/normes/A_RESO_2010_PS.pdf

The resolution reaffirms the OIE's official status as standard-setting body for animal health and animal welfare and, although recognising (in the preamble) that private standards can be beneficial to producers and traders in promoting good practice, asks for various actions to ensure that private standards are not in conflict with OIE standards.

Robach M 2010 A private sector perspective on private standards – some approaches that could help to reduce current and potential future conflicts between public and private standards
http://www.oie.int/eng/normes/A_78SG_9%20.pdf

Private standards are largely driven by consumer demands, are not always science-based and are often prescriptive rather than outcome based, as the public standards are. In some cases they provide standards for matters not provided for in public standards. Animal welfare was one of these matters, although OIE is now providing standards for animal welfare. The paper highlights the need for 'respectful dialogue' between the public standard-setting bodies and the private sector, which can be facilitated by global private standard-setting bodies and global industry organisations.

Wolff C & Scannell M 2008 Implication of private standards in international trade of animals and animal products, 76th General Session, International Committee, OIE, Paris, 25 – 30 May 2008

http://www.oie.int/eng/normes/A_private%20standards.pdf

The background paper provides information on the development and application of private standards. It points out that compliance with private standards is not able to be enforced by law but that non-compliance may mean exit from the market. The perception that private standards are unfair to developing countries is discussed.

Veterinary legislation

OIE 2009 Editorial: Veterinary legislation is the foundation of any efficient animal health policy http://www.oie.int/eng/edito/en_edito_nov09.htm

The editorial urges the updating of veterinary legislation to meet new animal health and welfare demands.

OIE (undated) Guidelines on veterinary legislation

http://www.oie.int/eng/oie/A_Guidelines_Vet%20Leg.pdf

The guidelines provide general and technical recommendations for the content and format of veterinary legislation.

GENERAL

KAVANGO-ZAMBEZI TRANSFRONTIER CONSERVATION AREA (KAZA TFCA)

Biodiversity conservation and ecosystem health

AHEAD-GLTFCA Working Group 2008 As the fences come down – Emerging concerns in transfrontier conservation areas [Portuguese version also available]
<http://www.wcs-ahead.org/documents/asthefencescomedown.pdf>

The document provides a summary of issues that decision-makers need to consider when working on issues related to transfrontier conservation areas. One of the key issues is the problem of transmissible diseases at the wildlife-livestock-human interface. Another issue is land use and the need to achieve a balance between ensuring the livelihoods of livestock producers on one hand with alternative land uses on the other. An integrated, inter-disciplinary approach is proposed.

Ferguson K & Hanks J (eds) 2010 Fencing impacts: A review of the environmental, social and economic impacts of game and veterinary fencing in Africa with particular reference to the Great Limpopo and Kavango-Zambezi Transfrontier Conservation Areas. Mammal Research Institute, University of Pretoria, South Africa
http://www.wcs-ahead.org/gltfca_grants/pdfs/ferguson_final_2010.pdf

The book consists of ten sections with 39 chapters and two appendices dealing with the impacts of fencing, erected for various purposes, on wildlife, livestock and livelihoods.

Henk D 2008 Human and environmental security in Southern Africa: The Kavango-Zambezi (KAZA) Transfrontier Conservation Area Project, 49th ISA Convention, San Francisco, California, 26 March 2008
<http://www.au.af.mil/awc/AFRICOM/documents/kaza.pdf>

The paper highlights the challenges posed by opening international borders to allow a free flow of people, particularly in an area characterised by recent conflict, present poverty and an abundance of weapons available to poachers and other criminal elements. It is noted that security and the institutions and organisations responsible for security were conspicuously absent from the KAZA planning process. Potential areas of conflict are identified, with the main focus on poaching of high value wildlife and disputes over water. Increasing involvement of the military in environmental protection is described, and it is suggested that KAZA offers unique opportunities to form partnerships to address security issues while keeping the focus on the environment.

KAZA-TFCA Ministerial Meeting 2010 Kavango-Zambezi Transfrontier Conservation Area implementation calls Press Release, KAZA-TFCA Ministerial Meeting, 15 July 2010, Livingstone, Zambia
<http://www.zanis.org/zm/>

The press release describes the positive statements made at the meeting of the ministerial committee of the countries participating in the KAZA TFCA. The ministers were urged to expedite the actions needed for the successful development of the TFCA.

KfW Entwicklungsbank Press Release, 17 June 2010 Nature protection, peace and tourism - KfW Entwicklungsbank finances world's biggest conservation area in Africa <http://www.kfw.de>

EUR 20 million will be provided for park infrastructure, tourism facilities, wildlife management, de-mining and coordination of private initiatives of farmers, villages and international investors. De-mining and health programmes are seen as medium term goals.

Ministry of the Environment and Tourism, Namibia, 2005 AHEAD: Possible applications in Namibia? Introductory Workshop, Roof of Africa, Klein Windhoek, 29 November 2005 http://www.wcs-ahead.org/documents/namibia_introworkshop.pdf

The report on the one-day workshop highlights the conflict between animal disease control and biodiversity conservation and describes the AHEAD approach which attempts to integrate human, animal and ecosystem health. There was agreement that a transdisciplinary approach is needed to try to resolve the problems at the wildlife/livestock/human interface.

Perkins (not dated) TFCAs: Same old problems at a different spatial scale <http://www..orc.ub.bw/docs/kalworkshop/Perkins.pdf>

The document is a power point presentation that highlights the conflict between livestock production and wildlife management that is driven by preferential trade agreements with high value export markets. This encourages livestock production in areas where owing to an arid climate and climate change it may not be sustainable. The presentation highlights the advantage of allowing wildlife sufficient space and suggests that a possible solution to the current situation might be to fence disease-free livestock in smaller spaces, creating islands from which export might take place but allowing the wildlife sufficient freedom to move as necessary for their wellbeing and survival. Participation of animal health decision makers in conservation workshops is recommended.

Transfrontier Conservation Consortium 2006⁶ Pre-feasibility study of the proposed Kavango-Zambezi Transfrontier Conservation Area, Final Report, Volume 1 <http://www.peaceparks.org/xMedia/PDF/Peace%20Parks/KZTFCA/Volume%201%20KAZA%20TFCA%20Final%20Report%2017%20Oct%20Complete.pdf>

The pre-feasibility study was undertaken to guide the five participating countries to define an agenda to take the TFCA proposal forward. The first volume of the final report describes the background to the establishment of the KAZA TFCA and the process of consultation and its findings and recommendations. The study made provision for country surveys and one of the key issues to be included in the surveys was Veterinary Health, with a view to determining disease risks associated with the TFCA and harmonising veterinary management policies and procedures. Three activities were recommended: enhanced cooperation between veterinary and human health authorities in the partner countries, quantification of pests and diseases of socio-economic significance and investigation of whether TFCA development would increase their

⁶ To avoid broken links access via http://www.peaceparks.org/Stories_1022100000_8_0_0_0_793_Kavango-Zambezi+TFCA+Progress+Report.htm and follow links to pdf files

spread, and a regional study of existing veterinary and international boundary fences and proposed fence development.

Transfrontier Conservation Consortium 2006 Pre-feasibility study of the proposed Kavango-Zambezi Transfrontier Conservation Area, Final Report, Annexes, Volume 2

<http://www.peaceparks.org/xMedia/PDF/Peace%20Parks/KZTFCA/Volume%202%20KAZA%20TFCA%20Prefeasibility%20Study%20Final%20Report.pdf>

The document consists of 5 annexes covering the literature review and references, key biodiversity issues in formulating the boundaries, Zimbabwe's perspective on the veterinary considerations, a preliminary tourism assessment, and a cost-benefit assessment. In the literature review, a section is devoted to veterinary issues with a focus on reconciling necessary disease control measures with ecosystem and biodiversity conservation. In Annex B disruption of movements of wildlife by veterinary fences is identified as a key issue for TFCA development and is discussed together with increased conflict owing to human settlements. The Annex on veterinary issues is provided as a separate document in the Zimbabwe folder.

Transfrontier Conservation Consortium 2006 Pre-feasibility study of the proposed Kavango-Zambezi Transfrontier Conservation Area, Final Report, Country Surveys, Volume 3

<http://www.peaceparks.org/xMedia/PDF/Peace%20Parks/KZTFCA/Volume%203%20KAZA%20TFCA%20Prefeasibility%20Study%20Final%20Report.pdf>

The results of the country surveys are presented in tabular form, with lists of participants in the consultations in the different countries. *[Veterinary issues were apparently not addressed and there were no participants from any of the national veterinary services. Only in Botswana was the Director of Veterinary Services listed as a person who should be consulted].*

Southern African Peace Parks – Kavango-Zambezi Park Development, 2009

http://www.peaceparks.org/Stories_1022100000_8_0_0_0_672_Kavango-Zambezi+TFCA+Park+Development.htm

The document provides a beautifully illustrated summary of the evolution of the KAZA TFCA and the subsequent developments up to the end of 2008.

Tourism in the Kavango-Zambezi Transfrontier Conservation Area [briefing note on survey undertaken in 2004]

<http://www.nnf.org.na/EIS/data/literature/Tourism%20in%20the%20KAZA%20TFCA.pdf>

The survey focuses on accommodation providers and tour operators in the Kavango-Zambezi TFCA in Botswana, Namibia, Zambia and Zimbabwe. It concluded that tourism was making a positive contribution to the economy but that steps needed to be taken to address inequities in the benefits of the industry to local communities. Capacity building, skills development and finance to allow greater participation by the community members in the higher-paid positions in the industry as well as greater representation at management levels and as owners of enterprises are recommended, as well as partnerships between private entities and dwellers on communal land. The note also pointed out that the majority of residents in the KAZA area are reliant on subsistence

agriculture efforts should be made to increase efficiency in this sector while ensuring sustainability.

WCS 2009 Beyond fences: Policy options for biodiversity, livelihoods, and transboundary disease management in Southern Africa. Scaling up Conservation Success with SCAPES – Draft document http://www.wcs-ahead.org/documents/wcs_scapes_kaza_fy10_ip_apr_13_10.pdf

The document describes the WCS “Beyond fences” programme that focuses on threats facing biodiversity conservation in large transboundary landscapes. Current approaches to animal disease control constitute a key threat to transboundary conservation. The programme recognises that livestock production and biodiversity conservation both have the potential to bring considerable economic benefits to the region. The need is therefore to resolve the land use conflicts in the target areas and find ways to integrate livestock- and wildlife based enterprises for the benefit of communities to achieve sustainable biodiversity conservation. This will require new approaches to disease control that do not depend on extensive cordon fencing to the detriment of wildlife movement and species survival.

Integrated Development Plans for the National Components of the KAZA TFCA

The integrated development plans for participating countries follow the same basic template but there is some variation in how the plan is structured and what is included. To enable good management, key performance areas are identified: resource management, business and benefit flow management. A large part of the plan is devoted to a detailed description of the study area selected within the KAZA component, well illustrated by a large number of maps.

ZAWA 2008 Integrated Development Plan for the Zambian Component of the Kavango-Zambezi Transfrontier Conservation Area, June 2008
<http://www.zawa.org.zm/Downloadables/KAVANGO-ZAMBIA>

The participatory planning process is described and illustrated. The purpose, significance and challenges of the Zambian component of the KAZA TFCA are described. The detailed description of the study area includes a description of poverty levels. Agriculture is identified as an important sector in Zambia, of which livestock production comprises 35%, but the plan notes that the agricultural potential in the study area is generally low, and agricultural activities contribute only about 20% of household income to households that practise agriculture. It is therefore indicated that a shift to other activities aligned with conservation, including game farming, might be a viable alternative.

Zimbabwe Parks and Wildlife Authority 2009 KAZA Zimbabwe Integrated Development Plan, August 2009, (Draft) [Document obtained during site visit]

The document places the Zimbabwe Component of the KAZA TFCA in context. In the introductory section an overview is provided of the purpose, components, relevant international, continental, regional and national legislation, and organizational structure of KAZA TFCA. The second section gives a detailed description of the study area selected in the Zimbabwe component. While most of the land is used for conservation, there are some commercial farms focusing on game or mixed farming. Some

pastoralists using seasonal grazing are present along the Botswana border. Land tenure is a mixture of state, communal and private land, but most of the land in the area belongs to the state. Poverty levels are high and natural resources are used to augment subsistence farming; the potential for livestock and crops in the area is generally low. The perception that conservation is aimed at excluding local populations needs to be changed by ensuring community participation. Detailed land use plans are to be developed but the agricultural suitability of the area is regarded as low and the highest potential would be for game ranching, as this would not be constrained by livestock diseases.

OTHER

Animal health, livestock production and trade in livestock products

Cabrera R, Cochran M, Dangelmay, D'Aguilar G, Gawande K, Lee J, Speir I & Weigand C 2007 African capacity building for beef exports: Lessons from the Namibian and Botswanan beef industries. (Draft) <http://kishoregawande.net/wp-content/uploads/2008/12/africabeef.pdf>

The authors take the standpoint the global system of sanitary regulations for trade in meats is trade-facilitating, that countries wishing to export need to comply with them, and that compliance is achievable in the short term. Using the cases of Botswana and Namibia, the central role of government in the industrialization of the meat industry is highlighted. Government should provide credible animal disease control services and function as a market intermediary. They argue that the long term challenge is capacity building for export, not compliance with requirements, and this depends on providing proper incentive structures for suppliers, noting that Botswana and Namibia have failed to do this. *[The paper stresses the important role of the veterinary fences. Strangely, the paper by Mbaiwa & Mbaiwa on the negative effects of veterinary fences on wildlife appears in the reference list but is not quoted in the text!]*

Department of Agriculture, Forestry and Fisheries, South Africa 2010 Beef market value chain profile <http://www.nda.agric.za/docs/AMCP/BeefMVCP2009-2010.pdf>

The document provides statistics relating to the South African beef market for the period 1998/1999 to 2007/2008. Exports to the SADC region indicate that South Africa exports beef to a number of countries in the region, but mainly Mozambique and Angola.

FAO-OIE (in collaboration with WHO) 2008 The global strategy for prevention and control of highly pathogenic H5N1 avian influenza. FAO, Rome <http://www.fao.org/docrep/fao/011/aj134e/aj134e00.pdf>

The strategy provides an example of the approach of the FAO and OIE to prevention and control of an epizootic disease. It includes the concept of the importance of on-farm biosecurity as a preventive measure.

FAO-OIE-WHO Collaboration: Sharing responsibilities and coordinating global activities to address health risks at the animal-human-ecosystems interfaces. A Tri-Partite Concept Note. April 2010

http://www.oie.int/download/FINAL_CONCEPT_NOTE_Hanoi.pdf

The concept note stresses the need for greater collaboration to meet growing global health challenges and recognises that greater coherence is needed in standards set by the FAO/WHO Codex Alimentarius Commission on one hand and the OIE on the other. The note describes existing cooperation among the three organisations and proposes ways to achieve greater cooperation. These include global networks and the establishment of a joint Ministerial Conference consisting of the ministers of agriculture and health at the global level to discuss issues of animal and human health. *[Interestingly although the ecosystem is mentioned they do not suggest the inclusion of environmentalists or conservationists].*

Hazell P 200. All-Africa review of experiences with commercial agriculture: Case study on livestock, Background paper for the Competitive Commercial Agriculture in Sub-Saharan Africa (CCAA) Study. World Bank/FAO

<http://siteresources.worldbank.org/INTAFRICA/Resources/257994-1215457178567/Ch1-Livestock.pdf>

The paper reviews livestock production systems and livestock markets in sub-Saharan Africa and concludes that an opportunity has been missed. Africa has lost its traditional livestock exports in spite of higher demand worldwide. This is ascribed to an inability to increase productivity and lower unit costs, to control animal diseases and to meet the increasingly exigent international demands for certification and traceability. Regional and national markets are also constrained by a number of factors including low per capita consumption levels, poor infrastructure, high taxes, lack of market information, insufficient trader credit, and also inadequate disease control and certification. Botswana's beef industry and Kenya's dairy industry are used as examples of relative successes, but heavy market regulation and monopolistic boards have played a key role. The question is raised whether private companies or producer cooperatives could play a greater role, although not able to take on the state regulatory role of containing diseases and supplying certification for export.

Hoffman I 2010 Livestock biodiversity. *Revue scientifique et technique*, OIE 29: 73 – 86 www.oie.int

The paper discusses livestock in terms of its 'invasiveness', and the impacts of the introduction and expansion of few high-producing breeds on species, breed, within-breed and agricultural biodiversity as well as the impact of livestock production on natural biodiversity. It points out that under the Convention on Biological Diversity countries are responsible for control of invasive alien species but also for sustainable use and conservation of animal genetic resources and for food security. Measures are proposed to control genetic erosion.

Magalhães J 2010 Regional sanitary and phytosanitary frameworks and strategies in Africa – Report for the Standards and Trade Development Facility (STDF), FAO/OIE/WTO/WHO/WTO-OMC

http://www.standardsfacility.org/Files/Publications/STDF_Regional_SPS_Strategies_in_Africa.pdf

A scoping study commissioned by the African Union Commission was undertaken to determine the situation in Africa with regard to SPS frameworks and strategies in Africa. Inadequate technical capacity and inadequate coordination had been identified as major challenges for African countries to be able to comply with international SPS requirements. The report provides a critical analysis of, among others, the COMESA and SADC SPS frameworks. It notes that all of them follow closely the WTO SPS Agreement but that alterations in wording change not only the letter but the spirit of the agreement and that it would be better simply to follow the international agreement. Concern is expressed that unless the regional SPS frameworks are harmonised there will be much confusion as most countries belong to more than one regional body. There is also a fear that rather than facilitating trade the frameworks might further restrict it. On the other hand, practical approaches such as the proposed COMESA Green Pass system are considered useful provided they do not lead to unnecessary bureaucracy. The recommendations include increased participation in international standard setting bodies and the SPS Committee of the WTO. Capacity building to ensure more meaningful participation by African countries is part of the recommendation.

Rich K M & Perry B D 2010 The economic and poverty impacts of animal diseases in developing countries: New roles, new demands for economics and epidemiology PREVET(2010),doi:10.1016/j.prevetmed.2010.08.002 (Accessed via the University of Pretoria Library)

The paper points out the complexity of analysing the impact of animal diseases and the control measures applied, with particular emphasis on developing countries where livestock is kept for purposes that include but are not restricted to commercial production. The importance of taking into consideration the behaviour of the different players along what are often long and complex value chains is emphasised so that policies for disease management and control are based not only what 'should' happen but also what is likely to happen in practice, and what the incentives are for compliance with disease control measures.

Rweyemamu M, Roeder P, MacKay D, Sumption K, Brownlie J, Leforban Y 2008 Planning for progressive control of foot and mouth disease worldwide Transboundary and Emerging Diseases 55: 73 – 87 (Accessed via the University of Pretoria Library)

The strategy for progressive control of FMD proposes seven stages that will take countries from an assessment of their status to extending FMD free zones and maintaining control. The progression will be from implementing vaccination and movement control to attaining first freedom with vaccination and then freedom without vaccination. The incentive is to be greater access to export markets and thus improved livelihoods. *[It is uncertain that this is achievable where African buffalo constitute a reservoir of SAT-type FMD viruses].*

Scoones I, Bishi A, Mapitse N, Moerane R, Penrith M L, Sibanda R, Thomson G & Wolmer W 2010 Foot and mouth disease and market access: challenges to the beef industry in southern Africa Pastoralism 1 <http://www.steps-centre.org/PDFs/FMD%20and%20markets%20paper.pdf>

The paper explores a series of alternatives to export of beef to Europe, including direct export to large retailers, emerging markets in the region and further afield, and local markets.

Scoones I & Wolmer W 2008 Foot-and-mouth disease and market access: challenges for the beef industry in southern Africa Transboundary animal disease and market access: future options for the beef industry in southern Africa Working Paper 1 2008 Institute of Development Studies, Brighton http://www.steps-centre.org/PDFs/VetScience_Working%20Paper%201.pdf

The paper questions whether the conventional approach to control of foot and mouth disease by creating free zones in order to access international beef markets is appropriate in all contexts, in particular in southern Africa, in view of the fact that it benefits a relatively small group of producers. Four other scenarios (export zones with vaccination, compartmentalisation, commodity-based trade and managing foot and mouth disease for domestic trade) are explored. It is concluded that in most cases an approach that combines two or more of the options would probably be the most robust.

Scott A, Zepeda C, Garber L, Smith J, Swayne D, Rohrer A, Kellar J, Shimshony A, Batho H, Caporale V & Giovannini A 2006 The concept of compartmentalisation Revue scientifique et technique, Office International des Épizooties 25: 873 – 879 www.oie.int

The paper describes the concept of compartmentalisation. The boundaries of a compartment are created by management and biosecurity rather than geography. Criteria and guidelines for compartments are provided.

Stirling A C & Scoones I 2009 From risk assessment to knowledge mapping: science, precaution and participation in disease ecology, Ecology and Society, 14 (online) <http://www.ecologyandsociety.org/vol14/iss2/art14/>

The article contends that 'governance of infectious disease risks requires understanding of often indeterminate interactions' between 'dynamic human and natural systems'. Under these circumstances 'science-based risk assessment' methods may be less applicable than broader-based precautionary and participatory approaches. The example used to illustrate this is pandemic avian influenza.

Thomson G R 2008 A short overview of regional positions on foot-and-mouth disease control in southern Africa. Transboundary animal disease and market access: future options for the beef industry in southern Africa Working Paper 2 2008 Institute of Development Studies, Brighton http://www.steps-centre.org/PDFs/VetScience_Working%20Paper%202.pdf

The paper discusses the particular problems that make foot and mouth disease control difficult and eradication impossible in southern Africa. These centre on the association

between African buffalo and foot and mouth disease, the problems that are encountered in assuring vaccine efficacy, and the fact that control as required for international trade relies on game fences that are highly controversial as far as conservationists are concerned. It points out that animal health management needs to be better integrated into land use policies in order to permit currently disadvantaged cattle producers access to higher value markets without causing the spread of foot and mouth disease.

Thomson G R, Leyland T J & Donaldson A I 2009 De-boned beef – an example of a commodity for which specific standards could be developed to ensure an appropriate level of protection for international trade Transboundary and Emerging Diseases 56: 9 – 17 (Accessed via the University of Pretoria Library)

De-boned beef from which lymph nodes and risk material associated with bovine spongiform encephalopathy has been removed is a product that is inherently safe for international trade regardless of whether the area of origin is free of particular transboundary diseases. However, the beef must be derived from healthy animals at the time of slaughter and assurance must be provided that the risk materials have been properly removed. The paper details how safety in respect of both animal and human diseases can be assured using a hazard analysis and critical control point (HACCP) approach.

Thomson G R, Perry B D, Catley A, Leyland T J, Penrith M-L & Donaldson A I 2006 Certification for regional and international trade in livestock commodities: the need to balance credibility and enterprise Veterinary Record, 159, 53-57(Accessed via the University of Pretoria Library)

The paper discusses the problem of providing credible certification for livestock commodities traded by developing countries. Ways to address the problem are explored. It is suggested that mechanisms to ensure safety of commodities that are not dependent on geographical freedom from specified diseases could benefit developing countries, but this would require a reliable, independent system of certification based on international standards.

Thomson G R, Tambi E N, Hargreaves S K, Leyland T J, Catley A P, van t’Klooster G G M & Penrith M-L 2004 International trade in livestock and livestock products: the need for a commodity-based approach Veterinary Record, 155, 429-433 (Accessed via the University of Pretoria Library)

An alternative approach to safe trade in livestock commodities is proposed, based on the safety of the product itself as opposed to that of the area of origin. Many developing countries, particularly in sub-Saharan Africa, are endemic for various transboundary diseases and for a number of reasons, including wildlife reservoirs, are not able to achieve country or zonal freedom. The paper argues that providing standards that will ensure the safety of commodities could overcome the problem, provided that credible certification of how the commodity was derived can be provided.

WCS 2003 Animal health matters: Improving the health of wild and domestic animals to enhance long term development success in USAID-assisted countries
<http://www.wcs.org/~media/.../AHM%20with%20USAID%20logo.ashx> (accessed 21 December 2010)

The project proposal emphasises the importance of animal health in developed and developing countries with special reference to its importance to the USA. It points out that animal health experts need to be involved in multidisciplinary teams when projects are planned to avoid negative results of overlooking the animal health issues that might affect the project. Ways in which development agencies can incorporate animal health monitoring and management into projects are suggested.

Biodiversity conservation and ecosystem health

SADC FMD Project 2008 Achieving compatibility between the Trans-frontier Conservation Area (TFCA) concept and international standards for the management of trans-boundary animal diseases (TADs). Report of the Workshop held at Chobe Marina Lodge, Kasane, Botswana, 11 – 14 November 2008
http://www.wcs-ahead.org/documents/sadc_tfcas_tads_nov08.pdf

The message from the workshop was that innovative approaches to controlling disease risks associated with trade in meat from both domestic and wild ungulates could usher in a new era of rural livelihood generation through enhanced compatibility between livestock rearing and wildlife conservation. Participants included experts on animal health, wildlife ecology, socio-economic and development issues. The creation of transfrontier conservation areas has major advantages for biodiversity conservation but poses challenges in terms of increased risk of animal diseases transmitted between wildlife and livestock that could impact negatively on trade. The concept of commodity-based trade, which de-links trade from area-based disease freedom and allows safe trade in livestock and wildlife products was endorsed by the workshop.

Governance

Media Institute of Southern Africa 2010 Government Secrecy in an Information Age: A report on open and secretive government institutions in southern Africa MISA Windhoek, Namibia <http://www.windhoekplus20.org/research-2/>

Research into openness of government institutions in selected countries in southern Africa revealed that most of the countries still have a problem with openness and more of the institutions examined were secretive than open. Botswana, Namibia and Zambia were included in the survey, with Namibia obtaining the most favourable, although critical report of the three. The ministries responsible for animal health were not selected in any of the three countries. The Ministry of the Environment and Tourism of Namibia was selected, received average scores and was not categorised as either excessively secretive or admirably open.