#### LIVESTOCK IMPROVEMENT ACT, 2009 (Act No. 9 of 2009)

#### LIVESTOCK IMPROVEMENT REGULATIONS, 2021

(Published on 16th April, 2021)

#### ARRANGEMENT OF REGULATIONS

#### REGULATION

- 1. Citation
- 2. Interpretation
- 3. Application
- 4. Competent authority
- 5. Designation of other competent authorities
- 6. Approval for carrying out duties
- 7. Livestock breeders' society
- 8. Approved laboratory
- 9. Performance testing, genetic evaluation or publication of evaluation results
- 10. Centre animal scientist
- 11. Semen, ova/embryo collection centre
- 12. Artificial insemination centre
- 13. Ovum or embryo collection or production team
- 14. Breeding animals, semen, ova and embryos for breeding
- 15. Scientific and educational research programme
- 16. General guidelines for import of animal and animal genetic material
- 17. Import of breeding animal, semen, ovum or embryo
- 18. Importer's guidelines
- 19. Standards for importation of AAGM
- 20. Guidelines for importation of poultry, fertile or hatching eggs
- 21. Guidelines for export of AAGM
- 22. Conditions for export of AAGM
- 23. Sale of AAGM
- 24. Criteria for import or export of live animals
- 25. Transportation
- 26. Pre-conditions for live animals' importer or exporter
- 27. Pre-conditions for imported or exported semen
- 28. Pre-conditions for imported or exported ova and embryos
- 29. Duties of authorised officers
- 30. Appeal
- 31. Fees
- 32. Registration of registering authorities
- 33. Registrations and approvals
- 34. Renewals of registrations and approvals
- 35. Register of registered inseminators, semen collectors, embryo transferors and innovulators
- 36. Register of livestock breeders' society
- 37. Premises registered as centres
- 38. Registered import or export agent

- 39. Animals approved as donor animals for semen, embryos or ova
- 40. Register of registered registration authorities
- 41. Termination of registration and approval
- 42. Offences and penalties **SCHEDULES**

IN EXERCISE of the powers conferred on the Minister of Agricultural Development and Food Security by section 38 of the Livestock Improvement Act, the following Regulations are hereby made -

- 1. These Regulations may be cited as the Livestock Improvement Regulations, 2021.
  - 2. In these Regulations, unless the context otherwise requires —
  - "animal and animal genetic material ('AAGM')" means an animal or ovum, embryo, semen or any other material originating from an animal through which the hereditary factors of such animal can be transferred;
  - "animal health certificate" means a certificate in which the health status of animals, semen, ova or embryos is certified for the purposes of these Regulations by an official veterinarian issuing the certificate;
  - "approval" means any approval issued to a competent authority, by the Minister or the Registrar to carry out a duty under regulation 6;
  - "approved body" means an institution approved to carry out the performance testing and recording of animals as well as the genetic evaluation of animals or any other activities as required by the Act and these Regulations;
  - "approved for breeding" means breeding animals or the semen, ova and embryos of such animals approved for breeding;
  - "approved laboratory" means a laboratory approved to carry out the analytical or diagnostic tests required under these Regulations;
  - "authorised officer" means any government official on duty designated to execute certain functions under the Act or these Regulations;
  - "breed" means a population of animals which produce progeny possessing a high degree of genetic stability as shown by identifiable uniformity in breed standards and performance;
  - "breeder" means an owner or producer of pure-bred animals which produce progeny possessing a high degree of genetic stability as shown by identifiable uniformity in breed standards and performance, and shall be registered and affiliated to a registered livestock breeders' society;
  - "breed standards" means a written set of phenotypic and genotypic standards of excellence;
  - "centre" has the same meaning assigned to it under the Act;
  - "centre animal scientist" means an animal breeder or reproduction physiologist responsible for the day-to-day supervision and management of a semen or an embryo collection centre under regulation 10;
  - "collection of semen" means a quantity of semen collected from a donor animal at any one time;
  - "consignment of embryos" means a quantity of embryos removed in one operation from a single donor animal, and with the appropriate animal health performance test records and pedigree certificates;
  - "embryo" means an ovum that has been fertilised and is in the initial stage of development;

Citation

Interpretation

- "embryo transfer" means an act of implanting an embryo in a female animal:
- "genetic material" means ovum, embryo, semen and any other material originating from an animal through which the hereditary factors of such animal can be transferred;
- "herd-book" means any book, register, file or data medium which is maintained by a livestock breeders' society and in which pure-bred breeding animals are registered with an indication of their ancestors or pedigree and performance information;
- "landrace" means a specific breed of an animal indigenous to or developed in Botswana:
- "official veterinarian" means a veterinary surgeon engaged by the Ministry and registered in terms of the Veterinary Surgeons Act;

"OIE" means World Organisation for Animal Health;

- "ovum or embryo collection ('production team')" means a group of technicians supervised by a team veterinarian or an animal scientist authorised to perform in-vitro fertilisation, collect, process and store ova or embryos of breeding animals;
- "pedigree certificate" means a certificate issued by the registering authority and indicates the identity, ancestry and blood type of a stud animal:
- "performance certificate" means a certificate issued by an authorised person or body, that indicates the identity and performance or progeny test results;
- "performance testing ('genetic evaluation')" means the testing or genetic evaluation of breeding animals for the purpose of assessing their genetic merit;
- "premises" includes a house, land, place, water or a fixed or moveable structure, and includes a vessel, vehicle, train or aircraft;
- "processed" includes when an embryo is examined, washed, treated and placed in identified and sterile containers;
- "pure-bred" means a pure-bred breeding animal registered in the main section of a herd book, whose parents and grandparents are registered in a herd book of the same breed:
- "registering authority" means a livestock breeders' society registered in terms of the Act:
- "relevant stakeholder" means the Botswana Stud Book Association or a livestock breeders' society;
- "team animal scientist" means an animal breeder or a reproduction physiologist responsible for the supervision of an ovum or embryo collection team;
- "team veterinarian" means a veterinarian responsible for the supervision of an ovum or embryo collection team; and
- "veterinary official" means a public officer who is a technician or scientist employed by the Department of Veterinary Services.
- 3. These Regulations shall apply to a trade in and approval for breeding of Application breeding animals, their semen, ovum and embryo, excluding embryos derived by transfer of nuclei or cloning.
- 4. For the purposes of these Regulations, the Minister shall be the competent authority.
- 5. Notwithstanding regulation 4, the Minister may appoint the Registrar, subject to any limitation or conditions as he or she decides, as a competent authority to grant approvals in relation to any or all the matters referred to in these Regulations.

Cap. 61:04

Competent authority

Designation of other competent authorities

Approval for carrying out duties

- **6.** (1) Subject to these Regulations, the Minister or Registrar may grant an approval to a person for the carrying out of duties in subregulation (2), provided the Minister or Registrar is satisfied that the requirements of these Regulations shall be complied with.
  - (2) An approval under subregulation (1) may be issued for —
  - (a) a livestock breeders' society in terms of section 21 (1) of the Act and regulation 7;
  - (b) a laboratory to carry out the blood typing, analytical or diagnostic tests in terms of regulation 8;
  - (c) the performance testing or genetic evaluation of breeding animals in terms of regulation 9;
  - (d) a centre animal scientist in terms of regulation 10;
  - (e) a semen, ovum or embryo collection centre in terms of regulation 11;
  - (f) an ovum or embryo collection, production centre or team in terms of regulation 13;
  - (g) breeding animals used as donor animals, semen, ova and embryos for breeding purposes in terms of regulation 14; or
  - (h) a scientific and educational research programme involving trade in semen, ova or embryos in terms of regulation 15.
  - (3) An application for approval shall be —
  - (a) in writing;
  - (b) in such form as the Registrar may specify;
  - (c) legible and state the name and address of the applicant and if it is a body corporate, its principal place of business;
  - (d) accompanied by such fee as may be set out in terms of regulation 31; and
  - (e) addressed to the Registrar.
- (4) An applicant shall provide the Registrar with such information as the Registrar may require.
- (5) A person who wilfully makes a false or misleading statement under this regulation commits an offence and is liable to a fine not exceeding P5 000 or to imprisonment for a term not exceeding 6 months, or to both.
- (6) An approval in terms of subregulation (2), with any condition attached, shall be in writing and in such form as the Minister or Registrar may decide.
- (7) An approval shall be valid for such period as the Registrar may determine or as specified on the approval.
- (8) Subject to subregulation (6), the Registrar may attach any condition, including a condition on the keeping of appropriate records, at the time the approval is issued or at any other time, and may amend or revoke such condition upon notifying the applicant or a holder of the approval in writing of the condition, amendment or revocation.
- (9) The Registrar may refuse an application for approval or revoke an approval if he or she is satisfied that the Regulations or the conditions of approval have not been complied with, and he or she shall notify the owner or person in charge of the facility in writing of the refusal or revocation.
- (10) Notwithstanding subregulation (9), the Registrar shall not revoke, refuse or amend a condition to an approval unless he or she
  - (a) notifies the applicant or holder, of his or her intention to revoke the approval, refuse the application or amend the condition,
  - (b) specifies his or her reasons for the intended revocation, refusal of the approval or amendment of the condition; and
  - (c) affords the applicant or holder of the approval an opportunity to make representations to the Registrar within 14 days of the receipt by that person of the notification referred to in subregulation (9) and has considered such representations.

- (11) The holder of an approval shall, within 14 days of making any change, inform the Registrar of the change made in the operation or organisation of the activities to which the approval relates.
- (12) A person who contravenes an approval or a condition of an approval or fails to comply with subregulation (11) commits an offence and is liable to a fine not exceeding P500 or to imprisonment for a term not exceeding 3 months, or to both.
- 7. (1) A person shall not carry out any duties of a livestock breeders' society or carry himself or herself as performing such duty unless he or she is the holder of an approval in respect of such society.
- (2) An approval in respect of a livestock breeders' society shall only be issued where
  - (a) the applicant has met the conditions specified in Schedule 1;
  - (b) the approval does not endanger the reservation of the breed or negatively affect the performance testing and recording programme of existing livestock breeders' societies; and
  - (c) there is no prior approval of the livestock breeders' society for the same breed.
- (3) The record of animals in any herd-book which is maintained by a livestock breeders' society shall be in accordance with the conditions as set out in Schedule 2.
- (4) A livestock breeders' society shall not refuse the recording into its herd-book of pure-bred breeding animals from the herd-books approved by competent authorities in other countries:

Provided such animals comply with the veterinary and performance testing and recording requirements set out in regulation 9.

- (5) Notwithstanding subregulation (3), the entry standards of the pure-bred animals produced by natural means shall not be higher than animals produced from using semen or embryos.
- (6) Stud breeders approved by the competent authorities in other countries which meet the conditions specified in Schedules 1 and 2 and which maintain herd-books for pure-bred breeding animals shall qualify as members of a local livestock breeders' society.
- (7) A person who contravenes this regulation commits an offence and is liable to a fine not exceeding P5000 or to imprisonment for a term not exceeding 12 months, or to both.
- **8.** (1) A person shall not carry out or cause to be carried out molecular, analytical or diagnostic tests for the purposes of these Regulations except in an approved laboratory.

(2) Premises where molecular, analytical or diagnostic tests are carried out may be registered as a laboratory

where -

- (a) the prescribed facilities are available at such premises as set out under Schedule 6;
- (b) the technical operations at such premises are controlled and managed by a person who complies with the prescribed requirements; and
- (c) any other requirements set out by the Registrar are met.
- (3) A person who contravenes this regulation commits an offence and is liable to a fine not exceeding P5000 or to imprisonment for a term not exceeding 12 months, or to both.

Livestock breeders' society

Approved laboratory

Performance testing, genetic evaluation or publication of evaluation results

- 9. (1) A person shall not carry out performance testing, genetic evaluation or publication of evaluation results unless he or she is a holder of an approval in Part I as set out in Schedule 3.
- (2) The holder of an approval in terms of subregulation (1) shall comply with the conditions, the performance monitoring methods and the methods used for assessing the genetic merit of breeding animals for the traits concerned as set out in Schedule 3.
- (3) A person who fails to comply with subregulation (1) commits an offence and is liable to a fine not exceeding P500 or to imprisonment for a term not exceeding three months, or to both.

Centre animal scientist

- 10. (1) A person shall not be employed, engaged as or represent himself or herself as a centre animal scientist unless he or she is a holder of an approval issued under the Act.
- (2) An approval in terms of subregulation (1) may only be issued to a person who, in the opinion of the Registrar, is suitably qualified and has the appropriate expertise.
- (3) An approval in respect of the centre animal scientist shall be limited to the centre named in the application.
- (4) A person who contravenes this regulation commits an offence and is liable to a fine not exceeding P5000 or to imprisonment for a term not exceeding 12 months, or to both.
- 11. (1) A person shall not engage in any of the activities of a semen, ova/ embryo collection centre unless he or she is the holder of an approval in respect of that centre.
- (2) The holder of an approval in terms of subsection (1) shall comply with the following
  - (a) conditions as set out in Schedule 4;
  - (b) conditions relating to the supervision of an approved semen, ova/embryo collection centre as set out in Schedule 5;
  - (c) conditions on the movement of animals into approved semen, ova/embryo collection centres as set out in Schedule 7;
  - (d) routine tests and treatment which shall be applied to all animals in an approved semen, ova/embryo collection centre as set out in Schedule 6; and
  - (e) any required analysis as set out in Schedules 4, 5, 7 and 10 to be carried out in approved laboratories.
- (3) The Registrar shall assign an approved semen, ova/embryo collection ova/embryo centre a registration number and record such number in a register.
- (4) A holder of an approval in respect of a semen, ova/embryo collection centre shall cause to be kept at the centre, such records as the Minister may require in relation to the health of the
  - (a) animal in the centre during the period the animal is at the centre; and
  - (b) semen, ova and embryos, while stocks of semen, ova or embryos are stored in the centre, and for a period of two years thereafter.
- (5) A person who contravenes this regulation commits an offence and is liable to a fine not exceeding P5000 or to imprisonment for a term not exceeding 12 months, or to both.

Artificial insemination centre

12. (1) A person shall not engage in any of the activities of an artificial insemination centre unless he or she holds an approval in respect of that centre.

Semen, ova/embryo collection centre

- (2) Subject to subregulation (1), the holder of an approval of an artificial insemination centre shall comply with the following conditions as set out in Schedule 9 and -
  - (a) the conditions relating to the supervision of an approved artificial insemination centre as set out in Schedule 10; and
  - (b) the conditions applying to the movement of animals into an approved artificial insemination centre as set out in Schedule 8.
- (3) Any analysis required in Schedules 8 to 10 shall be carried out in an approved laboratory.
- (4) The Registrar shall keep a register, allocate each centre a registration number and maintain the register.
- (5) The holder of the approval in terms of subregulation (1) shall cause to be kept at the facility such records as the Registrar may require in relation to
  - (a) the health of an animal during the time the animal is in the centre,
  - (b) the breeding season of each year; and
  - (c) the health of semen, ova and embryos, while stocks of semen, ova or embryos are stored in the centre.
- (6) A person who contravenes this regulation commits an offence and is liable to a fine not exceeding P5000 or to imprisonment for a term not exceeding 12 months, or to both.
- 13. (1) A holder of an approval in respect of an ovum or embryo collection or production team and every member of such team shall comply with the following conditions as set out in Schedule 12 —

(a) for the approval of an embryo collection or production team;

- (b) relating to the collection, processing, storage and transport of embryos; and
- (c) applying to donor animals.
- (2) Subject to subregulation (1), the Registrar shall register each approved ovum or embryo collection or production team and he or she shall allocate each collection or production team a registration number.
- (3) A person who contravenes this regulation commits an offence and is liable to a fine not exceeding P5000 or to imprisonment for a term not exceeding 12 months, or to both.
  - **14.** (1) The Registrar shall issue an approval to use —
  - (a) an animal for breeding where the applicant complies with the conditions set out in Part I of Schedule 13;
  - (b) approved semen conditions set out in Part II of Schedule 13; or
  - (c) ova or embryos of breeding animals for breeding unless such ova or embryos comply with the conditions set out in Part III of Schedule 13.
- (2) A person who contravenes this regulation commits an offence and is liable to a fine not exceeding P5000 or to imprisonment for a term not exceeding 12 months, or to both.
- **15.** (1) Subject to this regulation, a person shall not carry out a scientific and educational research programme involving trade in semen, ova or embryos without an approval.
- (2) Notwithstanding subregulation (1), a scientific and educational institution or a university in the country carrying out a research programme involving semen, ova or embryos of breeding animals which, in the opinion of the Minister or any competent authority, does not involve trade in these products, may carry out such research programme.

Ovum or embryo collection or production team

Breeding animals, semen, ova and embryos for breeding

Scientific and educational research programme General guidelines for import of animal and animal genetic

material

- (3) An approval in terms of subregulation (2) shall be limited to the duration of the programme.
- 16. (1) A person may apply to the Registrar to import AAGM for breeding and research in Schedule 19.
- (2) Subject to subregulation (1), the import of AAGM includes a live animal, semen, embryo, fertile egg, ovum and any form of tissues.
- (3) The importer shall give reasons in writing, for the import and further use of the AAGM and attach other documents as may be requested by the Registrar.
- (4) The Registrar, the Board or relevant stakeholders shall undertake prior-import risk assessment and dissemination when a new AAGM is to be imported.
- (5) Any AAGM import permit authorisation shall be processed by the Registrar upon payment of a fee of P100.
- (6) AAGM imported shall be periodically evaluated at other institutions, including outside Botswana.
  - (7) Any AAGM imported shall —
  - (a) indicate the nature of the consignment and, the name and address of the facility to which it is being consigned;
  - (b) indicate the anticipated arrival date and its point of entry into the country; and
  - (c) specify any other detail that may be required by the Registrar.
- 17. (1) A person shall not import breeding animals, semen, ova or embryos from another country other than through an entry point approved for that purpose.
- (2) A person who imports any semen, ova or embryos shall consign such semen, ova or embryos to an approved facility, as may be required by the Registrar.
- (3) A person shall not import pure-bred breeding animals, semen, ova or embryos unless such animals, semen, ova or embryos are approved for breeding and are accompanied by pedigree information, veterinary or performance testing certificates.
- (4) The consignee in the country of pure-bred breeding animals, semen, ova or embryos which are to be imported shall report the details of such importation in writing to the Registrar at least 30 working days prior to import.
- 18. (1) An institution or agency may apply to the Registrar for an import permit upon payment of an application fee of P100.
- (2) An importer institution or agency of AAGM which the importer institution forms an agreement with, shall be a legally certified entity in the country of origin.
- (3) Subject to subregulation (1), the importer institution or agency shall comply with the requirements as prescribed by the Registrar.
- (4) An importer institution or agency of AAGM shall submit basic information on genetic, health, production, processing, and storage and transportation data on the AAGM to the Registrar 30 days prior to import.
- (5) An importer institution or agency which imports genetic materials shall follow guidelines formulated by OIE, while importing the genetic materials.
- (6) An importer institution or agency shall submit animal health certificates with the imported AAGM.

Import of breeding animal, semen, ovum or embryo

Importer's guidelines

- (7) Notwithstanding subregulation (6), depending on the type of AAGM, an exporter institution or agency shall submit sample genetic material to the relevant institution for specific tests, as the Registrar may direct.
- (8) An institution or agency which imports genetic material shall describe and submit to the Registrar, information from the date of import to the date of disposal in terms of the prescribed interval for the specific AAGM and in such form as may be specified by the Registrar.
- (9) The Registrar shall evaluate an institution or agency and such institution or agency shall keep and maintain appropriate performance records and pedigree information with standard formats.
- 19. (1) A person who imports AAGM shall ensure that any AAGM imported is free from any genetically modified organism or living modified organism.
- (2) Subject to subregulation (1), a person who imports AAGM shall ensure that he or she labels for
  - (a) semen, ovum and embryo the breed name, donor number, date of production and batch number; and
  - (b) a transit package or letter, in addition to the labels under paragraph (a), the country of origin, species, producer, company, volume of animal genetic material per package, storage temperature and means of transportation.
- (3) Any AAGM imported shall be accompanied by a pedigree certificate, health certificate or the performance certificate or any other detail that may be required by the Registrar.
- (4) Subject to subregulation (3), a detailed criteria and standards for specific AAGM to be imported may be obtained from the Registrar.
- **20.** (1) An application for authorisation of importation of poultry or fertile eggs in terms of this regulation shall be accompanied by a
  - (a) certificate issued by the foreign supplier of poultry or eggs in which the ancestry of such poultry or eggs is confirmed;
  - (b) comprehensive motivation by the applicant on reasons why import of the new pure breeding lines or breeds is necessary; and
  - (c) written confirmation by the Director of Veterinary Services indicating that accommodation for the poultry concerned is available at a quarantine facility approved by the said Director, or at a quarantine facility under the control of the said Director.
  - (2) An application referred to in subregulation (1) shall be -
  - (a) submitted to the Registrar at least 30 days prior to the intended date of importation of the poultry or hatching eggs concerned; and
  - (b) accompanied by the required application fee of P100.
- (3) An authorisation for the importation of poultry or fertile or hatching eggs shall be subject to the following conditions
  - (a) the consignment of poultry or fertile or hatching eggs shall be marked in accordance with internationally accepted practices and methods;
  - (b) each consignment shall be transported, under the supervision of an official veterinarian or in a vehicle sealed by an official veterinarian, from the port of entry thereof into Botswana to the quarantine facility; and
  - (c) each consignment shall be accompanied by a written recommendation from the Botswana Poultry Association.
- 21. (1) A person who exports AAGM may apply for a permit from the Registrar and such permit shall be valid for 12 months.

Standards for importation of AAGM

Guidelines for importation of poultry, fertile or hatching eggs

Guidelines for export of AAGM

- (2) Any AAGM for export may be collected from a member of the livestock breeders' societies or registered centres.
- (3) A person shall not export live AAGM of indigenous animal breeds or landraces categorised as threatened or endangered.
- (4) A person shall not export from Botswana an AAGM of a landrace unless such export has been authorised by
  - (a) the Minister in writing; and
  - (b) certified by the relevant livestock breeders' society.
  - 22. (1) An exporter institution shall —
  - (a) submit a letter of application for export permission to the Registrar at least 30 days before the intended date of export; and
  - (b) submit detailed information on genetic, health, production, processing, and storage and transportation data about the AAGM to the Registrar prior to import of the AAGM.
- (2) The official veterinarian shall, with the approval of the Registrar, provide a health certificate as requested by the importing country, which certificate shall include a fertility report, a breeding soundness report of the animal or the genetic material.
  - (3) Subject to subregulation (1), an exporter shall attach a label —
  - (a) on the shipment of semen, ovum and embryo, the breed name, donor number, date of production and batch number; and
  - (b) in addition to the shipment in paragraph (a), on the transit package or letter, the country of origin, species, producer, company, volume of animal genetic material per package, storage temperature and means of transportation.
- (4) A person shall follow the OIE Terrestrial Animal Health Code as last revised for semen, embryo, and ova collection and processing techniques.
- revised for semen, embryo, and ova collection and processing techniques.

  23. (1) At a sale, any AAGM collected in Botswana or imported shall be
  - accompanied by a written warranty by the Registrar.

    (2) The warranty referred to in subregulation (1) shall
    - (a) include a health certificate by an official veterinarian;
    - (b) record that the AAGM has been packed, marked and labelled in accordance with international standards; and
    - (c) guarantee that the AAGM was prepared in accordance with international standards.
  - (3) In the case of genetic material where the resultant progeny may be recorded or registered in terms of any livestock breeders' society, the AAGM shall be accompanied by
    - (a) certification from the livestock breeders' society that the AAGM was collected from approved stud book animals;
    - (b) certification from the livestock breeders' society that the performance of the donor animal complies with the minimum standards set by that livestock breeders' society; and
    - (c) identification details of the AAGM.
    - 24. (1) Breeding animals shall be accompanied by the following information —
    - (a) a legible record of the country of origin, species, breed name, identification;
    - (b) breeder institution, including a name, registration number and address of the farm of origin;
    - (c) importing or exporting institution, including the institution's or company's name and address; and
    - (d) a clear label of quantity to be imported or exported, indicating information for tracing the animal.

Conditions for export of AAGM

Sale of AAGM

Criteria for import or export of live animals

- (2) A health and sanitary certificate issued under Schedule 7 shall show that the animals were -
  - (a) inspected by a veterinarian 30 days before their important or export and were free from livestock diseases listed in Appendices 1 and 2 of the Diseases of Animals Act;

Cap. 37:01

- (b) not exposed to any of the diseases 60 days before inspection; and
- (c) treated for internal and external parasites within 30 days of import or
- (3) Animals under this regulation shall be kept in a quarantine camp in the country of origin for 21 days before and after their import or export.
- (4) All bulls shall be examined on breeding soundness to confirm their fertility and breeding potential and the results shall be shown in the health certificate.
- (5) The animal shall be identified by a permanent identification system enabling it to be traced to its flock or herd of origin.
- (6) Where any of the diseases listed in Appendix 1 of the Diseases of Animals Act, break out on board a vessel while the animals are in transit, the said vessel shall not be permitted to dock at the port of entry and the animals therein shall be disposed of.
- (7) Where the animals, upon arrival at the port of entry, after an inspection by an authorised officer, are found to be free from diseases listed in Appendix 1 of the Diseases of Animals Act, the following requirements shall be complied with -
  - (a) the animals shall be identified as imported animals;
  - (b) the animals shall be unloaded into a truck or trailer and transported immediately to any place that an authorised officer may determine, where depending on the condition of the animal upon its arrival, the animal may be placed under quarantine for at least 21 days; and
  - (c) the animals in the quarantine shall be periodically inspected by an official veterinarian.
- (8) Where any of the diseases listed in Appendix 1 of the Diseases of Animals Act break out after the animals have been unloaded, all the infected animals shall be condemned and disposed of at the expense of the owner and no compensation shall be paid for any animal destroyed.
- (9) A person who deals with import and export of live animals shall ensure a pedigree and performance test certificate is attached to every shipment.
- (10) A person authorised to import or export live animals shall not transfer, cede or sell his or her permit to any person.
- 25. (1) A person who transports animals shall follow the procedure of OIE Transportation Terrestrial Animal Health Code as last revised.

(2) A person who transports animals under these Regulations shall —

- (a) use clean and disinfected vehicles;
- (b) ensure the vehicle on transit stops only at approved ports; and
- (c) ensure all animals intended for export or import are issued a health certificate by a veterinarian.
- (3) An animal from outside Botswana shall not be allowed aboard an aircraft or vehicle during the time any other animal is on board.
- 26. (1) A person who imports or exports live animals shall ensure that the Pre-conditions following are made available -
  - (a) appropriate facilities for the intended purpose;

for live animals' importer or exporter

- (b) a suitable mode of transport;
- (c) office and record keeping rooms with necessary record keeping facilities;
- (d) a feed store with healthy and good quality feed.
- (2) A person who imports or exports live animals shall ensure he or she provides well trained personnel, including animal attendants.
- 27. A person who imports or exports semen of breeding animals shall ensure that
  - (a) the semen is collected, processed and stored in an approved semen, ova/embryo collection centre as set out in Schedules 4, 5, 6 and 7;
  - (b) he or she meets the conditions set out in Schedule 13;
  - (c) the semen is accompanied by an animal health certificate as set out under Schedule 16;
  - (d) the semen is accompanied by a pedigree certificate as specified under Schedule 14; and
  - (e) the semen imported outside Botswana comes from an animal which
    - (i) is registered in a herd-book or register kept by a competent authority or Registrar, and
    - (ii) an authorised officer has carried out a performance test and a genetic evaluation on the exported semen.
- 28. (1) A person who imports or exports ova and embryos of breeding animals shall ensure that
  - (a) he or she complies with the conditions relating to their collection, processing, storage and transport as set out under Schedule 19;
  - (b) the ova or embryos were conceived as a result of imported semen, artificial insemination or *in-vitro* fertilisation with semen from a donor sire standing at an approved semen, ova/embryo collection centre;
  - (c) he or she meets the requirements on donor animals as set out under Schedule 12;
  - (d) the Registrar issues him or her with an animal health certificate as set out under Schedule 16; and
  - (e) an authorised officer issues him or her a performance test certificate.
- (2) Where there is more than one ovum or embryo in a single straw, the certificate issued shall specify this where the ova or embryos have the same parentage.
- (3) Ova or embryos of breeding animals for import from outside Botswana
  - (a) be from countries of origin that have been certified to be free from diseases specified in the Diseases of Animals Act and those listed in Appendix 1 of the Diseases of Animals Act;
  - (b) have been collected by an ovum or embryo collection team approved by the competent authority in the countries of origin;
  - (c) be accompanied by a pedigree and health certificate; and
  - (d) come from an animal which is registered in a herd-book or register kept by a competent authority.
- (4) Only frozen embryos that are free from foot-and-mouth disease may be imported into Botswana.
- (5) Subject to subregulation (4), the embryos shall be stored under approved conditions for a minimum of 30 days before being transported.

Pre-conditions for imported or

exported semen

Pre-conditions for imported or exported ova and embryos

**29.** (1) Every authorised officer shall be issued with a warrant of his or her Duties of appointment stating that he or she is acting under these Regulations.

authorised officers

- (2) An authorised officer shall produce his or her warrant upon arrival on the premises being inspected and upon request by the property owner or occupier.
- (3) An authorised officer may, for the purpose of carrying out his or her duties under these Regulations -
  - (a) at any reasonable times enter and search any premises where the officer reasonably suspects that any breeding animals or their products or any other thing, the subject of these Regulations is being used, collected, stored, sold, packaged, transported, imported or exported;
  - (b) at any other place, carry out such examinations, tests, checks and inspections of the premises or place and any equipment, machinery or plant, any animal, product or thing found thereat as the officer considers necessary:
  - (c) take, without payment, such samples of any substance or, where the authorised officer is an official veterinarian, take from any animal a sample, from the premises or place as he or she may reasonably require for the purposes of such functions, and carry out or have carried out on the samples such examination checks and inspections in accordance with any provision of these Regulations;
  - (d) require the owner, person in charge, employee or any occupant to give him or her such information or produce such books, documents and other records within the power or procurement of the person as the officer requires;
  - (e) examine and take copies of or extracts from, any such records, including in the case of information in non-legible form a copy of or extract from such information:
  - (f) stop any vehicle which the officer suspects contains any AAGM in contravention to these Regulations;
  - (g) seize and detain any AAGM being imported or exported where he or she reasonably believes that there is non-compliance with any provision of these Regulations; or
  - (h) open any package containing or suspected to contain AAGM.
- (4) An authorised officer shall, before entering any premises in terms of subregulation (3), give the property owner or person in charge, 24 hours' notice of his or her intention to enter the premises for such purpose.
- (5) A person who obstructs or hinders an authorised officer in the exercise of his or her duties under subregulation (1) or who gives false or misleading information to an authorised officer commits an offence and is liable to a fine not exceeding P5 000 or to imprisonment for a term not exceeding 6 months, or to both.
  - (6) A person who —
  - (a) refuses or wilfully omits to give such information or document;
  - (b) tampers with any AAGM or any sample taken; or
  - (c) wilfully does anything which could reasonably lead to an inaccurate representation of the AAGM or sample taken,

commits an offence and is liable to a fine not exceeding P5 000 or to imprisonment for a term not exceeding 6 months, or to both.

(7) An authorised officer who finds or comes in possession of any AAGM which he or she reasonably believes is evidence of the commission of an offence under these Regulations, may seize and detain the AAGM pending a conclusion of any proceedings.

- (8) An authorised officer may, by notice in writing to the owner or the person in charge of any AAGM which has been seized and detained in accordance with these Regulations
  - (a) require anything specified in the notice to be done by the person to whom the notice is directed before the AAGM is released;
  - (b) require the disposal of AAGM upon its release by the person addressed in the notice, in the manner specified in the notice and at the expense of the owner; or
  - (c) indicate the authorised officer's intention to dispose of the AAGM at the expense of the owner, in a specified manner so as to prevent the AAGM from being imported, exported or used in contravention of these Regulations.
- (9) Subject to subregulation (8), where a person has to take specific action, an authorised officer may retain control of the AAGM until the requirements of the notice have been complied with.
- (10) A person shall not without the consent of the authorised officer move, dispose of, interfere with or otherwise deal with the AAGM other than in compliance with the requirements of the notice.
- 30. (1) Any person who is aggrieved by a notice under these Regulations may, not later than 21 days from the date of the notice, appeal against the notice to the Board.
- (2) An aggrieved person shall give notice of appeal in terms of subsection (1) to the Registrar at least 30 days before its hearing.
- (3) The appeal procedures under this regulation shall be in terms of section 32 of the Act.
- **31.** (1) The Registrar may charge an application fee of P100 in respect of applications for approvals.
- (2) The Registrar may refuse to grant the approval or revoke it pending payment of the fee by the owner or a person in charge, in terms of subsection (1).
- **32.** An application for registration as a registering authority shall be in the form set out by the Registrar and shall be accompanied by
  - (a) an application fee of P100;
  - (b) a copy of the constitution approved by the general meeting of the livestock breeders' society or a copy of the constitution compiled and approved by a group of livestock breeders' societies;
  - (c) proof that the applicant is able to comply with internationally acceptable performance recording methods;
  - (d) proof that performance recording methods comply with international norms and standards; and
  - (e) proof that the performance recording method makes provision for long term scrutiny and random parentage testing.
  - **33.** (1) The registration of -
  - (a) a person as an inseminator or semen collector, embryo collector, embryo transferor or import agent shall be valid for a period of 12 months; and
  - (b) a centre shall be valid for a period of 36 months.
- (2) An approval of an animal for the collection of semen, ova or embryo shall be valid for a period of 72 months.

Appeal

Fees

Registration of registering authorities

Registrations and approvals

34. (1) A person may apply to the Registrar for the renewal of —

(a) registration as an inseminator, semen collector, embryo collector, embryo transferor or import agent;

Renewals of registrations and approvals

- (b) the registration of premises as a centre; or
- (c) the approval of an animal as a donor for the collection of genetic material.
- (2) An application under subregulation (1) shall be —
- (a) accompanied by a renewal fee of P50;
- (b) submitted to the Registrar in a form as set out in Schedule 20; and
- (c) submitted to the Registrar not later than 30 days before the expiry date of registration or approval.
- (3) Notwithstanding subregulation (2), an application that reaches the Registrar's office after the expiry date of registration or approval shall be considered where
  - (a) it has been received within 90 days after the expiry date of such registration or approval; and
  - (b) it is accompanied by the applicable fee of P100.
- (4) When a centre ceases to function as such, the holder of the certificate of registration of that centre shall within 14 days return the certificate to the Registrar.
- (5) Where an animal approved for collection of semen, ova or embryo is removed from a centre, the authorised officer shall return the certificate of approval to the Registrar within 14 days of the date of removal of the animal.
- (6) Where the registration is terminated or the approval of an animal for the collection of semen, ova or embryo is withdrawn, the person who was issued with the approval certificate shall return the approval certificate to the Registrar within 14 days of the date of notification.
- 35. The Registrar shall keep a register in which the following information shall be recorded
  - (a) the name, address, identity number and age of each inseminator, semen collectors, embryo transferor or embryo collector and innovulator;
  - (b) particulars of the course of instruction, the authority or institution that presented such course and the date of completion of the course;
  - (c) the number and date of the certificate of registration issued to each person; and
  - (d) the expiry date of the registration of such person, the date on which it has been renewed and the expiry date of such renewal.

36. The Registrar shall keep a register of the -

- (a) name of each livestock breeders' society,
- (b) kind and breed of livestock the society keeps and breeds;
- (c) number and date of the certificate of registration issued to such livestock breeders' society; and
- (d) physical address of the livestock breeders' society.
- 37. The Registrar shall keep a record of the —
- (a) name and address of each centre;
- (b) number and date of the certificate of registration issued to such centre; and
- (c) expiry date of the centre's registration and each renewal of registration.
- 38. The Registrar shall keep a record of the following —
- (a) the name and address of each import or export agent;
- (b) the number and date of the registration of each import or export agent; and
- (c) the expiry date of the registration, expiry and renewal certificate of each import or export agent.

Register of registered inseminators, semen collectors, embryo transferors and innovulators

Register of livestock breeders' society

Premises registered as centres

Registered import or export agent Animals approved as donor animals for semen, embryos

Register of registered

registration

authorities

- 39. The Registrar shall keep a record of the following —
- (a) the kind and breed of the donor animal;
- (b) the identification of the animal and where applicable the number allocated to that animal;
- (c) name of the centre where the animal is kept;
- (d) number and date of the certificate of approval issued in respect of the animal; and
- (e) the expiry date of the approval of the animal, the date and expiry date of renewal of registration.

**40.** The Registrar shall keep a record of registered registration authorities and the record shall include —

- (a) the name, address, and contacts of each institution or livestock breeders' society;
- (b) particulars and details of a contact person for the institution or breeders' society;
- (c) the number and date of issue of a certificate of registration to each institution or livestock breeders' society:
- (d) the registration date, renewal and expiry dates; and
- (e) the kind of animal and its breed.

Termination of registration and approval

- 41.(1) The Registrar may at any time withdraw the approval of an animal or terminate the registration of a semen collector, inseminator, embryo collector, embryo transferor or import agent, or of any premises as a centre, if he or she is satisfied that
  - (a) any condition referred to in section 18 (1) and (2) of the Act has not been complied with; or
  - (b) in the case of the approval of an animal, the provisions of section 18 of the Act or Schedule 13 to these Regulations are no longer applicable.
- (2) Where the Registrar terminates the registration of a semen collector, inseminator, embryo collector, embryo transferor, agent or of premises as a centre or withdraws the approval of an animal, he or she shall in writing, notify the person issued with the certificate, stating the grounds for such termination or withdrawal.
- (3) Where the Registrar has grounds to terminate the registration of a group of persons as a livestock breeders' society or of a group of animal breeders' societies as a registering authority, he or she shall consult the Board and lodge a complaint with the Minister who will appoint a Board of enquiry in terms of the Act.

Offences and penalties

- **42.** Any person who —
- (a) commits or permits a contravention of any provision of these Regulations or a notice issued pursuant to these Regulations;
- (b) does not cease any action that he or she is required to cease; or
- (c) obstructs or hinders any officer in the exercise of any power conferred by the Regulations,

commits an offence under these Regulations and is liable to a fine not exceeding P1000 or to imprisonment for a term not exceeding 12 months, or to both.

#### SCHEDULE 1

(regulation 7)

#### CONDITIONS FOR APPROVAL OF LIVESTOCK BREEDERS' SOCIETIES

A. In order to be approved, a livestock breeders' society shall —

- 1. have legal personality;
- 2. prove to the Minister or Registrar that it
  - (a) operates efficiently;
  - (b) can carry out the checks necessary for recording pedigrees;
  - (c) has a sufficiently large herd or the minimum number of 500 animals as required to carry out a breed improvement programme; or
  - (d) has a sufficiently large herd to preserve the breed where this is considered necessary; and
  - (e) can make use of the livestock performance data necessary to carry out its breed improvement or preservation programme.
- 3. have a set of rules covering the -
  - (a) definition of the breed's characteristics;
  - (b) system for identifying animals;
  - (c) system for recording pedigrees;
  - (d) definition of its breeding objectives;
  - (e) systems for making use of livestock performance data; and
  - (f) division of the herd-book, if there are different conditions for entering animals or if there are different procedures for classifying the animals entered in the book.
- 4. Have rules of procedure, adopted in accordance with its constitution, laying down, in particular, principle of non-discrimination between the members of the breeders' society or organisation concerned.
- 5. The constitution of such society shall meet requirements provided under section 21 (3) (d) (i-iv) of the Act.
- The livestock breeders' society or organisation may also provide for the amendment
  of its constitution and the details thereof where the amendments and details are in terms
  of section 22 of the Act.
- 7. The minimum number of animals required to carry out a breed improvement programme shall be 500 animals.

### SCHEDULE 2 (regulation 7 (3) and (6))

#### CONDITIONS FOR ENTERING AN ANIMAL IN HERD-BOOKS

- 1. To qualify for entry into the main section of the herd-book of its breed an animal shall
  - (a) be descended from parents and grandparents entered in a herd-book of that same breed;
  - (b) be identified at birth according to the rules of that herd-book, and be identified at birth according to the rules of that herd-book; and
  - (c) have a pedigree established in accordance with the rules of that herd-book.
- 2. The main section of a herd-book may be divided into several classes according to the animals' merits. Only animals meeting the criteria laid down in condition 1 above may be entered in one of those classes. Where a herd-book contains several classes in the main section, an animal from another country shall be entered in the class of the book whose criteria it meets.
- 3. A Breeders' livestock society may decide that a female, which does not meet the criteria laid down in condition 1 above, may be entered in a supplementary section of that herd-book. In such case the female shall
  - (a) be identified in accordance with the herd-book rules;
  - (b) be judged as per the breed standards; and
  - (c) have a minimum performance criteria as set in the herd-book rules.

Note: The requirements set out in 3 (b) and (c) may be distinguished on whether the female animal belongs to the breed although it has no known origin or it was obtained from an upgrading programme as approved by the livestock breeders' society managing the herdbook.

4. A female whose mother or maternal grandmother are entered in a supplementary section of the herd-book as set out under condition 3 and whose father and two grandfathers are entered in the main section of the herd-book as set out under condition 1shall be classified as a pure-bred female and entered in the main section of the herd-book.

(regulations 9 and 28 (1) (e))

# CONDITIONS FOR GRANTING APPROVAL TO CARRY OUT PERFORMANCE TESTING, GENETIC EVALUATION OR PUBLICATION OF EVALUATION RESULTS

#### PART I

- 1. A person carrying out performance testing, genetic evaluation or publication of evaluation results shall
  - (a) have adequate resources, facilities and staff, and where necessary commercial industry support, co-operation and involvement to ensure complete, unbiased and accurate evaluations of animals;
  - (b) ensure that all animals involved in performance testing or genetic evaluation are properly identified and that complete and accurate records (being open to inspection at all reasonable times by an authorised officer) are kept as required by the Minister or designated competent authority under regulation 5;
  - (c) ensure that all animals involved in performance testing or genetic evaluation are properly identified and that complete and accurate records (being open to inspection at all reasonable times by an authorised officer) are kept as required by the Minister or designated competent authority under regulation 5;
  - (d) give an account of the recording methods, the model of performance description, the statistical method of analysis and the genetic parameters used for each evaluated trait; and
  - (e) enable all aspects of the testing or evaluation to be under the effective supervision of the Minister or designated competent authority.

#### PART II

1. A record of the recording methods, the model of performance description, the statistical method of analysis and the genetic parameters used for each evaluated trait shall be given and shall also comply with the following:

#### A. PERFORMANCE RECORDING

All data must be recorded under the approved body.

- 1. Beef production traits
- (a) In individual performance or progeny testing at a station the test method and the number of animals tested are to be indicated. The following are to be indicated in the test protocol
  - (i) Conditions for acceptance into the station,
  - (ii) Where applicable, the on-farm performance of the test animals prior to entry into the station,

- (iii) Identity of the owner of the test animals for individual performance testing,
- (iv) Maximum age for the test animals entering the station and the age range of contemporary animals on the station,
- (v) Length of adaptation and test periods at the station, and
- (vi) Type of diet and system of feeding.

Note: The minimum traits to be recorded include live weight gain and muscular development (conformation), feed conversion, scrotal circumference and carcass traits.

- (b) Testing in the field ('on-farm performance testing')
  - (i) The test method and the method to validate test results shall be provided by the approved body,
  - (ii) The minimum traits to be recorded include live weight, scrotal circumference and muscular development ('conformation'),
  - (iii) Testing carcass and meat quality traits through survey data from farms and points of sale and slaughter, and
- (c) Recording beef production data must comply with the principles agreed by International Committee for Animal Recording ('ICAR') as set in the ICAR Rules, Standards and Guidelines for Beef Performance Recording).
- 2. Milk recording

The recording of the milk production data shall comply with the principles of the ICAR Recording Guidelines for Milk.

3. Reproduction ('secondary traits')

Reproductive traits shall comply with the principles of ICAR

4. Morphological ('type') assessment

Assessment of type traits shall comply with the principles in the ICAR.

#### **B GENETIC EVALUATION**

- 1. Principles
- (a) The genetic evaluation of breeding animals shall be carried out under the Department of Agricultural Research and shall include the following performance traits according to the selection objectives —
  - (i) milk production;
  - (ii) beef production; or

- (iii) milk and beef productions for dual purpose breeds;
- (iv) traits reproductive performance; or
- (v) of morphology for breeds as set in ICAR standards.

Note: The breeding value of an animal is calculated on the basis of the results of the performance of the individual animal or its relatives.

- (b) The statistical methods applied in genetic evaluation shall comply with the principles agreed upon by competent international bodies including ICAR and shall guarantee a reasonable genetic evaluation, unaffected by the main environmental factors and data structure.
  - (i) The reliability of the genetic evaluation shall be measured as the coefficient of determination in accordance with principles agreed upon by competent international bodies including ICAR.
  - (ii) When publishing the evaluation results the following shall be included —

```
(aa) reliability; and (bb) date of evaluation.
```

- (iii) Genetic peculiarities of an animal shall be determined by the bodies officially appointed in consultation with the livestock breeders' societies.
- 2. Genetic evaluation of animals for Artificial Insemination (AI)
- (a) Except for protected breeds, the male animals shall be genetically evaluated on compulsory traits and the estimated breeding values from the Performance Recording Scheme or Breed Society.
- (b) In the genetic evaluation of dairy traits, the milk yield and content ('butterfat and protein percentage'), somatic cell count and relevant data for the genetic aptitude for dairy traits shall be included.
- (c) The minimum reliability of the genetic evaluation of AI males of dairy breeds shall be at least 0.5 for the main production traits according to ICAR principles taking into account all information from relatives.
- (d) Genetic evaluation of artificial insemination bulls for production traits may use the following performance testing methods
  - (i) individual performance testing on station,
  - (ii) progeny or sib test on station or in specialised units,
  - (iii) progeny or sib test on farm,

in such a way that the offsprings are distributed among the recorded herds to allow a valid comparison of bulls to be made; or

(iv) progeny or sib test by means of collecting data on farms, in auction sales or in slaughter houses in such a way that a valid comparison of bulls can be made:

Provided where the carcass weight or traits of meat quality, growth performance and calving aptitude are being recorded, the traits as well shall be included in the genetic evaluation of a bull.

(regulations 11 (2) (a) and 27)

### CONDITIONS FOR THE APPROVAL OF SEMEN, OVA OR EMBRYO COLLECTION CENTRES

- 1. Public semen, ova or embryo collection centres shall —
- (a) be placed under a permanent supervision of a centre Animal Scientist;
- (b) have -
  - (i) an animal housing including isolation facilities,
  - (ii) animal accommodation areas should be species specific where relevant,
  - (iii) a pre-entry isolation centre which is not compulsory for horses,
  - (iv) semen, ova or embryo collection centres including a separate room for the cleaning and disinfection or sterilisation of equipment,
  - (vi) semen, ova or embryo processing room, and
  - (vii) semen, ova or embryo storage room, which may not be on the same site,
- (c) be so constructed or isolated so as to prevent contact with livestock outside;
- (d) be so constructed that the animal housing and the semen, ovum or embryo collecting, processing and storage centres are easily cleaned and disinfected;
- (e) isolation accommodation so as to have no direct communication with the normal animal accommodation:
- (f) be so designed that the animal accommodation is physically separated from the semen, ova or embryo processing room and both are separated from the semen, ova or embryo storage room;
- (g) have personnel which is technically competent and observes high standards of personal hygiene to prevent the introduction of pathogenic organisms;
- (h) have special protective clothing and footwear for use only at the semen, ova or embryo collection centres to be worn at all times inside the centre;
- ensure visitors to the semen, ova or embryo collection centres are kept at a minimum and are authorised and controlled;
- (j) ensure -
  - (i) its equipment is specifically for the centre's use and it is disinfected before it is used,
  - (ii) all equipment and tools brought onto the premises is examined and treated where necessary to avoid an introduction of diseases as set out in the OIE Terrestrial Animal Health Code; and

- (k) be officially approved by a competent authority in consultation with a veterinarian.
- 2. Public semen, ova or embryo collection centres shall ensure —
- (a) there is separate and distinct areas for accommodating resident animals, for semen, ova or embryo collection, for feed storage, for manure storage, and for the isolation of animals suspected of being infected;
- (b) any semen, ova or embryo collection area is cleaned daily after collection and kept clean at all times;
- (c) feed introduction and manure removal is done in a manner which poses no significant animal health risk;
- (d) donor bulls are approved and registered in terms of the Act; and
- (e) the semen, ova or embryo collector is registered in terms of the Act.

### SCHEDULE 5 (regulation 11)

### CONDITIONS FOR THE SUPERVISION OF SEMEN, OVA OR EMBRYO COLLECTION CENTRES

1. The supervision of any semen, ova or embryo collection centres shall ensure the centre accommodates only animals of the species whose semen, ova or embryo is to be collected.

Note: Other domestic animals which are strictly necessary for the normal operation of the collection centre may also be admitted, provided that they present no risk of infection to those species whose semen, ova or embryo is to be collected and they fulfil the conditions laid down by the centre manager that —

- (a) a record is kept of all animals at the centre, giving details of the breed, date of birth and identification of each of the animals, all checks for diseases and all vaccinations carried out;
- (b) there is regular inspection by an official veterinarian, at least twice a year where checks on the conditions of approval and supervision shall be carried out:
- (c) the entry of unauthorised persons is prevented and authorised visitors shall be required to comply with the conditions laid down by the centre manager;
- (d) employment of technically competent staff suitably trained in disinfection procedures and hygiene techniques relevant to the control of the spread of disease; and
- (e) only semen, ova or embryo collected at an approved collection centre is processed, and stored in approved centres to avoid any contamination.
- 2. Deep-frozen embryos may also be stored in approved collection centres provided that –
- (a) such storage is authorised by the Registrar;
- (b) embryos meet the requirements on animal health; and
- (c) embryos are stored in separate storage flasks in the premises for storing approved semen.
- 3. Collection, processing and storage of semen, ova or embryo shall take place only in the premises set aside for the purpose and under conditions of the strictest hygiene.
- All equipment which comes into contact with semen, ova or embryo or the donor animal during collection and processing shall be properly disinfected or sterilised prior to use.
- 5. Products of animal origin used in the processing of semen, ova or embryo including additives or a diluent, shall be obtained from sources which present no animal health risk or are so treated prior to use to prevent such risk.

- 6. Storage flasks and transport flasks shall be properly disinfected or sterilised before the commencement of each filling operation.
- 7. The cryogenic agent used shall not have been previously used for other products of animal origin.

(regulations 8 (2) and 11)

# ROUTINE TESTS AND TREATMENT WHICH SHALL BE APPLIED TO ALL BOVINE ANIMALS IN AN APPROVED SEMEN, OVA OR EMBRYO COLLECTION CENTRE

- 1. All animals kept at an approved semen, ova or embryo collection centre shall be subjected at least once a year to the following tests
  - (a) Tuberculosis test:
  - (b) Brucellosis test;
  - (c) Enzootic Bovine Leucosis test;
  - (d) Test for Campylobacter Foetus Infection; and
  - (e) any other test as may be prescribed.
- 2. All tests shall be carried out according to the OIE standards.
- 3. If any of the above tests should prove positive, the animal shall be isolated and the semen, ova or embryo collected from it since the last negative test may not be used for AI.
- 4. Semen, ova or embryo collected from all other animals at the centre since the date when the positive test was carried out shall be held in separate storage and shall not be used for AI until the health status of the centre has been re-established.

# SCHEDULE 7 (regulations 11 (2) (c), (e), 24 (2) and 27)

### CONDITIONS APPLYING TO THE MOVEMENT OF ANIMALS INTO APPROVED SEMEN, OVA OR EMBRYO COLLECTION CENTRES

- 1. All animals admitted to a semen, ova or embryo collection centre shall —
- (a) have been quarantined for at least 28 days.
- (b) prior to quarantine set out in condition (a), animals should have belonged to a herd which is officially Newcastle, TB and FMD disease free.
- (c) before and during quarantine be tested for the following diseases
  - (i) Tuberculosis,
  - (ii) Brucellosis,
  - (iii) Enzootic Bovine Leukosis,
  - (iv) Bovine Rhinotracheitis or Infectious Pustularvulvo-vaginitis,
  - (v) Bovine Viral Diarrhoea,
  - (vi) Campylobacteriosis, and
  - (vii) Trichomoniasis.
- 2. If an animal tests positive for any of the above diseases, the animal shall be removed forthwith from the quarantine. In a case of group isolation, it is necessary to re-establish the eligibility of the remaining animals for entry into the collection centre in accordance with this Schedule.
- 3. All tests shall be carried out according to internationally approved standards including OIE standards.
- 4. Animals shall only be admitted to the semen, ova or embryo collection centre with the express permission of the centre manager.
- 5. Animals shall only be admitted to the semen, ova or embryo collection centre with the written permission of the centre manager and all movements, both in and out shall be recorded.

# SCHEDULE 8 (regulation 12 (1), 12 (2) (b) and 12 (3))

# CONDITIONS FOR THE APPROVAL OF ARTIFICIAL INSEMINATION (AI) CENTRES

The AI centres shall —

- (a) be supervised by a permanent and qualified personnel;
- (b) have an animal handling facility that includes
  - (i) isolation facilities, or
  - (ii) an insemination structure with a shelter, a cooler and a separate room for the storage of AI requisites, the cleaning and disinfection or sterilisation of AI instruments;
- (c) have a shelter designed that it is elevated away from direct sunlight and the cooler with enough air circulation to reduce the evaporation of liquid nitrogen;
- (d) be so constructed or isolated to avoid contact with outside livestock;
- (e) be so constructed that the perimeter fence is double fenced; and
- (f) have isolation accommodation ('quarantine area').

(regulation 12 (2) and (3))

# CONDITIONS RELATING TO THE SUPERVISION OF ARTIFICIAL INSEMINATION (AI) AND EMBRYO TRANSFER (ET) CENTRES

The centres shall be so supervised that —

- (a) only the animal species to be inseminated are admitted into AI centres;
- (b) only open females (confirmed non-pregnant by Pregnancy Diagnosis) are allowed in these centres or facilities and in government operated centres or facilities, calves are strictly not allowed;
- (c) only healthy animals with no clinical signs of ill health are admitted into these centres or facilities.
- (d) records of all animals are kept at the centre, detailing breed, age, identification, vaccinations, inseminations and health history of each animal;
- (e) each centre or facility shall have a good animal husbandry management programme;
- (f) each centre is regularly inspected by a veterinary official or a veterinarian for biosecurity requirements, at least once during the breeding season at which time standing checks on the conditions of approval and supervision shall be carried out;
- (g) the entry of unauthorised persons is prevented. Furthermore, authorised visitors shall be required to comply with the conditions laid down by the centre or facility manager; and
- (h) only technically competent personnel shall carry out the procedures.

(regulation 11 (2) (e), 12 (2) (a) and 12 (3))

# CONDITIONS APPLYING TO THE MOVEMENT OF ANIMALS INTO ARTIFICIAL INSEMINATION CENTRES

- 1. All animals admitted to an AI centre shall -
  - (a) have been moved to the AI centres according to animal movement protocol specified by the Department of Veterinary Services;
  - (b) have been subjected to Pregnancy Diagnosis ("PD") test and confirmed not pregnant by a qualified officer and reach AI centres within 48 hours after PD;
  - (c) be dipped within 48 hours prior to their admissions at AI centres:
  - (d) carry an identity in the form of a brand mark and an ear tag as required by the Botswana Identification and Trace Back System (BAITS);
  - (e) be accompanied by an inter-zonal movement permit issued by the Department of Veterinary Services;
  - (f) be from a herd which is officially TB and FMD disease free;
  - (g) come from farms or cattle posts that are within a 20 km radius in which for at least 30 days, there has been no case of foot-and-mouth disease; and
  - (h) come from herds that have for at least 30 days, been free from diseases which are compulsorily notifiable in the country.

(regulations 8, 9 and 10)

### CONDITIONS FOR THE APPROVAL OF AN OVA OR EMBRYO COLLECTION AND OVA OR EMBRYO PRODUCTION TEAMS

In order to be issued approval each embryo collection team shall fulfil the following conditions —

- 1. The collection, processing and storage of embryos shall be carried out either by a team Veterinarian or animal scientist or under his or her responsibility by one or more competent technicians.
- 2. The embryo collection team shall be placed under the general supervision and authority of an official veterinarian or animal scientist.
- 3. The embryo collection team shall have at its disposal permanent or mobile laboratory facilities where embryos can be examined, processed and packed, consisting of at least a work surface, a microscope and cryogenic equipment.
- 4. In the case of a permanently sited laboratory, the embryo collection team shall have at its disposal
  - (a) a room where embryos can be manipulated which is adjacent to but physically separate from the area used to handle the donor animals during collection; and used in embryo collection and manipulation;
  - (b) where micromanipulation of the embryo which involves penetration of the zona pellucida is to be carried out, this shall be done in suitable laminar-flow facilities which shall be properly cleaned and disinfected between batches,
    - (i) a clean section which shall be for the examination and manipulation of embryos,
       and
    - (ii) the other section which shall be for accommodating equipment and materials used when handling donor animals; and
  - (c) a mobile laboratory officer who shall always be in contact with a permanently sited laboratory officer to ensure that the sterilisation of the mobile laboratory equipment and the provision of fluids and other products necessary for the collection and manipulation of embryos are carried out.
- 4. To be approved as a team for the production and processing of embryos derived by in vitro fertilisation and or in-vitro culture, an embryo production team shall fulfil the following additional requirements
  - (a) The personal shall be trained in appropriate disease control and laboratory techniques, particularly in procedures for working in sterile conditions;
  - (b) The team shall have at its disposal a permanently-sited processing laboratory which shall —

- (i) have adequate equipment and facilities, including a separate room for recovering oocytes from ovaries and separate rooms or areas for processing oocytes and embryos, and storing embryos, and
- (ii) show no clinical signs of disease.
- 5. Notwithstanding condition 1, conditions 2 and 3 shall also apply to live animals intended as donors of oocytes by ovum pickup or ovariectomy.
- 6. For donors of ovaries and other tissues to be collected after slaughter in an abattoir, the donors shall not have been designated for slaughter, and as part of a national disease eradication programme and the donors shall not come from a holding which is subject to restrictions because of an animal disease.
- 7. For donors of ovaries and other tissues to be collected after slaughter in an abattoir, the donors shall not have been designated for slaughter, and as part of a national disease eradication programme, and the donors shall not come from a holding which is subject to restrictions because of an animal disease.
- 8. The abattoir where the ovaries and other tissues are collected shall not be situated in a zone subject to prohibition or quarantine measures.
- 9. In case of donors of semen, the animals including bulls, bucks, rams, boars, toms shall meet the requirements as set out in section 18 of the Act and
  - (a) donor animals shall also meet requirement 1;
  - (b) on the day of collection the donor animal shall
    - (i) show no clinical signs of disease, and
    - (ii) be kept in a holding which is not subject to veterinary prohibition or quarantine measures,
    - (iii) the animals must be kept in a satisfactory state of cleanliness, particularly of the lower thorax and abdomen,
    - (iv) whether on pasture or housed, the animal should be kept under hygienic conditions and housed, the litter should be kept clean and renewed as often as necessary,
    - (v) the coat of the animal should be kept clean,
    - (vi) for bulls, the tuft of hairs at the preputial orifice, which is often soiled, shall be cut to about 2cm,
    - (vii) the hair shall not be removed altogether or cut too short because of the hair's protective role of avoiding irritation of the preputial mucosa and the hairs' aid of drainage of urine,
    - (viii) the animal shall be brushed regularly, and where necessary on the day before semen, ova/embryo collection, paying special attention to the underside of the abdomen.
    - (ix) in the event of soiling, there should be careful cleaning, with soap or a detergent, of the preputial orifice and the adjoining areas, followed by thorough rinsing and drying, and
      - (x) when the animal is brought into the collection area, the technician shall ensure that the animal is clean and it is not carrying any excessive litter or particles of feed on its body or its hooves.

### SCHEDULE 12 (regulation 13 (1) and 28 (1) (c))

#### CONDITIONS FOR APPROVAL OF DONOR ANIMALS

- 1. An application for approval of an animal for the collection of genetic material shall be
  - (a) submitted to the Registrar on a form that is obtained from the office of the Registrar for this purpose; and
  - (b) accompanied by -
    - (i) The application fee of P100,
    - (ii) an extended two generation pedigree and the certificate thereof of the concerned animal as issued by the Association in terms of the Act or the relevant registering authority in terms of these Regulations,
    - (iii) a blood typing or DNA profile certificate as required by the livestock breeders society concerned confirming parentage or individual identification,
    - (iv) the performance data or estimated breeding values of the animal in terms of section 18 (3) (a) (ii) of the Act and certified by an organisation in terms of section 20 (2) of the Act or by an independent registering authority operating a performance testing scheme approved by the Registrar for this purpose, and
    - (v) the animal health certificate indicating the health status of the concerned animal, certified by the veterinarian, in terms of section 20 (3) (b) of the Act.
- 2. For the purposes of embryo collection, donor animals shall
  - (a) have spent at least a month within the country of collection;
  - (b) have been present in the herd of origin for at least 30 days prior to collection;
  - (c) come from herds which are disease free; and
  - (d) during the previous year, they shall not have been present in a herd which has shown any clinical sign of infectious bovine rhinotracheitis or infectious pustular vulvo-vaginitis.
- 3. On the day of embryo collection the donor cow shall
  - (a) be kept in a holding which is not subject to veterinary prohibition or quarantine measures; and
  - (b) show no clinical signs of disease.
- 4. Notwithstanding condition 1, conditions 2 and 3 shall also apply to live animals intended as donors of oocytes by ovum pickup or ovariectomy.

- 5. For donors of ovaries and other tissues to be collected after slaughter in an abattoir, they shall not have been designated for slaughter as part of a national disease eradication programme and the donors shall not come from a holding which is subject to restrictions because of an animal disease.
- The abattoir where the ovaries and other tissues are collected shall not be situated in a zone subject to prohibition or quarantine measures.
- 7. In case of donors of semen, the animals including bulls, bucks, rams, boars, toms shall meet the requirements as set out in section 18 of the Act and
  - (a) donor animals shall also meet requirement 1;
  - (b) on the day of collection the donor animal shall
    - (i) show no clinical signs of disease, and
    - (ii) be kept in a holding which is not subject to veterinary prohibition or quarantine measures,
    - (iii) the animals must be kept in a satisfactory state of cleanliness, particularly of the lower thorax and abdomen,
    - (iv) whether on pasture or housed, the animal should be kept under hygienic conditions and housed, the litter should be kept clean and renewed as often as necessary,
    - (v) the coat of the animal should be kept clean,
    - (vi) for bulls, the tuft of hairs at the preputial orifice, which is often soiled, shall be cut to about 2cm.
    - (vii) the hair shall not be removed altogether or cut too short because of the hair's protective role of avoiding irritation of the preputial mucosa and the hairs' aid of drainage of urine,
    - (viii) the animal shall be brushed regularly, and where necessary on the day before semen, ova/embryo collection, paying special attention to the underside of the abdomen.
    - (ix) in the event of soiling, there should be careful cleaning, with soap or a detergent, of the preputial orifice and the adjoining areas, followed by thorough rinsing and drying, and
    - (x) when the animal is brought into the collection area, the technician shall ensure that the animal is clean and it is not carrying any excessive litter or particles of feed on its body or its hooves.

### SCHEDULE 13 (regulation 14 (1) and 41 (1) (b))

# CONDITIONS FOR APPROVAL OF ANIMALS FOR BREEDING AND APPROVAL OF SEMEN OF BREEDING ANIMALS FOR ARTIFICIAL INSEMINATION USE PART I

Breeding Animals -

Animals which comply with the following conditions are approved for breeding—

- (1) Female breeding animals;
- (2) Purebred male breeding animals entered in the main section of an approved herd book for natural service;
- (3) Any stud animal with approved pedigree and performance tests certificates; and
- (4) Stud animals which have tested free from reproductive diseases as specified in Appendix 2 of this Schedule.

#### PART II

Semen of breeding animals for use in AI or fertilisation -

- (1) Applications for approval for breeding of semen of breeding animals shall be accompanied by
  - (a) both the performance test and pedigree certificates in accordance with Schedule 11 in the case of semen of pure bred breeding animals;
  - (b) in the case of semen from other breeding animals the ancestry and the performance test information similar to that referred to in Schedule 11 shall be provided; the origin of this information shall be stated and be acceptable to the Minister or the Registrar;
  - (c) a declaration that the donor animal is or will be blood typed and that a blood typing certificate will be available from an approved laboratory on request; and
  - (d) a declaration of known genetic defects in the animal itself or its ancestry.
- (2) Semen of breeding animals shall comply with the following conditions
  - (a) Semen for unrestricted use -

The genetic merit of the semen for required traits as specified by the Minister shall be in accordance with Schedule 3.

(b) Semen for testing and genetic evaluation of untested bulls — Semen from untested breeding animals may only be used for the purpose of testing and genetic evaluation of such breeding animals. The number of inseminations and if necessary the time period for the use of such semen may be specified by the Minister.

### (c) Semen for special breeding purposes

Notwithstanding condition 2 (b), semen from untested breeding animals may be approved for special breeding purposes for use in individual herds by the Minister and he or she may attach conditions.

### PART III

- (1) Ova and embryos of breeding animals which comply with the following are approved for breeding—
  - (a) Ova and embryos of pure bred breeding animals; and
  - (b) Embryos of other breeding animals the result of fertilisation by semen approved for unrestricted use under Part II 2 (a).

### Appendix 1

## PROHIBITED LIVESTOCK HEREDITARY DEFECTS IN LIVESTOCK SEMEN OR OVA

Kind of animal Hereditary Defect

1. Cattle Abnormal skull (nasal opening fused)

Absent dewclaws

Agnathia (abnormal low jaw)

Dermatosparaxis Dwarfism Cryptorchidism Hermaphroditism Impacted molars

Congenital ichthyosis (diffuse hyperkeratosis and abnormal

carnification of the thick horn scales)

Skin resulting in congenital porphynnuria (pink tooth)

Spastic paresis
Viable hypotrichosis
Deformed limbs
Hereditary laminitis
Flexed pasterns
Bowed pasterns
Prognathism
Skew face
Deviated penis
Scow tail
Screw tail

Muscular hypertrophy Digital anomalies Multiple eye defects

2. Goats Abnormal skull (nasal opening fused)

Agnathia Dwarfism

Hermaphroditism Impacted molars Conformational defects

Congenital ichthyosis (diffused hyperkeratosis and abnormal

carnification of the thick, horny scales) Congenital porphynnuria (pink tooth)

Viable hypotrichosi Deformed limbs Flexed pasterns Bowed pasterns Prognathism Skew face Deviated penis Scow tail Screw tail

Muscular hypertrophy Digital anomalies Multiple eye defects Shortened jaw

3. Horses Kyphosis

Deformed forelegs

Wobbles

4. Sheep Abnormal skull (nasal opening fused)

Agnathia Dwarfism

Hermaphroditism Impacted molars Conformational defects

Congenital ichthyosis (diffuse hyperkeratosis and abnormal carnification of the skin resulting in thick horny scales)

Congenital porphynnuria (pink tooth)

Cryptorchidism
Viable hytotrichosis
Deformed limbs
Flexed pasterns
Bowed pasterns
Prognathism
Skew face
Deviated penis
Scow tail
Screw tail

Muscular hypertrophy Digital anomalies Multiple eye defects Shortened jaw Diverticulosis ileitis

Split ears Stringhalt Hermaphrotism

Kinky tail Congenital bent legs

Cryptorchidism Melanotic skin tumours

Eye defects (micropthalmia) Polydactyl Syndactyl Scrotal hernia

Thickened forelimbs

5. Poultry Silky feathers (Hypohyrodisms)

Cracked beaks

Ostriches Dwarfism

### Appendix 2

### PROHIBITED REPRODUCTIVE DISEASES IN LIVESTOCK, SEMEN OR OVA

1. Cattle

Actinobacillus seminis infection

Brucellosis

Campylobacteriosis

Caprine retrovirus infection

Enzootic bovine leucosis

Equine virus arteritis

Johnes disease

Leptospirosis

Milioidosis

Pestivirus infection

Trichomoniasis

**Tuberculosis** 

Bovine Viral Diarrhoea

# SCHEDULE 14 (regulations 15 (1) and 27)

### SEMEN INFORMATION

### Model Certificate for Semen of pure-bred breeding animals

Document relating to	semen	
Semen identification	system	
Colour	Batch No.	ID No.
No. of doses/straws		Date of collection
Donor ID No.		Donor herd book No.
Donor breed		
Origin of semen		Address of semen, ova/embryo collection centre
Semen destination		Name and address of consignee
Done at		on
Name		(Signature)
Title of signatory		

### SCHEDULE 15 (regulations 15 (1), 27 and 28 (1) (d))

### EMBRYO INFORMATION

Model Certificate for Embryos of pure-bred breeding animals

Number:					
Original country of col	lection:				
Competent authority:					
Embryo information					
Colour No.		Batch		ID No.	
Date of insemination			Date of collection		
No. of embryos per straw			No. of straws		
Donor ID No.			Donor herd book No.		
Donor breed					
Origin of embryo					
Address of embryo col	lection cent	re			
Approval No. of embryo collection centre:					
Consignment ID					
Destination of embryo					
Place of loading					
Country and place of o	destination	·			
Means of transport					
Name and address of consignor					
Name and address of consignee					
Done at:			Date:		
Name			(Signature)		
Title of signatory					

# SCHEDULE 16 (regulations 15 (1) and 27)

### ANIMAL HEALTH CERTIFICATE FOR TRADE IN SEMEN

Number:				
Original country of collection:				
Competent authority:				
Semen information				
Colour	Batch 1	No.	, , , , , , , , , , , , , , , , , , , ,	ID No.
No. of doses/straws		D	ate of collection	
Donor ID		D <sub>N</sub>	onor herd book	
Donor breed				
Origin of semen				
Address of semen, ova	embryo collection	1		
Approval/Registration collection centre:	No. semen, ova/en	nbryo		
Destination of semen				
Place of loading				
Country and place of destination				
Means of transport				
Name and address of consignor				
Name and address of co	onsignee			
I, the undersigned office	cial veterinarian ce	rtify that:		
The semen described comply with OIE states	l above was collec indards.	ted, proce	ssed and stored ur	nder conditions which
2. The semen described	l above was sent to	the place	e of loading in a se	ealed container.
<ol><li>The semen described by OIE.</li></ol>	above was collecte	ed from re	productive disease	free bulls as required
Done at:		Or	•	
Name		(Si	gnature)	
Title of signatory				

# SCHEDULE 17 (regulations 15 and 28 (1))

### ANIMAL HEALTH CERTIFICATE FOR TRADE IN EMBRYO

Number:				
Original country of co	llection:			
Competent authority:	·			
Embryo information				
Colour		Batch No.		ID No.
Date of insemination			Date of collection	
No. of embryos per straw			No. of straws	
Donor ID No.			Donor herd book No.	
Donor breed				
Origin of embryo				
Address of embryo co	llection centi	re		
Approval No. of embr	yo collection	centre:		
Consignment ID				
Destination of embryo	)			
Place of loading				
Country and place of	destination			
Means of transport				
Name and address of	consignor			
Name and address of	consignee			
I, the undersigned off	icial veterina	rian certify	that:	
The embryo describ comply to OIE stan		s collected, p	processed and stored u	ınder conditions which
2. The embryo describ	oed above wa	is sent to the	place of loading in a	sealed container.
3. The embryo descri required by OIE sta		was collecte	d from reproductive	disease free cows as
4. The embryo describ against FMD within				ve not been vaccinated
5. The embryo was sto	red in approve	ed condition	s for a minimum of 30	days prior to dispatch.

6. The embryos were derived by to penetration of the zona pells	natural in-vitro fertilisation and subjected to/not subjected ucida. (please tick the appropriate)
Done at:	Date:
Name	(Signature)
Title of signatory	

#### **SCHEDULE 18**

(section 16(1)(a) - (c) and regulation 31)

#### REGISTRATION OF CERTAIN PERSONS

- 1. Subject to section 16 (a) (c) and regulation 31, an application for registration as an inseminator, semen collector, embryo collector or transferor shall be submitted to the Registrar in a form from the Registrar's office for this purpose.
- 2. Such an application shall be accompanied by
  - (a) the documentary proof referred to in terms of regulation 31;
  - (b) proof that the applicant has passed the relevant practical examination in terms of these Regulations; and
  - (c) the application fee of P100.
- Conditions for registration as an inseminator, semen collector, embryo collector or transferor include that —
  - (a) a person intending to register, in terms of the Act, as an inseminator, semen collector, embryo collector or transferor shall complete the appropriate course of instruction conducted by an approved institution; and
  - (b) a successful completion of the course of instruction shall be followed by the relevant practical examination.
- 4. The practical examination referred to in condition 3 shall be
  - (a) attempted after a period of at least 6 months practical experience; and
  - (b) conducted by an approved institution appointed by the Registrar.
- 5. The course of instruction referred to in condition 3 shall in the case of a course instruction to register as
  - (a) an inseminator, include instructions with reference to the following
    - (i) the theory and technique of the non-surgical artificial insemination of animals,
    - (ii) the anatomy of the reproductive tract of the male and female animals,
    - (iii) physiology and diseases of reproduction,
    - (iv) the principles of veterinary hygiene, and
    - (v) the basic theory of livestock breeding and genetics that includes the theory and practice of the processing of semen in terms of the Act on the collection, sale and processing of semen and the artificial insemination of animals;
  - (b) a semen collector, include instructions with reference to the following
    - (i) the theory and practice of the collection, evaluation, processing, packaging, labelling, storage and distribution of semen,
    - (ii) the basic theory and practice of laboratory hygiene, and
    - (iii) the Act with regard to the collection, evaluation, processing, packaging, labelling, storage and sale of semen;
  - (c) an embryo transferor or innovulator, include instructions with reference to the following
    - (i) the theory and technique of the non-surgical embryo transfer in animals,
    - (ii) anatomy of the reproductive tracts of the male and female animals, with particular attention to female animals,
    - (iii) reproduction physiology and endocrinology, more especially in relation to female animals,
    - (iv) the principles of embryology, fertilisation, fusion, zygote physiology and development,

- (v) the basic theory of the collection, thawing and implantation of embryos,
- (vi) the theory and practice of the selection and preparation of recipient animals, and
- (vii) the Act with regard to the collection, sale and conveyance of semen, ova and embryos, the fertilisation of ova for the collection of embryos, the artificial insemination of animals and embryo transfer; and
- (d) an embryo collector include instructions with reference to the following -
  - (i) the advanced level of instructions referred to in conditions (a) and (c),
  - (ii) the theory and practice of the selection and preparation of animals,
  - (iii) for the collection of ova and embryos and animals for embryo transfer, and
  - (iv) the theory and the practice of the collection of ova and embryos.
- 6. An approved institution shall issue documentary proof in a form approved by the Registrar, certifying that such person has successfully completed the course of instruction and the relevant practical examination.

### SCHEDULE 19

(regulations 16 and 28 (1) (a))

## APPLICATION FOR THE IMPORT OF ANIMALS AND ANIMAL GENETIC MATERIAL

### A. IMPORTANT INFORMATION

- 1. Complete fully in print.
- 2. Complete in full in duplicate. Incomplete applications will be returned to the applicant and no responsibility for any inconvenience will be accepted.
- 3. Application to be submitted 30 days prior to importation.
- 4. Import permits are valid for a limited period and one consignment only.
- 5. Ensure that the following documentation is attached to the application
  - (a) an extended two generation pedigree;
  - (b) the performance records;
  - (c) blood typing or DNA tests certificate; and
  - (d) an approval from relevant Breeder Society.
- 6. The applicant must be a juristic person, e.g. Eddy Tsala, or Eddy Tsala T/A Maru Stud, or Maru Stud CC, of Maru Stud (Pty) Ltd, or Maru Ltd.
- 7. If the applicant does not sign the application personally, a letter authorising the signatory (agent) to sign the application on behalf of the applicant shall accompany the application.
- 8. If an applicant has entered into an agreement with a foreign supplier of the animals to be imported, in terms of which royalties, fees or concessions, in addition to the purchase price payable or to be given in respect of the use of such animal or progeny thereof, this application shall also be accompanied by a confirmation by the Ministry of Trade, Investment and Industry that such agreement has been approved by the Ministry.
- 9. A fee of P100 shall accompany each application.
- A bank guaranteed cheque or a postal order shall be payable to Government of Botswana
- 11. Applications shall be submitted to the -

Registrar of Livestock Improvement Private Bag 0032 Gaborone Botswana

Tel: (+267) 3689625 Fax: (+267) 3951120

B. IF AN APPLICATION IS MADE BY AN AGENT ON BEHALF OF AN IMPORTER, PLEASE PROVIDE THE FOLLOWING —								
1. Full names of importer								
2. Registration number (if applicable)								
3. Address of importer								
4. Attach proof in the form of a signed letter (on the importer's letterhead where applicable) stating that —								
(a) you are authorised to apply on behalf of that importer; and								
(b) the importer agrees to be bound to all the terms and conditions of this application as well as any permission, permit or authorisation issued as a result thereof.								
NO APPLICATION WILL BE CONSIDERED WITHOUT SUCH CONFIRMATION BEING ATTACHED.								
C. PARTICULARS								
1. Surname and initials of the applicant or the name of the company								
2. Prefix								
3. National Identity number or Passport number								
4. If the applicant is an immigrant, supply details (on a separate piece of paper)								
5. Registered name of farm								
6. Magisterial district								
7. Complete postal/residential address								
8. Postal code								
9. Telephone (code and number)								
10. Fax (code and number)								

12. Email addres	\$S							
3. Membership	Membership number and herd-book or Stud book registration number (if any)							
4. Purpose of ir	nportation (give	e reasons and	d motivat	ion)				
5. Expected da	-			-				
6. Approved cl	earing agent							
7. Quarantine s 8. Animal gene	tation tic material for	which applic	cation is	made				
19. Breed								
0. Species								
20.1 Animals								
Full register animal or no anin	n-registered	Registrati	on No.	Colour of animal	Gender			
	amanuru .							
21. DETAILS O	F GENETIC M	IATERIAL						
21.1. Semen do	onor							
Name	Registratio	n number	Num	ber of doses				
			<u> </u>					

Samen donor/Name	& Dag	Ova donor/Nan	a &	Number of	
Semen donor/Name number	æ Keg.	Registration Nu		doses	
		,			
21.3. Other (specify)					
Name	Regist	ration number	Nun	nber of doses	
2. Country of origin			<del></del>		
3. Full address of est	ablishmei	nt or AI centre from	whom tl	ne import is to b	e made
					•
4. Port of entry					
D. DECLARATION B I, the undersigned, I					
	icicuy uci	ciaic mat			
	that The	ave read and unders	الداء مرا	a mmavidiana	F &L - T

(b) the animal(s) to be imported to the best of my knowledge complies with the prescribed minimum import requirements as stipulated in the Livestock Improvement Act;

with the Authorised Regis months of arrival in the c (d) negotiations to buy the ar	<ul> <li>(c) application shall be made for the recording or registration of the animal genetic material with the Authorised Registering Body and Livestock Improvement office within three months of arrival in the country;</li> <li>(d) negotiations to buy the animal genetic material from the foreign owner are already</li> </ul>								
under way;									
(e) all veterinary and current	cy exchange requirements will be strictly adhered to; and								
(f) to the best of my knowled	ge the particulars given in this application are true and correct.								
Signature	Date								
Initials and Surname	Capacity								
E. DECLARATION BY BREED	DERS' SOCIETY								
Name:									
It is hereby declared that —									
(a) that the donor animals m	nentioned in this application does/do comply with the cort requirements of the breeders' society; and								
(b) the applicant is a member recorded or registered fer	r of this breeders' society and he/she is in the possession of males of this breed; and								
(c) all changes made on the ap	plication form have been initialised by this breeders'society; and								
	ents of the constitution of the breeders' society, as far as the have been complied with.								
SIGNATURE	DATE								
INITIALS AND SURNAME	CAPACITY								

# SCHEDULE 20 (regulations 17 and 34)

# APPLICATION FOR RENEWAL OF THE APPROVAL FOR AN ANIMAL FOR THE COLLECTION OF SEMEN

Name of applicant (juristic person)	
Name and address of centre	
Species	
Breed	-
Name of animal	
Nick name	••
AI-code	-
Stud book registration number	
I the undersigned, hereby declare that the particulars of the as the attached documents are to the best of my knowledge	
SIGNATURE OF AUTHORISED OFFICER	DATE
CAPACITY	

# SCHEDULE 21 (regulation 20)

### APPLICATION FOR THE IMPORT OF POULTRY/EGGS

### A. IMPORTANT INFORMATION

- 1. Complete in print using capital letters only.
- 2. Complete in full in duplicate. Incomplete applications will be returned to the applicant and no responsibility for any inconvenience will be accepted.
- 3. Application to be submitted 30 days prior to import/export.
- 4. Import permits are valid for a limited period and one consignment only.
- 5. If the applicant does not sign the application personally, a letter authorising the signatory (agent) to sign the application on behalf of the applicant shall accompany the application.
- 6. Ensure that the following documentation is attached to the application
  - (a) The certificate, issued by the foreign supplier of poultry or eggs, on which the generation status of such poultry or eggs is confirmed; and
  - (b) A comprehensive motivation of the reasons why the importation of new pure breeding lines or breed is necessary (if applicable); and
  - (c) Written confirmation by the Director: Department of Veterinary Services that accommodation is available at an approved quarantine station.
- 7. The applicant shall be a juristic person, eg. Eddie Tsala, or Marata T/A Tsalatsotlhe Stud, or Tsalatsotlhe Stud CC. or Tsalatsotlhe Stud (Pty) Ltd., or Tsalatsotlhe Poultry, or Tsalatsotlhe Poultry CC.
- 8. If the application is not signed by the applicant personally, a letter authorising the signatory (agent) to sign the application on behalf of the applicant, must accompany the application.
- 9. An application fee of P100 shall accompany each application.
- 10. A cheque or postal order shall be payable to -

The Registrar Livestock Improvement Private Bag 0032 Gaborone Botswana Telephone (+267) 3689625 Fax (+267) 3951120

## C. IF APPLICATION IS MADE BY AN AGENT ON BEHALF OF AN IMPORTER, PLEASE PROVIDE —

1.	ruii names of importer
2.	Registration number (if applicable)
3.	Address of importer

Attach proof in the form of a signed letter (on the importer's letterhead where applicable) stating -

- (a) that you are authorised to apply on behalf of that importer; and
- (b) that the importer agrees to be bound to all the terms and conditions of this application as well as any permission, permit or authorisation issued as a result thereof.

NO APPLICATION WILL BE CONSIDERED WITHOUT SUCH CONFIRMATION BEING ATTACHED.

D		$\mathbf{P}_{i}$	AK.	U	CU	LAKS
---	--	------------------	-----	---	----	------

D. PARTICULARS				
1. Full names and surname of the applicant/or the name of the compa	ny.			
2. Identity number/Passport number/Company number	_			
3. If the applicant is an immigrant, supply details (on a separate sheet	:)			
4. Complete physical name of the farm				
5. District				
6. Complete postal address				
7. Postal code				
8. Telephone (code and number)				
9. Fax (code and number)				
10. Email				
11. Poultry for which application is made (give numbers)	N	lumber		
· · · · · · · · · · · · · · · · · · ·	Male	Female		
Layer lines (grandparent-and great-grandparent stock)				
Layer lines (parent-stock for evaluation purposes)				
Broiler lines (grandparent-and great-grand parent stock)				
roiler lines (parent stock for evaluation purposes)				

Show purposes (fowls)	
Ducks, geese, turkeys, muscovies (show and commercial	al purposes)
12. Purpose of import (give reasons and motivation) (U	Jse separate sheet)
13. Expected date of import	
14. Approved clearing agent	
15. Country of origin	
16. Port from which imports will be sent	
17. Port of entry	
E. DECLARATION BY APPLICANT	
<ul> <li>I, the undersigned, hereby declare that the poultry or</li> <li>(a) to the best of my knowledge comply with the pres and should this not be the case, the transaction w</li> <li>(b) all veterinary and currency exchange requirement</li> <li>(c) in the case of poultry for show purposes, the poultry production of meat or eggs; and</li> <li>(d) to the best of my knowledge the particulars give correct.</li> </ul>	scribed minimum import requirement will be considered as cancelled; and ats will be strictly adhered to; and y will not be used for the commercian
SIGNATURE	DATE

# SCHEDULE 22 (regulation 24)

# APPLICATION TO IMPORT/EXPORT ANIMALS FOR CERTAIN PURPOSES (SHOWS)

#### A. IMPORTANT INFORMATION

- 1. Complete fully in print.
- 2. Incomplete applications will NOT be considered.
- 3. Application to be submitted 30 days prior to import/export.
- 4. Import permits are valid for a limited period and one consignment only.
- 5. Attach copy of the receipt of the prescribed application fee of P100.
- 6. Make a cheque or postal order payable to —

### **BOTSWANA GOVERNMENT**

7. Submit the application to —

The Registrar of Livestock Improvement Private Bag 0032 Gaborone, Botswana Tel No.: (+267) 3689625

Tel No.: (+267) 3689625 Fax No.: (+267) 3951120

## B. IF APPLICATION IS MADE BY AN AGENT ON BEHALF OF THE APPLICANT, PLEASE PROVIDE -

1.	Full names of applicant
2.	Registration number (if applicable)
3.	Address of applicant

- 4. Attach proof in the form of a signed letter (on the applicant's letterhead where applicable) stating that the
  - (a) agent is authorised to apply on behalf of that applicant; and
  - (b) applicant agrees to be bound by all the terms and conditions of this application and any permission, permit or authorisation issued as a result thereof.

# NO APPLICATION WILL BE CONSIDERED WITHOUT SUCH CONFIRMATION BEING ATTACHED.

	PARTICU Full name		arname of t	he ap	plicant or name	e of	the company	y —	
2. I	dentity n	umber/F	Passport nu	mber	of applicant or	Co	mpany numb	per —	
3. F	Registere	d name	of the farm	_					
4. Γ -	District a	nd Place	;						
5. ] - -	Postal an	d reside	ntial addre	ss —					
6. F	Postal cod	de —							
7. T	Telephone	e (code a	and numbe	r)					
8. F	Fax numb	per —							
9. E	E-mail ad	ldress —							
D. I	DETAILS	S OF IM	PORT/EX	PORT	,				
1. F	Purpose (	mark wi	th a cross)						
Sh	ows	Exhibi	tions	Com	petitions				
	Stu	d mating	g/Veterinar	y Ser	vices				
2. 1	ype of a	nimal (n	nark with a	cross	)				
Ca	ttle	S	heep		Goats		Horses		Others
Bre	ed of an	imal							

^					•
3.	Num	her.	of	anım	ลเร

Male		Female	Unweaned	Castrated
1. Perm	nanent brand/t	attoo or description of	animal	
5. Com	plete this part	in a case of a registere	d horse or animal	
Nan	ne of animal	Reg./Passport/ Microchip No.	Colour	Gender
. Inten	nded date of in	nport/export		
. Inten	nded date of re	turn to country of origi	in (if applicable)	
. IMP	ORT PARTIC	ULARS		
	Name and physwill be kept	sical address of person a	and farm or village in l	Botswana where the anim
(b) '	Telephone Nu	mber —		<del>-</del>
(c) 1	District —			
(d) \$	State Veterinar	rian —		
EXP(	ORT PARTIC	ULARS		
(a) 1	Export to —			
_				

(c)	Telephone number —
,	•
( <i>d</i> )	District —
E. CO	UNTRY OF ORIGIN
Cou	ntry
Full	address of establishment from where the import is to be made —
	or border of entry
1 011	
	CLARATION BY APPLICANT

### SCHEDULE 23

(regulations 24 and 26)

INFORMATION ON HOW TO IMPORT OR EXPORT ANIMALS TEMPORARILY FOR SPECIFIC PURPOSES SUCH AS SHOWS, EXHIBITIONS, COMPETITIONS AND STUD MATING/ VETERINARY SERVICES.

#### DESCRIPTION

If applicant wants to import/export animals into/out of the Republic of Botswana for specific purposes such as shows, exhibitions, competitions and stud mating/veterinary services, legislation requires that you must apply for and be granted Livestock improvement permit from the Registrar of Livestock Improvement.

- To import/export animals temporarily, you must apply for Livestock Improvement permit from the Registrar of Livestock Improvement and for a veterinary import permit from the Director of Veterinary Services.
- Incomplete applications will be returned to the applicant and no responsibility for any inconvenience will be accepted.

#### STEPS TO FOLLOW

- If applicant is temporarily importing/exporting an animal for specific purposes such as shows, exhibitions and competitions, you must complete the relevant application form in print using capital letters. (Link to Department of Animal Production website).
- Contact the Department of Animal Production if you are not sure which form to complete. (Link to Department of Animal Production for contact list).
- Applicant shall apply 30 days before you import/export.
- If applicant is temporarily importing an animal for stud mating/veterinary services purposes, you must have a:
  - Certificate from a recognised Registrar in the country where you are importing the animal from. The certificate must indicate a DNA blood type of the animal and the animal profile.
  - Recommendation from the relevant Botswana Breeder's Society specifically for landrace breeds,
- The correct fee must accompany each application (see information below)
- Send the forms and proof of payment to:

The Registrar of Livestock Improvement

Private Bag 0032

Gaborone

Botswana

Or fax to (+267) 3951120

- Following receipt of the completed application form and proof of payment, animal improvement permit will be issued and be given to the Department of Veterinary Services to issue veterinary import permit.
- After applying for livestock improvement import permit, you must apply for veterinary import permit from the Department of Veterinary Services. For enquiries regarding veterinary import permit please phone (+267) 3689003.
- Both these original permits have to be presented to the Veterinary Official at the port of entry, together with the original Veterinary Health Certificate issued by the exporting country.

### Legal framework

- Livestock Improvement Act, 2009
- Diseases of Animals Act, Cap. 37:01

Service standard

It will take 30 days to process the application.

#### Cost

P50.00 for livestock improvement permit (Revised annually and published in Government *Gazette*).

 Make bank guaranteed cheques and postal orders payable to: Botswana Government

Reference shall be the importer's name and surname.

- Applicant is responsible for bank charges as well as the Foreign Bank charges. The Department will not issue a permit if the full fee of P50.00 is not received.
- A bank guaranteed cheque made payable to Government of Botswana may be attached to the application form and posted to the address listed under contact details.

Payments may also be made at the offices of the Department of Animal Production

- In cases where you are applying on behalf of someone else, please make sure that you pay in the name of that person or company's name.
- No application will be processed without proof of payment.

Forms to complete

Application to import/export animals for certain purposes (Shows)

Contact details

Director of Animal Production

Tel: (+267) 3689625 Fax: (+267) 3951120 Gaborone, Botswana

Physical Address: Ministry of Agricultural Development and Food Security

Plot No. 4701 Station Road Gaborone

Postal Address: The Registrar of Livestock Improvement

Private Bag 0032

Gaborone Botswana

Directorate: Livestock Improvement, Private Bag 0032, Gaborone

EXPORT OF SEMEN: AUTHORISATION No. EXP 0002

Authorisation is hereby granted to	o —		
Name of applicant —			
Postal address —			
For the export of		(Species)	semen of the
	(Name of bree	ed) from the	
(country of origin) to			_ (country of import)
List of semen to be exported —			
Name of donor animal	Reg. No.	Number of Doses	
e.g. Computer	e.g. 15 240	10	
	TOTA	AL: 10	

### CONDITIONS

- 1. The consignment shall be accompanied by the Breeders' Society inspection report.
- 2. The authorisation is for one consignment only and subject to compliance with the veterinary requirements as set out in the attached permits and is also subject thereto that the intended export meets with all the provisions of this Act.
- 3. The authorisation does not exempt the exporter from the provisions of any other law.
- 4. The authorisation may be withdrawn by the Registrar should there be any false information in the application.

## SCHEDULE 24 (regulation 28)

# CONDITIONS RELATING TO THE COLLECTION OR PRODUCTION, PROCESSING, STORAGE AND TRANSPORT OF OVA OR EMBRYOS BY AN APPROVED EMBRYO COLLECTION OR PRODUCTION TEAM

### 1. Collection and processing —

- (a) Embryos shall be collected and processed by an approved collection team without coming into contact with any other consignment of embryos not meeting the requirements of these Regulations.
- (b) Embryos shall be collected in a place which is isolated from other parts of the premises or holding and which shall be in good conditions and easy to cleanse and disinfect.
- (c) Embryos shall be processed in either a permanent laboratory facility or a mobile laboratory facility, which is not situated in a zone subject to prohibition or quarantine measures.
- (d) All implements which come into contact with the embryos or the donor animal during collection and processing shall be disposable or shall be properly disinfected or sterilised prior to use.
- (e) Products of animal origin used during collection of the embryos and in the transport medium shall be obtained from sources which present no animal health risk or are to be so treated prior to use so that such risk is prevented.
- (f) All media and solutions shall be sterilised by approved methods according to the recommendations of the International Embryo Transfer Society (IETS) manual and antibiotics may be added to the media in accordance with the IETS manual.
- (g) Storage and transport facilities shall be properly disinfected or sterilised before the commencement of each filling operation.
- (h) The cryogenic agent used shall not have been previously used for other products of animal origin.
- (i) Each embryo container and the containers in which the embryos are stored and transported shall be clearly code-marked in such a way that the date of collection of the embryos, the breed and identification of the donor sire, the donor dam and the registration number of the team can be readily established.
- (j) The characteristics and form of code marking shall be as specified in writing by the Minister.
- (k) Each embryo shall be washed at least 10 times in a special fluid for embryos; and
- (1) The special fluid shall be changed as frequently as determined by the Registrar.

- (m) The embryo may contain trypsin, in accordance with internationally recognised procedures; and each wash shall be a 100-fold dilution of the previous wash and a sterile micropipette shall be used to transfer the embryo on each occasion; and
- (n) After the last wash each embryo shall be subjected to microscopic examination at a magnification of at least x 50 over its entire surface to determine that the zona pellucida is intact and is free from any adherent material.
- (o) Any micro-manipulation which involves penetration of the zona pellucida shall be carried out in the facilities approved for the purpose, and after the last wash examination.
- (p) A micro-manipulation may only be carried out on an embryo that has an intact zona Pellucida.
- (q) Each consignment of embryos that has successfully undergone the processing provided for in condition (c) shall be placed in a sterile container marked in accordance with condition (i) and the container shall be sealed immediately.
- (r) Each embryo shall, where appropriate, be frozen as soon as possible and stored in a place which is under a control of a team veterinarian and which is subject to regular inspection by an official veterinarian.
- (s) All products in the processing, washing and transportation media shall be obtained from sources which present no animal health risk or are so treated prior to use to prevent such risk.
- (t) The conditions (a) to (o) shall apply appropriately to the collection, processing, storage and transport of ovaries, oocytes and other tissues for use in *in-vitro* fertilisation.
- (u) Each collection team shall submit to an approved laboratory specified in writing by the Minister, routine samples including those of flushing fluids, washing fluids, disintegrated embryos and non-fertilised ova, resulting from the team's activities for official examination for bacterial and viral contamination.
- (ν) The procedure for collecting of samples, conducting such examinations and the standards to be achieved shall be in accordance with the procedures specified by the Minister and where the standards laid down are not achieved, the Minister shall withdraw his or her approval.

#### 2. Storage

- (a) Notwithstanding the application of condition (p), under Item 1 above, in the collection and processing of ova or embryo by the team, the following additional conditions shall apply
  - (i) when ovaries and other tissues are to be collected at an abattoir, the abattoir shall be officially approved and under the control of an official veterinarian whose responsibility is to carry out ante and post mortem inspection of donors.

- (ii) materials and equipment coming into direct contact with ovaries and other tissues shall be sterilised before use and after sterilisation, the materials and equipment shall be used exclusively for ovaries and other tissues and separate equipment shall be used to handle oocytes and embryos from different batches of donor animals.
- (iii) ovaries and other tissues shall not be allowed into the processing laboratory until completion of the post mortem inspection of the batch,
- (iv) Where a relevant disease is found in the batch of donors, or in any animals slaughtered in that abattoir on that day, all tissues from that batch shall be traced and discarded.
- (v) the washing and examination procedure shall be carried out after the culture procedure has been completed,
- (vi) any micro-manipulation which involves penetration of the zona pellucida shall be carried out accordingly, after the procedures laid down in condition (d) have been completed, and
- (vii) only embryos from the same batch of donors shall be stored in the same ampoule or straw.
- (b) Each collection team shall keep a record of its activities in respect of embryo collection during the 12 months before and 12 months after storage, including
  - (i) the breed, age and identification of the donor animals concerned,
  - (ii) the place of collection, processing and storage of embryos collected by the team,
  - (iii) the identification of the embryos together with details of their destination if known,
  - (iv) details of micro-manipulation techniques which involve penetration of the zona pellucida or other techniques such as in vitro fertilisation and or in vitro culture which have been performed on the embryos; and
- (c) In the case of embryos derived by in-vitro fertilisation, the identification may be done on the basis of a batch, and shall contain details of the date and place of collection of ovaries and or oocytes;
- (d) The reports provided by a collection team member shall enable any authorised person to identify the herd of origin of the donor animals;
- (e) Each embryo shall be washed at least 10 times in a special fluid for embryos which shall be changed each time and which, unless decided otherwise, shall contain trypsin, in accordance with internationally recognized procedures. Each wash shall be a 100-fold dilution of the previous wash and a sterile micropipette shall be used to transfer the embryo on each occasion;

- (f) After the last wash each embryo shall be subjected to microscopic examination at a magnification of at least x 50 over its entire surface to determine that the zona pellucida is intact and is free from any adherent material. Any micro-manipulation which involves penetration of the zona pellucida shall be carried out in the facilities approved for the purpose, and after the last wash and examination. Such micro-manipulation may only be carried out on an embryo having an intact zona pellucida;
- (g) Each consignment of embryos that has successfully undergone an examination shall be placed in a sterile container correctly marked and the container shall be sealed immediately;
- (h) Each embryo shall, where appropriate, be frozen as soon as possible and stored in a place which is under the control of a team veterinarian and which is subject to regular inspection by an official veterinarian;
- (i) All products in the processing, washing, transportation media must be obtained from sources which present no animal health risk or are so treated prior to use to prevent such risk;
- (j) Each collection team shall submit to an approved laboratory specified by the Minister routine samples, including those of flushing fluids, washing fluids, disintegrated embryos and non-fertilised ova resulting from its activities for official examination for bacterial and viral contamination;
- (k) The procedure for collecting of samples, conducting such examinations, and the standards to be achieved shall be in accordance with those specified by the Minister and where the standards laid down are not achieved the Minister shall withdraw his or her approval;
- (l) The collection team shall also ensure it is possible to identify the herd of origin of the donor animals;
- (m) Each embryo collection or production team shall ensure that the embryos are stored at suitable temperatures in premises approved for the purpose by the Minister. In order to be approved these premises shall
  - (i) comprise of at least one lockable room intended exclusively for embryo storage,
  - (ii) be easy to cleanse and disinfect,
  - (iii) have permanent records of all incoming and outgoing movements of embryos and the final destination of the embryos in particular shall be specified in such records; and
  - (iv) be subject to inspection by the official veterinarian; and
- (n) The competent authority may authorise the storage of semen, ova or embryo approved storage premises;

### 3. Transport

- (a) Embryos for trade shall be transported in hygienic conditions in sealed containers from the approved storage premises until their arrival at their destination; and
- (b) The containers shall be marked in such a way that the number in the container coincides with the number on the animal health certificate.

#### **SCHEDULE 25**

(regulations 27 and 28)

### APPLICATION TO EXPORT ANIMALS/EMBRYOS/OVA/SEMEN

### A. IMPORTANT INFORMATION

- 1. Complete in print using capital letters
- 2. Incomplete applications will be returned to the applicant and no responsibility for any inconvenience will be accepted
- 3. Applications to be submitted 30 days prior to exportation
- 4. Export permits are valid for a limited period and for one consignment only
- 5. Ensure that the documentation are attached to the application as required in section D of the application form
  - \* Application fee is P100 per application
- 6. Submit the application to —

The Registrar of Livestock Improvement Private Bag BO222 Gaborone Tel No. (+267) 368 9625 Fax No. (+267) 395 1120

B. IF APPLICATION IS MADE BY AN AGENT ON BEHALF OF AN EXPORTER, PLEASE PROVIDE:

Full names of exporter	
Registration number (if applicable)	
Address of exporter	

Attach proof in the form of a signed letter (on the exporter's letterhead where applicable) stating —

- (a) That you are authorised to apply on behalf of that exporter; and
- (b) That the exporter agrees to be bound to all the terms and conditions of this application as

well as any permission, permit or authorisation issued as a result thereof. NO APPLICATION WILL BE CONSIDERED WITHOUT SUCH CONFIRMATION BEING ATTACHED.

C. PARTICULARS
1. Full names and surname of the applicant or the name of the company
2. Company Number or <i>Omang</i> Number
3. Registered name of the centre for collections
4. Physical Address
5. Postal address
Postal Code
6. District
7. Telephone (code and number)
8. Fax number
9. E-mail

), EXPORT	PARTICULAR	S					
. Export to	)						
. Details o	f export					****	***************************************
1 Emb	oryos/Ova/Semen lete list reflecting	the following int	ormation	ı is atta	ached)		
Donor Female	Reg. No.	Donor Male	Reg. No.	Flu Dat		Coder	Total Doses
2 Animal (A comp		the following in	formation	ı to be	attached)		
Breed	Name of animal	Reg. No./ Identification No.	Male/Fe	emale	Reg. Bra Mark	and	
			,				

#### E. DECLARATION BY AGENT

- I, the undersigned hereby declare that -
  - (a) I acknowledge that I have read and understood the provisions of the Livestock Improvement Act, where applicable, and any regulations promulgated thereunder, as far as it relates to this application and anything contemplated herein.
  - (b) to the best of my knowledge the Genetic Material/Animals to be exported complies with the prescribed minimum Export requirements of the breeders society and should this not be the case the transaction will be cancelled.
  - (c) to the best of my knowledge the Genetic Material/Animals to be exported complies with the prescribed requirements of the country to whom export to take place.
  - (d) to the best of my knowledge the particulars given in this application are true and correct.

SIGNA	TURE OF AGENT	DATE
CAPAC	CITY	-
F. DEC	LARATION BY APPLICANT	
I, the	e undersigned hereby declare that —	
(a)	I acknowledge that I have read and under Improvement Act, where applicable, and any far as it relates to this application and anythi	regulations promulgated thereunder, as
(b)	to the best of my knowledge the Genetic Ma with the prescribed minimum Export requirer this not be the case the transaction will be ca	ments of the breeders society and should
(c)	to the best of my knowledge the Genetic Ma with the prescribed requirements of the coun	
(d)	to the best of my knowledge the particulars correct.	s given in this application are true and
SIGNAT	TURE OF APPLICANT	DATE

G. RECOMMENDATION BY BREEDERS SOO (Tick appropriate box)	CIETY / REGISTERING AUTHORITY
Name of breeders' society/registering authority -	
It is hereby certified that the animals/genetic mat does/does not meet with the requirements of the therefore the export is/is not recommended.	

DATE

SIGNATURE OF REPRESENTATIVE

(Breeders society/Registering Authority)

#### **SCHEDULE 26**

(regulation 33)

### CONDITIONS WHICH SEMEN COLLECTED AT APPROVED CENTRE SHALL SATISFY FOR THE PURPOSES OF AI

- 1. Semen shall be obtained from animals which -
  - (a) show no clinical signs of disease on the day the semen is collected;
  - (b) in the case of semen to be imported
    - (i) have not been vaccinated against FMD during the 12 months prior to collection, or
    - (ii) have not been vaccinated against FMD disease within 30 days immediately prior to collection;
  - (c) have been kept at an approved semen, ova/embryo collection centre for a continuous period of at least 30 days immediately prior to the collection of the semen in the case of collections of fresh semen;
  - (d) are not allowed to serve naturally;
  - (e) are kept in semen, ova/embryo collection centres which have been free from FMD for at least three months prior to collection of the semen and 30 days after collection; and
  - (f) have been kept in semen, ova/embryo collection centres which, during the period commencing 30 days prior to collection and ending 30 days after collection of the semen or, in the case of fresh semen, until the date of dispatch, have been free from those bovine diseases which are notifiable in the country.
- 2. Antibiotics as listed below shall be added to produce these concentrations in the final diluted semen and shall not be less than
  - (a) 500 IU per ml streptomycin,

500 IU per ml penicillin,

150 ug per ml lincomycin,

300 ug per ml spectinomycin;

- (b) Notwithstanding condition 2 (a), an alternative of antibiotics with an equivalent effect against campylobacters eptospirosis and mycoplasmas may be used; and
- (c) Immediately after their addition the diluted semen shall be kept at a temperature of at least 5°C for a period of not less than 45 minutes.

- 3. Semen shall be -
  - (a) stored in approved conditions for a minimum period of 30 days prior to dispatch and the requirement shall not apply to fresh semen; and
  - (b) transported in flasks which have been cleaned, disinfected or sterilised before use and which have been sealed prior to dispatch from the approved storage facilities.
- 3. Incomplete applications will not be CONSIDERED.
- 4. Application to be submitted 30 days prior to importation/exportation.
- 5. Import permits are valid for a limited period and one consignment only.
- 6. Ensure that the prescribed application fee (P50.00) is attached to the application.
- 7. Make cheques and postal orders payable to —

#### **BOTSWANA GOVERNMENT**

Submit the application to —

The Registrar of Livestock Improvement Private Bag 0032 Gaborone, Botswana

Tel No. (+267) 3689625 Fax No. (+267) 3951120

# A. IF APPLICATION IS MADE BY AN AGENT ON BEHALF OF THE APPLICANT, PLEASE PROVIDE

16. Full names of applicant:	
17. Registration number (if applicable).	
18. Address of applicant.	
19. Attach proof in the form of a signed letter (on the applicant's I stating —	etterhead where applicable)

- (a) That you are authorised to apply on behalf of that applicant; and
- (b) That the applicant agrees to be bound to all the terms and conditions of this application

as well as any permission, permit or authorisation issued as a result thereof. NO APPLICATION WILL BE CONSIDERED WITHOUT SUCH CONFIRMATION BEING ATTACHED.

В.	PARICULARS
1.	Full names and surname of the applicant or name of the company
2.	Identity number/Company number/Passport number
3.	Registered name of the farm
4.	District and Place
5.	Postal and residential address
6.	Postal code
7.	Telephone (code and number)
8.	Fax number
9.	Email
10	DETAILS OF IMPORT/EXPORT
1.	Purpose (mark with cross)
S	hows Exhibitions Competitions
	Stud mating/Vatarinary Sarvinas

2.	Type of animal
	(mark with a cross)

Cattle	Sheep	Goats	Horses	Others
Breed of animal				

^	T T	1	c		-
4	NIII	nher	ot a	ทเห	12 C

Male	Female	Unweaned	Castrated
4. Permanent brar	d or tattoo or description	n of animal	
5. Complete this p	part in a case of registere	d horses or animals	
Name of animal	Reg./Passport/ Microchip No.	Colour	Gender
5. Intended date of	import/export		
7. Intended date of	return to country of original	gin (if applicable)	
. IMPORT PART	ICULARS		
(a) Name and panimals wil	physical address of person l be kept.	on and farm or villa	nge in Botswana where the
(b) Telephone	number		
(c) District			
(d) State Veteri	narian		
. EXPORT PART	ICULARS		
(a) Export to			

(b)	Name and physical address of person and farm where the animals will be kept			
(c)	Telephone number			
(d)	District			
C. CO	UNTRY OF ORIGIN			
(a)	Country			
(b)	Full address of establishment from where the import is to be made			
(c)	Port or border of entry			
D. DE	CLARATION BY APPLICANT			
	undersigned, hereby declare that the afore-mentioned details are to the best of my edge true and correct.			
Signat	ure of Applicant Date			

MADE this 29th day of March, 2021.

KARABO SOCRAAT GARE, Minister of Agricultural Development and Food Security.