



[Price: Rs.18-00 Paise

ఆంధ్రప్రదేశ్ రాజపత్రము THE ANDHRA PRADESH GAZETTE PART IV-A EXTRAORDINARY PUBLISHED BY AUTHORITY

No. 11]

AMARAVATI,

MONDAY,

22nd NOVEMBER, 2021.

ANDHRA PRADESH BILLS ANDHRA PRADESH LEGISLATIVE ASSEMBLY

The following Bill was introduced in the Andhra Pradesh Legislative Assembly on 22nd November, 2021.

L. A. BILL No. 11 OF 2021.

A BILL TO REGULATE BOVINE BREEDING ACTIVITIES INCLUDING USE OF BREEDING BULLS FOR PRODUCTION OF SEMEN, PROCESSING, STORAGE, SALE AND DISTRIBUTION OF FROZEN SEMEN, ARTIFICIAL INSEMINATION SERVICES IN BOVINES FOR IMPROVING THE PRODUCTIVITY OF BOVINES IN THE STATE AND FOR MATTERS CONNECTED THEREWITH OR INCIDENTAL THERETO.

Be it enacted by the Legislature of the State of Andhra Pradesh in the Seventy Second Year of the Republic of India as follows,-

CHAPTER-I PRELIMINARY

Short title, extent and Commencement.

- 1. (1) This Act may be called the Andhra Pradesh Bovine Breeding (Regulation of Production & Sale of Bovine Semen and Artificial Insemination Services) Act, 2021.
 - (2) It extends to the whole of the State of Andhra Pradesh.
 - (3) It shall be deemed to have come into force with effect on and from the 14th October, 2021.
 - (4) The provisions sub-section (2) of section 4 and sub-section (2) of section 5 of this Act shall come into force from the date of issue of notification by the Government from time to time.

Definitions.

- 2. In this Act, unless the context otherwise requires,-
- (a) "Artificial Insemination" or "AI" means the process of depositing bovine semen in the body of the uterus of a mature bovine female with the intention of making it pregnant;
- (b) "AI Technician" means a person who possesses requisite qualification, skill and experience to perform artificial insemination in bovines, as prescribed;
- (c) "AI service provider" means any person including a Firm, Limited Liability Partnership, company, Producer company, Institution, Non-Governmental Organization, Breeders' Association, Trust, Department of central or State Government, co-operative Society, Livestock Development Board or any Agency, Agriculture or Veterinary University who undertakes AI service in bovines;
- (d) "Appellate authority" means the Appellate Authority as specified in the Act;

- (e) "Authority" means The Andhra Pradesh Bovine Breeding Authority.
- (f) "Bovine" means and includes cow, bull, bullock and buffalo;
- (g) "Bovine breeding" means breeding activities in bovines that include the use of bovine bulls for production of semen, production, processing, storage and distribution of bovine frozen semen, and providing AI services to bovines;
- (h) "Breeding Policy" means the State breeding policy, notified by the Government, from time to time, for maintaining and developing different breeds of cow, bull, bullock and buffalo in different agro-climatic zones of the State.
- (i) "Certified Bull" means a bovine bull meeting the prescribed standard for semen production as per Minimum Standard Protocol and is included as certified bull, in the certificate of registration of a semen station or any bovine bull certified to be of prescribed standard for semen production by the Authority, from time to time;
- (j) "Government" means the State Government of Andhra Pradesh;
- (k) "Natural Service" means use of breedable healthy bulls for making female bovines pregnant by natural mating;
- (l) "Premises" means any land area, yard, building, or vessel or vehicle or any other location that is used for bovine frozen semen production and for providing bovine Al service;
- (m) "Prescribed" means prescribed by rules made under this Act as per Minimum Standard Protocol and Bovine Breeding Policy of the State from time to time;
- (n) "Prescribed standards" means the standards prescribed by the Authority, from time to time, and to be adhered to by those seeking a certification of registration, namely:—
 - (i) Semen stations intending to use bovine bulls for frozen semen production in accordance with the methods and parameters as may be prescribed;

- (ii) Semen stations intending to produce, process, store and distribute bovine frozen semen in accordance with the procedures and parameters as may be prescribed; and
- (iii) AI service provider intending to provide AI services in accordance with the procedures and parameters as may be prescribed;

Central Act No.52 of 1984.

- (o) "Registered Veterinary Practitioner" means a graduate in Veterinary science registered under the Indian Veterinary Council Act, 1984;
- (p) "Semen Station" means premises, where a facility is setup for production, processing, storage and distribution of Bovine frozen semen;
 - (q)"State" means the State of Andhra Pradesh.

CHAPTER-II THE ANDHRA PRADESH BOVINE BREEDING AUTHORITY

Constitution of the Authority.

3. (1) The Government shall, by notification in the Official Gazette, constitute an Authority to be known as the Andhra Pradesh Bovine Breeding Authority to exercise the powers conferred on, and perform the functions assigned to it under this Act.

The Andhra Pradesh Bovine Breeding Authority shall consist of

(i) Director of Animal Husbandry Department, Andhra Pradesh

Chairman

(ii) Chief Executive Officer, Andhra Pradesh, Livestock Development Agency

Member

(iii) Additional Secretary, Finance Department

Member

(iv) Associate Dean , Sri Venkateswara Vetarinary University, Tirupati

Member

(v) Representative from NDDB/NDRI (Southern Regional Centre, Bengaluru)

Member

(vi) Director of Research, Sri Venkateswara
Vetarinary University, Tirupathi or his
representative not below the rank of Professor /
Principal Scientist Lam Farm, Guntur.

Member

(vii) One farmer from Cattle Breeders Association

in Andhra Pradesh

Member

(viii) Joint Director (Statistics) CEO

The affairs of the Authority shall be managed and administered by the Chief
Executive Officer.

Functions of the Authority:

- (2) The Authority shall perform the following functions, namely:—
- (i) To develop Dairy Husbandry in the State of Andhra Pradesh, with a view to increase production, productivity, sustainability and profitability.
- (ii) To formulate and implement the Bovine Breeding Policy and services in the State of Andhra Pradesh. The Authority will enforce Bovine Breeding Policy as prescribed in the rules to be formulated in accordance with this Act.
- (iii) To regulate the production, storage, sale and use of semen including sex sorted semen produced within or outside the State of Andhra Pradesh or imported from any other country.
- (iv) To Register and renew the registration of the semen Stations and AI service providers.
- (v) To inspect, survey and search any of the premises where activities related to AI service is going on;
- (vi) To receive the returns from AI service providers and to maintain records and data thereof from time to time;
- (vii)To grant recognition to the AI training institutes through Government of India;
- (viii) To collect and maintain information and statistical data with regard to activities of AI service providers, AI training institutes and the AI technicians;
- (ix) To regulate natural service of bovine breeding and to restrict indiscriminate breeding, so that phenotypic characters of indigenous breeds will not alter;
- (x) To advise the Government on any matter concerning the activity of bovine breeding;
- (xi) To appoint such number of officers and employees as it may consider necessary for the efficient performance of its functions;
- (xii)To plan and cause to be executed a programme for bovine breeding activities in general and conservation, preservation and propagation of indigenous breeds of cow, bull, bullock or buffalo in particular;
- (xiii) To plan and cause to be executed inter-alia a programme for community-based conservation of indigenous breeds, field performance recording in the home tract of bovine and establishment of breeder societies for indigenous bovine breeds in all districts:

- (xiv) To advise the Government on instituting an incentive mechanism for encouraging the rearing of indigenous bovine breeds;
- (xv) To create new business avenues in the Dairy Husbandry sector.
- (xvi) To promote innovative and advanced techniques like Embryo Transfer technology and to organize study tours, exposure visits within and outside the country.
- (xvii)To upgrade the skills of Veterinarians and para-Veterinarians in Bovine Breeding and technologies therein and to promote transfer of technology in collaboration with National and International institutes.
- (xviii) To achieve Financial sustainability of the authority.
- (xix) To exercise such other powers and perform such other activities and functions as may be prescribed by the Government, from time to time;
- (xx) The Authority, while discharging the functions under this Act, shall be bound by such directions as may be given by the Government.

feetings of the uthority.

- (3) Meetings of the Authority:
- (i) The Authority shall meet at least once in three months.
- (ii) Subject to the provisions, the Authority may regulate the procedure in regard to its meetings and the transaction of business at such meeting.
- (iii) The quorum necessary for the transaction of business at a meeting shall be four members including the CEO.

Powers of the Authority.

- (4) The authority shall have the following powers:
 - (i) Initiate and conduct inspections on the semen stations, service providers, AI training institutes to ascertain the quality parameters.
 - (ii) To implement Acts, Ordinances, Rules, Regulations and Policies from time to time.
 - (iii) Issue registrations and renewal of registrations in all the Bovine Breeding operations.
 - (iv) Entitled to bring any kind of new services in Bovine Breeding suitably adopted to Andhra Pradesh State.
 - (v) With due consultation with the stake holders decide and fix the rate for AI charges and other services.
 - (vii) Take up research oriented Development programmes in due consultation with Sri Venkateswara Veterinary University/ National/

- (vii) To initiate and conduct surveys and studies to ascertain the potential problems in Dairy Husbandry.
- (viii) Levy charges for services rendered or for facilities provided by the authority.
- (ix) Levy penalties on individuals/agencies/institutions/semen stations /service providers etc. for violation of Act in accordance with penalties mentioned in section 19 of this Act.
- (x) Order to bring any service / Product under its jurisdiction by means of framing regulations.
- (xi) Acquire and hold, take or give on lease, mortgage or hire, or sell or otherwise dispose of, any movable or immovable property.
- (xii) To enter into MoU's and to provide consultancy services.
- (xiii) Accept budget allocations from State and Central Governments, funds, grants, donations or subsidies whether in cash or otherwise and to utilize them for discharging the functions of the authority.
- (xiv) The Authority in order to perform the functions conferred on it by or under this Act, or any officer empowered by it may take such steps as may be necessary so as to obtain any information from any semen station, AI service provider, AI training institute or AI technician at any required time.
- (xv) The Authority may give directions requiring any person in-charge of any establishment, premises, where any activity relating to bovine breeding is carried out or who, in its opinion, is contravening any of the provisions of this Act and the rules made there under, to furnish such information in such form and in such manner, as may be prescribed.
- (xvi) The powers delegated in chapter IV will be in force in accordance with provisions of this Act.

Technical Advisory Committee and its Functions.

(5) (1) To design, verify, approve, monitor Breeding/ Technical policies, a committee namely the Technical Advisory Committee shall be constituted with the following members.

(i) Chief Executive Officer, Andhra Pradesh Livestock Development Agency

Chairman

(ii) Professor & Head, Animal Genetics & Breeding Sri Venkateswara Veterinary University nominated by SVVU, Tirupati

Member

(iii) Principal Scientist, Live Stock Research Station, LAW, Guntur

wemper

(iv) Advisor, NDS

Member

(v) Senior Veterinarian nominated by the Authority

Member

(vi) Any person designated by the Authority

Member

(vii) Joint Director, Statistics

Chief Executive Officer

- (2) (i) The Technical Advisory Committee will monitor the Breeding activities and recommend to State Authority for approval.
- (ii) The Technical Advisory Committee will design Region specific breeding policy for implementation in the State.
- (iii) The committee will examine the lab reports on Semen analysis from semen stations and Artificial Insemination service providers and recommend suitable actions to be taken up by the authority.
- (iv) The Technical Advisory Committee will extend required services as requisitioned by the authority.
- (v) The Technical Advisory Committee will send proposals on the matters connected with, to the Authority for taking necessary actions.

Disqualification for membership of the Authority and its Committees.

- (6) A person shall be disqualified from being appointed or continuing as a member of Authority or any committee of the authority, if he/she,-
- (i) is medically found or declared to be of unsound mind.
- (ii) is a person who having being declared an insolvent or bankrupt under any law in force, is a undischarged insolvent or bankrupt.

Executive Officers and Staff of the Authority.

- (7) (1) To assist Chairman and to perform the Bovine Breeding activities and such duties as required, the following officers & staff shall be appointed by redeployment/ creation of posts.
 - (i) The post of JD-Statistics in Directorate of Animal Husbandry shall be deployed to work as CEO.
 - (ii) The post of Assistant Director (Statistics) in O/o Joint Director (AH) Vijayawada shall be deployed.
 - (iii) Required staff of IT executive, Data Processing Operators and Office Subordinates shall be appointed on outsourcing basis through APCOS or any other agency with the permission of the Government under the rules as prescribed from time to time. The expenditure shall be met from authorities own fund.
- (2) Subject to such control and restrictions as may be prescribed, the Authority may appoint such other Executive Officers and may engage such Advisors, Consultants / Experts / Technicians / Officer Staff / Skilled / Unskilled workers / any other manpower as may be necessary for the efficient performance of its functions and pay them such salaries and

allowances as may be prescribed and determined from time to time from authorities own fund.

Finance and Accounts of the Authority.

- (8) (1) The authority shall have its own fund. The following shall be credited into the fund of the authority:-
 - (1) All such amounts received through the registrations;
 - (ii) All such amounts received through the penalties;
 - (iii) All such amounts received @ 50 paise per Artificial Insemination charges to be transferred from APLDA;
 - (w) All such amounts received through donations / Gifts / subsidies / Grants / other receipts from any source whatsoever;
 - (v) All such amounts as may be allocated in the budget by the State/ Central Government.
- (2) The receipts generated by the authority shall be deposited in Green Channel PD Account and are permitted to utilize for recurring expenditure (payment of salaries to outsourced employees and office contingency expenditure).
- (3) The authority shall open a Green Channel PD Account and funds received from Government (Central & State share) will be deposited in the Green Channel account of authority as per norms.
- (4) Any expenditure incurred by the Authority in the exercise, and discharge of its powers, and functions under this Act shall be met from this fund.

Audit of Accounts of the Authority.

- (9) (1) The authority shall cause proper books of accounts to be kept of the income and expenditure, assets & liabilities and all other transactions of the Authority.
- (2) The annual audit of the accounts of the Authority shall be done as per rules and regulations in vogue.

Transfer of property and contracts.

(10) (1) The Government may by notification published in the Gazette,

- (i) Any movable or immovable property of the Department of Animal Husbandry required by the Authority for the discharge of its functions under this Act; and
- (ii) Any contract or liability of the Department of Animal Husbandry connected with any of the functions of the Authority.
- (2) Upon the publication of notification under clause (1) in the Gazette,-
- (i) The properties specified in such notification shall vest in and be the properties of the Authority.
- (ii) The Contracts specified in that Order shall be deemed to be the contracts of the Authority and all subsisting rights and obligations of the Department of Animal Husbandry under such contracts shall be deemed to be the rights and obligations of the Authority.
- (iii) The liabilities specified in that notification shall be deemed to be the liabilities of the Authority.

Power to obtain information.

- (11) (1) The Authority in order to perform the functions conferred on it by or under this Act, or any officer empowered by it may take such steps as may be necessary so as to obtain any information from any semen station, AI service provider, AI training institute or AI technician.
- (2) The Authority may give directions requiring any person in-charge of any establishment, premises, where any activity relating to bovine breeding is carried out or who, in its opinion, is contravening any of the provisions of this Act and the rules made there under, to furnish such information in such form and in such manner, as may be prescribed.

CHAPTER-III

CERTIFICATION OF BULLS, REGISTRATION OF SEMEN STATIONS, AI SERVICE PROVIDERS, AI TECHNICIANS AND AI TRAINING INSTITUTES.

Certification of Bulls and Registration of Semen Stations. 4. (1) On and from the date of commencement of this Act, no person including any Firm, Limited Liability Partnership, company, Producer company, Institution, Non-Governmental Organization, Breeders' Association, Trust, Department of central or State Government, cooperative Society, Livestock Development Board or Agency, shall establish and operate a semen station for production of bovine frozen semen doses

for AI without obtaining a certificate of registration from the Authority.

- (2) The existing semen stations shall apply to the Authority for issue of registration certificate for frozen semen production within three months.
- (3) On and from the date of commencement of this Act, no semen station shall carry out semen production from any bull other than those certified as of prescribed standard, for semen production, by the Authority.
- (4) Every application for registration of semen station shall be made to the Authority in such form and in such manner, as may be prescribed and shall be accompanied with such fee not exceeding Five lakh rupees as may be prescribed.
- (5) Every application for registration of bull shall be made to the Authority in such form and in such manner, as may be prescribed and shall be accompanied with such fee not exceeding Ten thousand rupees as may be prescribed.
- (6) Applicants intending to set-up a new semen station or the existing semen stations, who have submitted an application form along with prescribed fee to the Authority, shall be issued a provisional certificate of registration to meet the conditions specified in subsection (4). The provisional certificate of registration shall be valid for a period of twelve months. It may be extended for a further period of six months on the request of the applicant, in writing. The Authority shall reply within one month about the status of extension.
- (7) For the grant of certificate of registration for a new semen station or the existing semen station, the applicant shall make a written request to the Authority for inspection from the date of grant of provisional certificate of registration or atleast before three months within the expiry of provisional period of twelve months or the extended period of six months whichever is applicable. The Authority shall, thereupon, send a committee of experts for obtaining the recommendations, for issuing the grant of certificate of registration or renewal within the period of provisional certificate of registration.

⁽⁰⁾ The Authority, after satisfying healt that -

⁽i) the semen station -

- (a) has premises for the quarantine of bovine bulls, that comply with part 1 of Schedule I;
- (b) has premises for the rearing and housing of bulls and the collection, processing, quality control, storage, distribution and quarantine of semen doses that comply with part 2 & 3 of Schedule I; and
- (c) has premises for the storage of semen doses that comply with part 4 of schedule I.
- (ii) every bull, used in the semen station for production of semen doses-
 - (a) has tested negative to the tests set out in :
 - (i) Schedule II, Part 1 prior to its entry to a quarantine station;
 - (ii) Schedule II, Part 2 during quarantine period at a quarantine station; The bull will be certified after examining the source, pedigree and disease screening by Andrology lab & VBRI.
 - (iii) Schedule II, Part 3 during rearing at a rearing station; and
 - (iv) Schedule II, Part 4 at the semen station;
 - (b) conforms to breed characteristics of the breed and meets the minimum standards for various traits in terms of quantity and quality as may be specified by the Authority or the Government of India and as modified and notified from time to time;
- (iii) the semen station conforms to the minimum operating standards for:
 - (a) bull housing and management as laid down in Schedule III, Part 1 and
 - (b)semen collection, processing, quarantine, storage, distribution and quality assurance as laid down in Schedule III, Part 2;
- (iv) the semen station maintains accurate details of the bull, whose semen doses it would like to produce, store, sell, distribute or proposes to distribute for Artificial Insemination in a format given in Schedule III, Part 3; shall grant the certificate of registration to a new semen station or the existing semen station clearly specifying the name and address of the semen station, registration number of the semen station, unique

identification No. of certified bulls to be used for semen production. name of the In-charge of the semen station and such terms and conditions, as it may deem fit.

- (a) On receipt of an application under sub-section (4) and (5), the Authority may, after making such enquiry as it deems necessary, either issue or refuse to issue the certificate of registration. Every registration shall be in such form and in such manner and subject to such terms and conditions as may be prescribed and shall be valid for a period of two years from the date of issue of the certificate of registration.
- (b) Only after obtaining registration from State Authority the semen stations should approach CMU, Government of India for inspection and Grading.

Provided that the Authority shall, before refusing to issue the certificate of registration, give the applicant a reasonable opportunity of being heard.

Registration of A1 service provider.

- **5**. (1) On and from the date of commencement of this Act, no AI service provider shall provide AI services without obtaining a registration certificate from the Authority.
- (2) The existing AI service providers shall apply to the Authority for issue of registration certificate for providing AI services within three months.
- (3) Every application for registration shall be made to the Authority in such form and in such manner, as may be prescribed and shall be accompanied with such fee not exceeding three lakh rupees as may be prescribed.
- (4) On receipt of an application under sub-section (3), the Authority may, after making such enquiry as it deems necessary, either issue or refuse to issue the certificate of registration after satisfying itself that Artificial Insemination Service Provider.
 - (i) has arrangements for receiving, storing and distributing semen as laid down in Schedule IV, Part 1;
 - (ii) obtains semen only from certified bulls of semen station registered under the Act;
 - (iii)Engages AI technicians, who hold such qualifications and experience as prescribed by the Central Authority from time to time for providing the artificial insemination services and who provide AI services on behalf of it. Iollows SOP for AI Service (Schedule IV Part-2)

and maintains records as prescribed by the State Authority.

- (iv) Provides AI services as per the approved Breeding Policy of the State of Andhra Pradesh.
- (v) Conforms to the guidelines as laid down in Schedule IV, Part 2.
- (5) Every certificate of registration shall be in such form and in such manner and subject to such terms and conditions as may be prescribed and shall be valid for a period of two years from the date of issue of certificate of registration:

Provided that the Authority shall, before refusing to issue the certificate of registration, give the applicant a reasonable opportunity of being heard.

Registration of AI technicians.

- 6. (1) on and from the date of commencement of this Act, no person shall act as AI technician and provide his services for any AI service provider unless, he,-
 - (i) Possesses such qualification and experience as maybe prescribed;
 - (ii) has undergone training from any authorized Al Training Institutes as may be prescribed; and
 - (iii) is registered with a semen station or AI service provider.
- (2) Every application for registration shall be made to the Authority in such form and in such manner, as may be prescribed and shall be accompanied with such fee not exceeding five hundred rupees as may be prescribed.
- (3) On receipt of an application under sub-section (2), the Authority may, after making such enquiry as it deems necessary, either issue or refuse to issue the certificate of registration. Every certificate of registration shall be in such form and in such manner and subject to such terms and conditions as may be prescribed:

Provided that the Authority shall, before refusing to issue the certificate of registration, give the applicant a reasonable opportunity of being heard.

Recognition of Al training institutes.

- **7.**(1) Any person including any Firm, Limited Liability Partnership Company, Producer company, Institution, Non-Governmental Organization, Breeders' Association, Trust, Department of Central or State Government, Cooperative Society, Livestock Development Board or Agency, Agriculture or Veterinary University shall apply to the Authority for grant of recognition as a Al training institute.
- (2) Every application for grant of recognition under sub-section (1) shall be made to the Authority in such form and in such manner, as may be prescribed and accompanied with such fee not exceeding fifty thousand rupees as may be prescribed.
- (3) On receipt of an application under sub-section (2), the Authority may, after making such enquiry as it deems necessary, either grant recognition or refuse to grant recognition after satisfying itself that the AI Training Institution:
- (i) follows the standard curriculum and duration for class room and practical training as approval and modified by the Authority from time to time (Schedule V part 1);
- (ii) has arrangements for class rooms with teaching aids and hands on training in palpating reproductive organs outside and in live animals and carrying out Artificial Insemination as laid down in Schedule V, Part 2;
- (iii) has arrangements with AI Service providing organizations to provide practical training to its trainees for the duration approved by the Authority.
- (iv) has a registered Veterinary Practitioner under whose supervision the institute imparts training;
- (4) every recognition shall be in such form and in such manner and subject to such terms and conditions as may be prescribed and shall be valid for a period of three years from the date of issue of the certificate of recognition:

Provided that the Authority shall, before refusing to grant the certificate of recognition, give the applicant a reasonable opportunity of being heard.

Renewal.

8. (1) Every application for renewal of the certificate of registration or recognition, as the case may be, under this Act shall be made not less than three months before the date of expiry of the period of such certificate of registration or recognition, as the case maybe:

Provided that the Authority may allow such application after the expiry of the aforesaid period, if the Authority is satisfied that the applicant was prevented by sufficient cause from applying for renewal in time.

(2) The provisions of this Act shall, as far as may be, apply relation to the renewal of the certificate of registration or recognition, as they apply in relation to the issue of certificate of registration or grant of recognition.

Regulation of sale of semen.

- **9.** (1) No semen station or AI service provider shall sell or distribute the bovine frozen semen doses including sex sorted semen to any person other than the registered AI service provider or the registered AI technician or to the person or institution as may be authorised by the authority. No semen station or AI service provider shall sell the bovine frozen semen doses, in contravention of the breeding policy of the State.
- (2) No semen/ sex sorted semen produced outside the State-of Andhra Pradesh shall be allowed into the State of Andhra Pradesh to be sold, distributed or gifted or stored or transported for Artificial Insemination/transfer, except with the prior approval of the Authority to be granted in such manner and subject to such conditions, as may be prescribed.
- (3) No semen/ sex sorted semen shall be imported for use in the State of Andhra Pradesh from any other country, except with the prior approval of the Authority to be granted in such manner and subject to such conditions, as may be prescribed.

Exemptions.

10. (1) Any semen production facility set up by research institutes or Veterinary Universities for the purpose of research and training shall be exempted from the obligation of holding a registration certificate for semen station so far as such research institutes or universities use the semen doses only on the animals owned by them and are not engaged in the

activity of selling or distribution of semen doses not exceeding one lakh doses per year.

(2) All the Government semen stations, AI Service Providers, AI training institutes and research stations and farms under Universities are exempted from registration fees.

Regulations for Bovine Breeding through natural service.

- 11. (1) Bovine breeding through natural service shall be restricted to only indigenous breeds.
- (2) All farmers who intend to keep male bovine for breeding by natural service either for their own herd or for making service available to other farmers' bovines shall register the male bovine with the person identified by the Authority in such manner as may be prescribed.
- (3) The registration shall be for a period of two years and the bulls used for natural service should not be renewed after two years.
- (4) The person identified under sub-section (2) shall provide the certificate of registration for the use of male bovine for natural service within forty five days of application after examination of the male bovine and related documents.
- (5) All male bovine intended for natural service shall be identified with notified ear tags.
- (6) A breeding soundness certificate shall be obtained from the appropriate authorities as may be identified by the Authority before inducting the male bovine for natural service. District Joint Director is authorized to certify the bulls used for natural service.
- (7) The farmers shall ensure that the male bovine used for natural service are subjected to periodical testing for diseases by the person identified or accredited by the Authority as that of male bovine used for AI services that would be prescribed, from time to time. The disease free certificate shall be produced when demanded by identified authorities.
- (8) Farmers intended for natural service to their animals should strictly adhere to the purebred males only, i.e Ongole should only be used on Ongole cows & ND cows and Punganur bulls with Punganur cows only. No Dairy farmer should crossbred the Ongole&Punganur breeds with exotic or

crossbreds. Purebred buffalo (Murrah, Jaffarbadi, Surti) should be bred by the same breed, however all Non Descript Buffalos and graded Buffalos will be bred by Murrah bulls.

- (9) The farmers shall ensure that the male bovine used for natural service are subjected to periodical vaccination for diseases by the person identified or accredited by the Authority as that of male bovine used for AI services that would be prescribed, from time to time. The vaccination certificate shall be produced when demanded by the person identified by the Authority.
- (10) The person identified under sub-section (2) shall have power to enter the premise where the male bovine for natural service are reared for examining the animals for their breeding soundness and compliance with this Act.
- (11) The male bovine declared unfit for breeding or infected with disease shall be eliminated by the farmer as per Minimum Standard Protocol.
- (12) The farmers shall maintain records of the male bovine used for natural service in such form and in such manner, as may be prescribed.

Duplicate Registration Certificate.

- 12. If a registration or recognition certificate issued under this Act is defaced, lost or destroyed, the Authority may, if satisfied, grant a duplicate registration or recognition certificate to the applicant on payment of such fee not exceeding,—
 - (i) Five thousand rupees for duplicate registration certificate of semen stations, AI service providers and Two hundred rupees for AI technicians;
 - (ii) Five thousand rupees for duplicate recognition certification of AI Training Institutes; and
 - (iii) One thousand rupees for duplicate registration certificate of bull, as may be prescribed.

Revocation of certificate of registration and recognition.

- 13. If the Authority is satisfied, either on a reference made to it in this behalf or on enquiry report or otherwise that—
- (i) The certificate of registration or recognition granted by it under this Act, for semen station, AI service provider, AI training institute or AI technician has been obtained by misrepresentation or fraud; or

- (ii) The holder of the certificate of registration or recognition has, without reasonable cause, failed to comply with the conditions subject to which the certificate or recognition has been granted or has contravened any of the provisions of this Act or rules made thereunder or has not complied with such conditions as may be prescribed by the Authority, then without prejudice to any other proceedings to which the holder of the certificate may be liable under this Act, the Authority may, after giving the holder of the certificate of registration or recognition an opportunity to show cause,-
 - (a) revoke the certificate of registration or recognition by giving reasons for such revocation; or
 - (b) suspend the certificate of registration or recognition till the holder of the certificate complies with all the required conditions to the satisfaction of the Authority; or
 - (c) impose such other conditions to be complied with, by the holder of certificate of registration or recognition; or take undertaking from the holder of the certificate of registration or recognition, to comply with the provisions of this Act and rules.

Appeal.

- 14. (1) Any person aggrieved by an order of the Authority refusing to grant or renew a certificate of registration or recognition or revoking or suspending the certificate of registration or recognition under the provisions of this Act, may prefer an appeal before the Appellate Authority who shall be the Special Chief Secretary/ Principal Secretary/ Secretary of the Department of Animal Husbandry, Dairy Development & Fisheries, Government of Andhra Pradesh. A member from NDDB / worked in Government semen stations having reputed scientific skills on Bovine Breeding is to be nominated by Special Secretary/ Principal Secretary/ Secretary, Government of Andhra Pradesh.
- The Appellate Authority, after giving a reasonable opportunity of being heard to the appellant, shall decide the appeal within three months or as expeditiously as possible.

(3) While pending disposal of an appeal, the Appellate Authority may direct that the order refusing to grant or renew a certificate or the order of revoking or suspending the certificate of registration or recognition shall not take effect until the appeal is disposed off.

CHAPTER - IV

POWER TO INSPECT, SEARCH AND MAINTENANCE OF RECORDS.

Power to inspect, search and seizure.

- 15. (1) The Authority or any officer or member of team of experts authorized by him in this behalf, with a view to securing compliance with the terms and conditions of the registration of recognition and any provisions of this Act and rules made there under, or for the purpose of inspection and enquiry, may,
 - (i) enter, inspect and cause or conduct search of any place of business or premises of the semen station or artificial insemination service provider or training institute in which it has reason to believe that any activity in contravention of the provisions of this Act and rules made there under is going on or there is any contravention of any of the provisions of this Act or rules made thereunder or the holder of certificate is doing activities in violation of the conditions of registration or recognition issued under this Act;
 - (ii) collect samples of semen, blood or any other material used in semen production or AI services, from the premises of any semen station or AI service provider or training institute and have such samples analysed by a laboratory authorized in that behalf by the Authority and shall also seize any bulls therefrom which are not duly certified for semen production or make such other enquiry as may be required, take statements of the holder of the certificate of registration or recognition and other persons working in such premises and to check the records thereof.
- (2) The provisions of the Code of Criminal Procedure, 1973 relating to search and seizure shall, so far as may be, apply to searches and seizures made under sub-section(1).

(3) Every person who holds the certificate of registration for semen station or AI service provider or a certificate of recognition for training institute under this Act, or an AI training institute or AI service provider shall be bound by any direction or order issued by the Authority, in pursuance of any of the provisions of this Act and shall comply with such direction or order and any failure on his part to comply with such direction or order shall be deemed to be a contravention of this Act.

Maintenance of Records and submission of Returns.

- **16.** (1) Every person who holds a certificate of registration or recognition under this Act shall maintain such books, accounts and records relating to his business in physical/electronic form.
- (2) Every semen station and AI service provider shall maintain a register containing therein the name, address, contact details and the qualification and experience of all those AI technicians, registered with them. The register so maintained and the application and supporting documents of the experience and qualification of the AI technicians shall be made available for the inspection of the Authority. A list of all such AI technicians shall be submitted along with the half yearly returns in electronic form to the Authority.
- (3) Every person who holds a certificate of registration for a semen station shall submit to the Authority a half yearly return in duplicate in respect of the semen station and with respect to new bulls proposed for registration in electronic form.
- (4) Every person who holds a certificate of registration as an AI service provider shall submit to the Authority a half yearly return in duplicate in respect of number of AI technicians engaged and number of inseminations carried out in electronic form.
- (5) Every person who holds a certificate of recognition as an AI training institute shall submit to the Authority, a half yearly return in duplicate giving a list of AI technicians trained and name of the registered veterinary-practitioner under whose supervision the training was imparted in electronic form.

Power to give directions.

- 17. Not with standing anything contained in any other law, but subject to the provisions of this Act, and to any direction that the Government may give in this behalf, the Authority, may in exercise of its power and performance of its functions under this Act, issue any direction in writing to any person or officer and such person or officer shall be bound to comply with such directions. The powers to issue directions under this section include the power to direct
 - (i) the closure, prohibition or regulation of any operation, process or activity related to bovine breeding, AI services, training; or
 - (ii) the stoppage or regulation of supply of electricity, water or any other service.

Power to make application to courts for restraining bovine breeding activities in contravention of this Act.

- 18. (1) Where it is considered by the Authority that any person or institution or service provider is engaged in the bovine breeding activity or providing AI services or AI training in contravention of the provisions of this Act and rules made there under Authority or any person authorized by the Authority in this behalf shall make an application to a court of Metropolitan Magistrate or Judicial Magistrate of First Class for restraining the said person or institution or service provider from carrying out the said activity.
- (2) On receipt of an application, the court may pass an order restraining any person or institution or service provider to carry out the said activity or give such directions or pass such order as it may deem fit.

Penalties.

- 19. (1) Whoever carries out the production of frozen semen at any premises, place or centre or semen station or provides artificial insemination services without holding a valid registration certificate or hold an expired registration certificate or carry on production activity of frozen semen from other than the certified bulls or contravenes with any of the provisions of this Act, shall be liable to pay a fine which may extend to one lakh rupees.
- (2) Whoever has been granted a certificate of registration as semen station or Al service provider under this Act and has contravened any of the provisions of this Act or failed to maintain the prescribed standards laid down in the Act, shall be liable to pay a fine which may extend to two lakh rupees.

- (3) Whoever fails to comply with any direction given with in such time as may be specified in the direction or fails to comply with any order issued or direction given by a court shall, in respect of each such failure and on conviction, be liable for a simple imprisonment up to six months or liable to pay additional fine which may extend up to one lakh rupees or both. The penalties or fine so imposed, may be recovered from the person concerned, as an arrear of land revenue or of public demand.
- (4) Whosoever resorts to any sort of advertisement or publicity misrepresenting the facts about the type and nature of services for which he has been granted the certificate of registration or recognition, be liable for cancellation & punishment for a simple imprisonment up to six months or liable to pay additional fine which may extend up to four lakh rupees or both.
- (5) Indiscriminate breeding of animals by any institution or individual, not advocated by the Authority is an offence and the offender is liable to pay a fine which may extend up to two lakh rupees.
- (6) No institution or individual, other than the one explicitly permitted by the Authority to do so, shall indulge in any kind of activity or research related to animal reproduction and such authorized activity or research shall be an offence and such institution or individual, on conviction, is liable to pay a fine which may extend upto one lakh rupees or for a simple imprisonment upto six months or both.

Offences by Companies.

20. (1) Where an offence under this Act, has been committed by a company, every person who, at the time the offence was committed, was incharge of, and was responsible to, the company, for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the offence and shall be liable to be prosecuted and punished in accordance with applicable IPC sections.

Provided that nothing contained in this sub-section shall render any such person liable to any punishment provided in this Act if he proves that the offence was committed without his knowledge for that he had exercised all due diligence to prevent the commission of such offence.

Central Act No. 45 of 1860.

- (2) Any person acting under this Act shall be deemed to be a public servant within the meaning of section 21 of the Indian Penal Code.
- (3) Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of, any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of that offence and shall be liable to be prosecuted and punished in accordance with applicable IPC sections.

Explanation. - For the purpose of this section, --

- (a) "Company" means any body corporate and includes a firm or other association of individuals; and
- (b) "Director" in relation to a firm, means a partner in the firm.

Cognizance of Offences.

- 21. (1) Production, possession, distribution, sale, transfer in any form, import or export or use of unauthorized semen or misbranded or substandard semen shall be a cognizable offence under this Act.
- (2) No court shall take cognizance of any offence under this Act except on a complaint made by the Authority or any officer authorized in this behalf by it.
- (3) No Court inferior to that of a Judicial Magistrate of the First Class shall try any offence punishable under this Act.
- (4) No prosecution for offences punishable under this Act shall be instituted except with the previous sanction of the Authority or an officer authorized in this behalf by the Authority, by notification.

CHAPTER - V

MISCELLANEOUS

Report of recognised laboratory.

22. Any document purporting to be a report signed and issued by a recognized laboratory may be used as evidence of the facts stated therein, in any proceedings under this Act.

Local authorities to assist. **23.** All local authorities shall render such help and assistance and furnish such information to the Authority as it may require for the discharge of its functions and shall make available for inspection and examination, such records or documents as may be necessary.

Returns and Reports. 24. The Authority shall furnish to the Government in such manner as may be prescribed such reports, returns, statistics, and other information with respect to its funds or activities as the Government may, from time to time, require.

Bar of -Jurisdiction of civil courts. 25. No civil court shall have jurisdiction to entertain any suit or proceeding in respect of any matter which an Appellate Authority constituted under this Act is empowered.

Protection of action taken in good faith. 26. No suit, prosecution or other legal proceedings shall lie against the Authority, any officer or employee of the Authority in respect of anything which is in good faith done or intended to be done in pursuance of this Act or any rule or order made there under.

Delegation of Powers.

- **27.** (1) The Government may, by notification, direct that all or any of the powers exercisable by them under this Act, other than the powers conferred by this section and sections 3, 29 and 30 may also be exercised by such person or persons as may be specified in the notification.
- (2) Whenever any delegation of power is made under sub-section (1), the person to whom such power has been delegated shall act under the direction, control and supervision of the Government.

Experts, Officers and Officials of the Authority to be Public Servants. **28.** Any member or officer of the Authority empowered by the Government, while exercising any power or performing any duty under this Act shall be deemed to be a public servant within the meaning of section 21 of the Indian Penal code.

Central Act 45 of 1860.

- Power to make Rules.
- 29. (1) The Government may, by notification, make rules for carrying out all or any of the purposes of this Act.

(2) All rules made under this section shall be laid, as soon as may be after they are so made, before the State Legislature, if it is in session and if it is not in session, in the session immediately following for a period of not less than fourteen days, which may comprise in one session or in two successive sessions and, if before the expiry of the session in which they are so laid or of the session immediately following, the State Legislature makes any modification in any of such rules or resolves that any such rule should not be made, such rule shall thereafter have effect only in such modified form or be of no effect, as the case may be, so however, that any modification annulment shall be without prejudice to the validity of anything previously done under that rule.

Power to remove difficulties

- **30.** (1) If any difficulty arises in giving effect to the provisions of this Act, the State Government may, as occasion requires, by order published in the Andhra Pradesh Gazette, make such provision not inconsistent with the provisions of this Act, as appear to be necessary or expedient for removing the difficulty.
- (2) Every Order made under this section shall be laid, as soon as may be after it is made, before the State Legislature.

Repeal and Savings.

Ordinance No.17 of 2021.

- **31.** (1) The Andhra Pradesh Bovine Breeding (Regulation of Production & Sale of Bovine Semen and Artificial Insemination Services) Ordinance, 2021 is hereby repealed.
- (2) Notwithstanding such repeal, anything done or any action taken under the said Ordinance shall be deemed to have been done or taken under this Act.

Schedule I

Construction and design of facilities of semen station

Part 1

Quarantine Station

The quarantine station must:

- a. Be at least one kilometer away from the main semen station;
- b. Be constructed so that contact with other livestock is prevented;
- c. Be such that it can be easily cleaned and disinfected.

Part 2

Rearing Station

The rearing station:

- (1) Must not have any direct contact with the main semen station;
- (2) Must be constructed so that contact with other livestock is prevented;
- (3) Must be such that it can be easily cleaned and disinfected.

Part 3

Main Semen Station

The main semen station must:

- (1) Have bull housing facilities having individual pen with adequate loafing area and are separated from the semen collection and processing facilities;
- (2) Have bull isolation facilities;
- (3) Have semen collection and processing facilities;
- (4) Have semen quarantine facilities, which may not be at the same site;
- (5) Be constructed so that contact with other livestock is prevented;
- (6) Be such that all bull housing, semen collection, semen processing and semen quarantine facilities can be easily cleaned and disinfected.

Part 4

Semen Storage

The semen storage room must:

- (1) Be such that it can be easily cleaned and disinfected;
- (2) Be well ventilated;
- (3) Have appropriate loading and unloading facilities for containers.

Schedule II

Minimum Health Requirements at Semen Stations Part

1

Health Requirements prior to Quarantine

Bulls, bull calves and their dams procured from any source shall be tested for TB, JD and Brucellosis. Bulls, bull calves and their dams shall be free from TB, JD and Brucellosis, and physical deformities.

Part 2

Health Requirements at Quarantine Station

Bull calves destined to be shifted to the Rearing Station or Bulls destined to be shifted to the Semen station should be placed under a minimum quarantine of 90 days in a separate quarantine station. During this period, a series of compulsory examinations and tests shall be carried out. Only after negative results, the bull shall be admitted to the rearing station / semen station.

- a) The quarantine station shall be located in a place, which is effectively separated from the main semen station and is at least 1 km away.
- b) The equipment used in handling, feeding, watering and cleaning the animals in the quarantine station shall not be shared with any other part of the semen station.
- c) The floor, ceilings, walls, iron pipes and all implements of the quarantine station shall be thoroughly disinfected with 4% washing soda solution at least two days before the arrival of a new group of animals.
- d) Only those animals that have met the requirements mentioned at Part 1 shall be allowed entry to the quarantine station.
- e) Each new bull or bull calf in the quarantine station shall be tested, as mentioned in Annex I through Annex VI against Bovine Tuerculosis

- (TB), Johne's disease (JD), Brucellosis, Infectious Bovine Rhinotracheitis (IBR), Campylobacteriosis and Trichomoniasis. All tests shall be done by an agency or disease diagnostic laboratory mentioned in Annex I through Annex VI.
- f) If any bull is found positive for TB, JD or Brucellosis, the positive bull shall be removed immediately without retesting. The remaining bulls shall be further tested twice for that particular disease at an interval of 60 days. If any bull is found positive, all animals in that batch shall be culled. As regards animals positive for IBR, culling shall be made based on isolation of virus for IBR.
- g) During quarantine, all animals shall be karyotyped to eliminate use of bulls with chromosomal defects.
- h) During quarantine, HF and their crosses shall be tested to be free from genetically transmitted diseases like Factor XI deficiency syndrome, Bovine Leukocyte Adhesion Deficiency (BLAD), Citrullinemia and Deficiency of Uridine Monophosphate Synthase (DUMPS).
- i) During quarantine, the bulls shall be vaccinated against FMD, HS, BQ, Theileriosis and Anthrax. However, vaccinations against bacterial diseases shall be done only if there is an outbreak or prevalence of a particular disease.

After successful quarantine, all bulls or bull calves shall be shifted to the rearing station or the semen station.

Part 3

Health Requirements in Rearing Station

- 1. Only those bull calves that have met the conditions set out in Part 2 shall be allowed to enter in the rearing station.
- 2. The bulls shall be vaccinated against FMD, HS, BQ and Anthrax. However, vaccinations against bacterial diseases shall be done only if the area is endemic to a particular disease.
- 3. The bull calves of exotic breeds and their crosses shall be vaccinated for Theileriosis once in a lifetime.
- 4. Testing for bulls against Tuberculosis, Johne's disease. Brucellosis, IBR, Campylobacteriosis and Trichomoniasis shall be carried out as mentioned in Annea Ith. ough Annea VI.

Part 4

Health Requirements in Semen Station

- Only those bulls that have met the conditions set out in Part 2 or those coming from the rearing station of the semen station fulfilling the conditions set out in Part 3 shall be allowed to enter in the rearing station.
- 2. The semen station shall have a well-defined bio-security protocol for entry of visitors, vehicles, stray animals, equipment, material, manpower working at the station, disposal of dead animals etc. Female animals should not be kept in the same premises.

3. Vaccination Schedule

The bulls shall be vaccinated against FMD, HS, BQ and Anthrax. However, vaccinations against bacterial diseases shall be done only if there is an outbreak or prevalence of a particular disease.

 To reduce lay off time, the bulls shall be vaccinated on the rest day or the day after completing semen collection. Sexual rest may not be required unless otherwise febrile condition is noticed.

The semen station shall arrange for carrying out ring vaccinations for all animals against FMD, HS and BQ within a radius of 10 km around the semen station. Vaccinations against HS and BQ shall be carried out in the areas having incidence of these diseases.

- Testing protocols for bulls against TB. JD, Brucellosis, IBR, Campylobacteriosis and Trichomoniasis are given below in Annex I to Annex VI.
- 5. Management of FMD shall be as detailed in Annex VII.
- 6. It must be ensured that the results are made available to the concerned semen station within the stipulated time period.
- 7. There should be an accreditation authority to accredit these laboratories with a periodic frequency.
- 8. There should be an appex reference laboratory for verification of the results if any station is not satisfied with the results of regular testing laboratory.
- 9. None of the semen production station should be allowed to test its bulls at its own / related laboratory.

Schedule III

Part 1

Bull Housing and Management

Housing

Bull sheds should have spacious individual pens with adequate loafing area, manger and water trough with access to drink water all the time. In hot and humid areas, during the summer a cooling system with sprinklers and fan is required particularly for buffaloes and exotic bulls. Disinfectants like formalin or phenyl based compounds should not be used in the bull sheds. Instead, compounds containing Gluteraldehyde should be used. Spraying of **Sodium Carbonate** (4%) solution should be carried out weekly. The floor should be sterilized at least once a year using a blowlamp or by burning straws. There should be an isolation shed for separating ailing / sick bulls for treatment at one corner of the farm. Bulls once diagnosed as infected with infectious / contagious disease should be removed immediately from the semen station.

Female stock should not be housed near the bull station.

Management of Bulls

- a) The coat of the bulls should be kept clean and well groomed. The hooves should be regularly trimmed.
- b) The length of the tuft of hairs at the prepucial orifice should be cut to about 2 cm.
- c) Douching of the prepuce with sterile normal saline solution may be done every ten days. Prepuce should also be washed with sterile normal saline solution, a day prior to semen collection. Disposable gloves and a separate sterilized nozzle should be used for each bull.
- d) A scientific feeding schedule should be followed for the bulls.

Schedule III

Part 2

Semen Collection and Processing and Semen Quarantine, storage and distribution

1. Semen Collection

- a) Ideally, the floor of the collection yard should be made of concrete layer at a depth of one foot from the ground level. A mixture of sand and limestone should be used to fill up to ground level and pressed firmly. Alternatively, a good quality rubber mat (with interlocking arrangement) or coir mat should be put into the concrete groove of the mounting area for adequate cushioning effect. After collection, the area must be thoroughly cleaned and odourless disinfectant solution (Colloidal iodine) be sprayed in the collection area.
- b) On the day of collection, prior to semen collection, the bulls should be properly washed and cleaned. At the collection arena, the prepuce should be cleaned externally with a sterilized napkin soaked in normal saline to remove any sand or dust particles before taking collection. A separate napkin should be used for each bull.
- c) The person responsible to carry out preputial wash must use disposable gloves and separate sterilized nozzle for each bull to avoid transmission of IBR infection from one bull to another.
- d) The bulls shall be sexually prepared by giving two / three false mounts followed by two minutes restraint and the total time limit should be not more than 12 minutes. The duration of each false mount shall be for 1 to 2 minutes.
- e) Sterilized bull aprons should be used to avoid the penis touching the hindquarters of the dummy. A fresh apron should be used for each ejaculate.
- f) Preferably veterinarians shall take semen collection. If semen is collected by staff, a veterinarian shall remain present to supervise the collection process. While taking collection, it shall be ensured that AV is not thrust on the penis of bull, instead the penis should be guided to AV.

- g) Before every collection, the semen collector shall either wash his hands with 0.1% Savlon solution or use disposable gloves or do both. The semen collector shall not touch the penis.
- h) Immediately after collection, the AVs shall be thoroughly cleaned by non-spermicidal neutral detergent. Separate AVs shall be used for each mounting. The AV shall be changed even if the bull has inserted its penis without successful ejaculation. The same AV shall not be used twice. The AVs shall always be kept inverted and the collection tube shall be covered with felt / water jacket (plastic bottle filled with warm water at 34°C) to avoid cold shock. The open end of sterilized AVs shall be covered with aluminium foil, which would be removed at the time when bulls are ready for giving semen.
- i) Preferably 10" size AVs shall be used for cattle and 8" to 9" size for buffaloes to ensure semen is ejaculated in cone. For buffaloes goat AVs can also be used. The cone shall be of top quality Neoprene rubber.
- j) If it is extremely essential to use a lubricant, separate sterilized glass rods should be used to smear K-Y Jelly on each AV.
- k) The AV shall not be shaken after ejaculation; otherwise lubricant and debris may mix with the semen samples.
- The entry of visitors/ staff / labourers shall be strictly prohibited in the collection arena at the time of semen collection and inside the semen laboratory.
- m) Protective clothing (barn coat) and gumboots shall be used by the Veterinarians and personnel while taking semen collection. Gumboots and barn coat should be washed daily immediately after completion of semen collection work.
- n) Semen must be obtained from a bull having normal libido. While taking two ejaculations the semen station shall keep a gap of 10 to 12 minutes between two ejaculates, depending upon the refractory period of the bull. (To harvest more quantity of semen, interval between two ejaculates shall be kept for 40 to 45 minutes. After taking first ejaculate, the bull shall be taken back to the shed for feeding and watering and again brought back for taking second ejaculate. However, care shall be taken to use a fresh & sterilised apron during second ejaculate)

o) In general semen stations should follow a norm of minimum two ejaculates per collection and a minimum two collections per bull per week for taking annually at least 90 collections and 180 ejaculates from each adult bull.

2. Evaluation & Processing

- a) The tube containing the freshly collected semen should be capped with aluminium foil as soon as it is placed in the pass box before transferring to the laboratory. The collection tube shall be kept capped until processed.
- b) As soon as the neat semen is received, it should be kept in a thermocontrolled water bath at 34°C under a Laminar Unit, after recording the weight / volume of semen.
- c) After examination of sperm concentration and initial motility, semen samples should be diluted with dilutor maintained at 34° C.
- d) Semen samples showing less than 500 million sperm per ml should be discarded.
- e) Semen samples selected for freezing should have a minimum of 70% initial progressive motility. Final dilution of semen keeping a minimum of 20 million spermatozoa per dose shall be done in appropriate flasks with the dilutor maintained at 34° C.
- f) Filling and sealing of semen straws should be done under a Laminar Flow Unit using sterile straws, filling nozzles and fresh rubber tubing. Rubber tubing should be used only once.
- g) After freezing is over the straws should be collected from the racks using scoop tongs.

3. Colour Specifications:

All semen stations should follow the following common colour codes

| 1. | Jersey | 1 - | Yellow |
|----|------------------|------|-------------------------------|
| 2. | Holstein | - | Pink |
| 3. | Indigenous | - | Orange |
| 4. | HF Crossbred | 3 3- | Pistachio Green (light green) |
| 5. | Jersey Crossbred | | Salmon |
| 6. | Sunandini | - | Blue |
| 7. | Buffalo | - | Grey |

If any of the above coloured straws is not available, then a transparent coloured straws shall be used.

4. Printing of Straws

Information regarding bull number, breed, name of the organization, year, batch no. (as per the day of the year), ejaculate no., etc. should be printed on each straw.

All semen stations should use the following printing abbreviations:

| Jersey | | JY . | Farm No. / Name |
|--------------|----------|---------|----------------------------|
| Holstein | 81 - 2-3 | HF | Breed |
| HF Cross | - | CB HF | Name of Institute |
| Jersey Cross | 10 - 1 | СВ ЈУ | Batch No. / Date of Prodn. |
| Sunandini | - | SUN | |
| Sahiwal | | SAH | |
| Red Sindhi | - | RS | |
| Kankrej | - | KANK | Handari Salas |
| Gir | 3.5 | GIR | |
| Tharparker | 0- | THAR | |
| Rathi | - | RATHI · | |

| Haryana | | HAR | |
|--------------------|---|------|--|
| Murrah Buffalo | - | MBF | |
| Surti Buffalo | - | SBF | |
| Jaffrabadi Buffalo | - | JBF | |
| Mehsana | - | MSNB | |

5. Post thaw motility

After freezing, the semen straws should be stored in a separate container. Post-thaw motility of semen should be examined at 24 hours. For a minimum concentration of 20 million per dose, minimum acceptable post thaw motility should be 50%. Semen doses below 50% progressive motility should be discarded.

6. Quality Checks for frozen semen

This includes:

(i) Quarterly testing of random samples from each batch for bacterial load using standard plate count (The standards for acceptable colony forming unit in processed semen is 5000 CFU per ml as per OIE norm. If the bacterial load exceeds the OIE limit, the semen doses are to be discarded.)

Neat semen as well as frozen semen should not have uncountable CFUs. Semen showing crowded CFUs should be subjected to testing for pathogenic organisms.

- (ii) Hypo osmotic swelling test (HOST) every day four to six samples
- (iii) Incubation test. everyday four to six samples
- (iv) Acrosome integrity test by Giemsa staining for all bulls at least once in a quarter shall be mandatory. Alternatively wet smear of semen shall be examined using DIC microscope
- (v) Percent Intact Acrosome all bulls to be covered once a quarter
- (vi) Sperm Concentration randomly two samples per week each for cattle and buffalo.

- (vii) Neat semen should be examined at an interval of every six months for morphological abnormalities particularly for crossbred bulls.
- (viii)Morphological examination of sperm of young bulls must be carried out (at least six samples at weekly intervals) before introducing them in the herd. Semen should not be used if the sample contains a total abnormality of more than 20% and head and mid-piece abnormality (alone) of 7%.

Quality check of semen straws drawn randomly from the long storage at periodic intervals should be done as a part of quality assurance

7. Information System

- a) Batch wise records of Volume of semen, density, motility, sperm concentration, dilution rate, total extended volume, post-thaw motility (24 hrs), total number of doses produced, etc. should be maintained.
- b) Details of semen supplied to various agencies including post-thaw motility at the time of dispatch.
- c) Fertility data of bulls, conception rate, records of the progeny associated with any genetic defect, percent male / female born, etc.
- d) Report on microbiological examination of semen samples.
- e) Records of all quality tests for neat and frozen semen samples

8. Frozen Semen Storage and Quarantine

- 1. Frozen semen storage room should be a well ventilated all weather safe area.
- Semen doses produced before 30 days from the date of dispatch should only be supplied for field use.
- 3. Semen goblets should be transferred to the bulk storage containers with proper recording of position in the canisters. After each dispatch, records redefining the position of remaining doses should be updated. A proper foolproof identification system for frozen semen container, canister, goblet and level of storage should be ensured so that a bull's semen can be traced with ease.
- 4. All transfers of frozen semen straws into the goblets should take place immersed under liquid nitrogen, in a polystyrene / thermocol box filled with liquid nitrogen

- 5. Reference samples of semen doses dispatched should be retained.
- 6. Precaution should be taken to see that each goblet has sufficient space for liquid nitrogen. Mini straws need special care and should not be exposed above liquid nitrogen even for a short time (10 seconds) as they get warm faster and irreversible damage to sperm viability is caused.
- 7. Liquid Nitrogen should be replenished at regular intervals to ensure the maintenance of level

Schedule IV

Part 1

Minimum Standards for Semen Storage and Distribution for Al Service Provider

- Semen storage room should be stored in a well ventilated, all weather safe storage area.
- 2. The service provider should ensure a proper foolproof identification system for each semen container, canister, goblet and level of storage maintained both in storage and distribution containers so that a bull's semen can be traced with ease.
- Details of semen supplied to various agencies including post-thaw motility at the time of dispatch should be recorded. After each dispatch, records redefining the position of remaining doses should be updated.
- 4. While transferring, goblets containing semen should be well identified and precaution should be taken to see that each goblet has sufficient space for liquid nitrogen. Mini straws need special care. They should not be exposed above liquid nitrogen even for a short time (10 seconds) as they get warm faster and cause irreversible damage to sperm viability.
- 5. All transfers of semen straws into the goblets should take place immersed under liquid nitrogen, in a polystyrene / thermocol box filled with liquid nitrogen
- 6. Liquid Nitrogen should be replenished at regular intervals to ensure the maintenance of level

Schedule IV

Part 2

Guidelines for Al service provider

- 1. An Al service provider must hold a certificate of registration from the State Authority.
- 2. AI service provider will engage AI Technicians holding such qualifications and experience as prescribed by the State Authority from time to time.
- Al technicians shall provide Al Services only if he/she is working under an Al service provider holding a Certificate of Registration from a State Authority.
- 4. An AI service provider must engage qualified veterinarians (one for minimum 50 AI workers) to supervise the work carried out by the AI technicians and address problems related to repeat breeders.
- 5. AI service provider must ensure that the AI technician engaged by him to provide AI services puts an ear-tag on each animal inseminated by him, maintains proper records of each insemination carried out in the formats prescribed by the State Authority and submits the same to the AI service provider periodically.
- 6. Al service provider would maintain proper records of insemination work in the formats prescribed by the State Authority and submit the same to the State Authority periodically in Form "F".
- 7. AI service provider would follow the Minimum Standards for storage, transport and transfer of semen doses from one container to other as laid down in Schedule IV Part 1 of the Bovine Breeding Act
- 8. Al service provider shall procure semen from only those semen stations which have obtained Certificate of Registration from the State Authority.
- 9. Al service provider shall use only those imported semen doses in its Al programme which have been imported with the approval of Government of India and shall follow the regulations laid down by Government of India for the use of such semen in the country.

Schedule V

Part 1

Curriculum for AI technician training

A. Class Room:

- 1) Different breeds of cows and buffaloes and their production and reproduction parameters
- 2) Conservation and development of indigenous breeds through selective breeding.
- 3) Benefits of Crossbreeding and genetic improvement of dairy animals
- 4) State Breeding Policies and their enforcement specific to the State to which trainee batch belong to
- 5) Introduction to AI, history of AI, natural service (NS) vs AI, advantages and limitations
- 6) External and internal body parts of a dairy animal and their function
- 7) Male reproductive organs & their functions
- 8) Semen, its collection, evaluation, processing, preservation
 - o different types of semen packing,
 - o structure of mini and medium straws
 - o information printed on straw and its importance
 - o Breed wise Straw colour codes
- 9) Female reproductive organs & their functions
- 10) Oestrus cycle:
 - o Internal and external symptoms at different stages of oestrus cycle
 - o Correct time of insemination
 - o Determinants of first Al in heifers
 - o Methods of heat detection in cattle and buffaloes
- 11) Normal reproductive cycle
- 12) Puberty, Maturity, Breeding, Fertilization, Implantation, Gestation and Calving

- 13) Ideal calving interval
 - > Service period, dry period and Inter-calving period
- 14) Process of insemination:
 - Collecting History
 - · Standard Operating Procedure (SOP)
- 15) Importance of:
 - · Proper method of semen withdrawal from container
 - · Proper thawing
 - Proper preparation of AI gun
 - · Proper site of semen deposition
 - · Care of animal during & after insemination
- 16) Al equipment and accessories & their care
- 17) Liquid nitrogen handling:
 - · Structure of LN container
 - · Handling & care of LN container
 - · Precaution in handling of LN
 - · Different models of LN containers
 - · Importance of maintaining cold chain and LN refilling schedule.
 - Proper LN level in container & its checking. Evaporation rates and refilling interval of commonly used containers in the field under normal working conditions.
 - · LN conservation measures
- 18) Pregnancy Diagnosis
- 19) Methods of calculating conception rates and factors affecting conception rates
- 20) Method of drying of animals on completion of 7th month pregnancy.
- 21) Common reproductive disorders/ diseases, repeat breeding, causes of abortion, etc.
- 22) Measures to obtain maximum fertility
- 23) Ear tagging, importance of record keeping
- 24) Recording formats and submission of records into the INAPH application(offline & online versions) through

- 25) PDA/Netbook/Desktop (training in data entry with dummy data on test server, different flash messages, saving the data, synchronization of data with the server and using action reports in day to day work.
- 26) Starting an AI centre
- 27) Method of non-surgical castration
- 28) Care and management of new born calf and heifers till it becomes pregnant at farmers perception.
- 29) Care and management of Dry Pregnant animals
- 30) Care and management of animals before and after calving, precautions at the time of calving and use of naval kit for disinfection of naval cord
- 31) Importance of Animal housing and general management in getting full expression of genetic capability
- 32) Importance of bio-security measures to be adopted during AI.
- 33) Economically important diseases and their prevention through timely vaccination; various available vaccines; vaccination schedules; importance of maintaining cold chain
- 34) Basic aspects of nutrition and concept of Ration Balancing
- 35) Importance of proper nutrition including feeding of vitamins and mineral mixtures and deworming in fertility management with emphasis on the adverse impact of macro and micronutrients deficiencies on fertility status/reproductive health of animal
- 36) .Fodder varieties, cultivation practices; preservation (hay & silage preparation) and enrichment of straw. Densification and enrichment of fodder.
- 37) Taking AI as a self employed enterprise
- 38) Importance of Animal Insurance: various insurance schemes

- 39) Various government schemes in the area of animal breeding
- 40) Role of Information and Communication Technology (ICT) in artificial insemination programme for bovines.

B. Case Studies

- 1) Advantages of Al over natural service.
- Advantages of following SOP for AIT-better conception rate and its impact over a period of five years.
- 3) Record keeping and using INAPH.
- 4) Extension activities related to animal husbandry (activities on Breeding, Health and Nutrition).
- 5) A farmer coming to Al Worker with an animal for insemination with following history of oestrus:
 - · 3rd day after heat,
 - · On the day of full moon
 - · Just on the time of starting of heat
 - Animal with pustular/watery/bloody vaginal discharge.
 - Gestational heat
 - · Post partum heat after one month of calving.
 - · Heifer in heat with lower body weight.
- 6) Care of young calves till its pregnancy
- 7) Effect/impact of good AI technician Vs inefficient AItechnician
- 8) Superstitious believes Vs Scientific method of breeding

C. Audio Visual materials:

- 1) Animal reproduction and AI
- 2) Changing lives
- 3) DO and DONOT of AI
- 4) Hygienic milk and milk product processing and packagining

- 5) Year round fodder production
- 6) Animal health care (Diagnostics for control and eradication of diseases FMD, HS, PPR, and avian diseases)
- 7) Improving quality and utilization of poor quality roughages
- 8) Mineral mixture for increased animal productivity
- 9) Organic farming for sustainability and profitability

D. Practical

- 1) Identification of different female reproductive organs on morbid Genitalia
- 2) Palpation of female genitalia in a Phantom box and passing of AI gun
- 3) Structure of LN container:
 - · different models
 - · handling & care
 - · checking LN level
- 4) Al equipment & accessories:
 - · handling & care including sterilisation
- 5) Palpation of female genitalia in live animal
- 6) Passing of AI gun in live animals
- 7) Demonstration of:
 - o proper method for withdrawal of straw from containers
 - o proper thawing procedure
 - o proper preparation of gun
 - o correct site of semen deposition
- 8) Pregnancy diagnosis at 90 days & beyond
- 9) Ear tagging
- 10) Record keeping and INAPH

E. Study visits

Study visits to any of the following places as deemed appropriate for the AI training Institutes

- AI Centre
- Cattle Feed Factory(optional)
- Dairy Farm
- Exhibitions and Krishimela/Pashumela (optional)
- · Semen Station
- · Dairy processing plant
- · Fodder farm/Demonstration farms

F. Duration of training

- 1) Al basic training:
 - Class room training along with practical training: 30 days
 - · Practical training in the field with AI service provider: 60 days
- 2) AI refresher training:
 - Classroom and Practical training -- 7 days
- G. Faculty profile and requirement (for a batch size of 30 trainees)
- 1. Veterinary Officers:

Minimum two Veterinarians are required with educational qualification of BVSc & AH and 3 years of work experience in AI, Breeding, Health and Management of Cows and Buffaloes along with experience in providing on the job practical training and delivery of lectures.

2. Support Staff:

Minimum one support staff is required with graduation in any discipline

H. Participant profile

1. AI Basic Training:

The participant of this programme should have at least passed in 10th standard examination with not less than 18 years of age.

2. AI Refresher Training:

The participant of this programme should be a practicing Al technician having at least I year relevant work experience and should have undergone Al Basic training.

I. Tests during Training:

Class Room Training:

- Fortnightly written test on topics covered.
- · Final written test at the end.
- · Final practical test to evaluate the skills learnt

J. Pass marks:

- Minimum three theoretical tests and one practical test may be conducted.
- · Minimum 50% in each of the test including the final tests.

Schedule V

Part 2

Facilities at Al Training Institute

Class room facilities:

For a batch of 30 trainees, there should be a class room having minimum of 600 square feet area. If there are more than 30 trainees, there should be an additional class of 600 square feet area.

Besides class rooms, there should be a laboratory having minimum 500 square feet area for practical classes. This laboratory should have facility to store reproductive organs and keep different models of animals and reproductive organs and space to keep semen and liquid nitrogen storage containers.

Besides, there should be a library having at least 400 square feet area and two administrative office rooms each having 300 square feet area.

2. Teaching aids

The class room must have minimum the following:

- · Adequate chairs and tables for trainees
- · White board
- · LCD Projector (optional)
- · Computer
- · Charts
- Charts and Models of reproductive organs
- The centre must have the required semen and LN storage containers, AI guns, and required AI accessories.
- Reproductive organs must be obtained from a nearby slaughter house for palpation and passing a gun.
- Ear tags and ear tag applicators
- · Measuring tape for estimation of body weight
- ICT aids (Computer, note books or PDAs, printers etc.,

3. Animal housing facilities for practical training

- For practice, the centre should have minimum one animal for six students.
- The centre may have its own animals for practical classes or tie up with nearby Gaushala or Panjarapol or slaughter house for practical training. Every trainee must pass Al gun in at least 20 animals during entire period of class room training.
- If the centre has its own animals, there should be a proper shea, a Trevis an Ai crare
 and a godown to store feeding material. Animals should be replaced every six months.

4. Lodging and boarding facilities for trainees

- The centre should have proper residential facilities for trainees including kitchen and minimum recreational facilities. Or
- The AI training Institutes may outsource the board and lodging facilities to an
 external agency through a formal agreement for at least a period of two years. The
 copy of the formal agreement should be kept for record for requirement at the time of
 Accreditation process.

5. Understanding with Al service providing organisations for practical training

- The Centre should have some formal arrangement with AI service providing organisations for its trainees to receive apprenticeship training for 60 days.
- During practical training each trainee should do minimum 75-100 AIs and the same numbers of P.D.s. The AI Centers having such work performance should be selected for apprenticeship training. The trainer of A.I. Technician should have enough experience (3 to 5 years) to impart practical training to trainee A.I. Technicians.
- Trainees should also get opportunities to address farmers meetings to develop confidence and do extension activity effectively.

6. Records/Documents for a AI training Institute

- 1) Trainees' records of registration
- 2) Trainees' daily attendance record
- 3) Records of successfully completed trainces
- 4) Summary of feedback obtained from trainees
- 5) Annual progress report / Training Brochure(optional)

Bovine Tuberculosis Management

resources and district as a story transmission is

| | Name | Delayed Hypersensitivity - |
|---------------------|-----------------------------|--|
| | | Single Intra-dermal test |
| | Reagent | Bovine tuberculin PPD |
| | Reagents from | IVRI, Izatnagar |
| Screening Fest | Testing at | Where animals are housed by RDDL/CDDL/NDDB |
| Details | Positive result criteria | As per OIE norms Negative: Increase in skin thickness less |
| | | than 2 mm & without clinical signs viz. exudation, necrosis, pain, inflammation of the lymphatic duct of that region or the |
| | at stage go | Inconclusive: Increase in skin thickness more than 2mm & less than 4mm, absence of above clinical signs, 72 hours post-inoculation. |
| | | Positive: Increase in skin thickness 4 mm or more, or presence of clinical signs viz. exudation, necrosis, pain, inflammation of the lymphatic duct of that region or the lymph node, 72 hours post-inoculation. |
| Eligible animals | | All animals above 6 weeks of age. |
| | Positive herd | Minimum 60 days after culling of last positive animal |

| Frequency of testing | Negative herd | Annual test is minimum. Six months (± 1 week) after last whole herd negative testing, desirable. |
|------------------------------------|---|--|
| Action on finding a | Animal | Immediate isolation and removal |
| positive bull | | Destroy semen doses produced since the |
| positive bull | Semen | last negative test |
| Tuberculosis free herd (OIE) | o bezinin kasi igili m yeshku bis | Herd found negative on two consecutive tuberculin tests at an interval of 6 months, the first being performed 6 months after the slaughter of last affected animal |
| Quarantine | Duration of quarantine | Minimum 90 days |
| | Test schedule | Two tuberculin tests, minimum interval of 60 days between tests. |

Annex II

Johne's Disease (JD) Management

| | Name | Delayed Hypersensitivity test (Skin test) |
|-------------------------|-----------------------------|--|
| | Reagent | Johnin PPD |
| | Reagents from | IVRI, Izatnagar |
| Screening | Testing at | Where animals are housed by RDDL/CDDL/NDDB |
| test Details | Positive result criteria | Increase in skin thickness of over 4 mm (discrete circumscribed swelling), 72 hours post-inoculation |
| Eligible animals | | All animals above 6 months |
| Frequency of | Positive herd | Minimum 60 days after culling of last positive animal |
| testing | Negative herd | Annual test is minimum. Six months (± 1 week) after last whole herd negative testing, desirable. |
| Action on | Animal | Immediate isolation and removal |
| finding a positive bull | Semen | Destroy semen doses produced since the last negative test |

Annex III

Bovine Brucellosis Management

| Screening Test | Name | ELISA, RBPT+CFT |
|--|----------------------------------|--|
| Details | Sample | Serum |
| Details | Reagents from | ADMAS / CDDL / OlE reference lab |
| | Testing at | CDDL/RDDL/NDDB |
| Eligible animals | | All above one year |
| | v samelik vers megt samuels k | In females 14 days after calving or abortion |
| | Positive herd | 30 to 60 days after culling of last positive animal |
| | Negative herd | Exactly one year (± 1 week) after last whole herd negative testing |
| Frequency of testing | Negative herd (optional) | Where the disease has been maintaining a very low profile (less than 1 % positive) quarterly or six monthly sample could be collected to minimize losses |
| Action on | Animal | Immediate isolate, castrate and remove |
| finding a positive bull | Semen | Destroy semen doses produced since the last negative test |
| Brucellosis free herd (OIE) | | Herd found negative on two consecutive annual tests |
| Additional testing at sexual maturity | | Serum ELISA before bulls are used for semen collection and distribution for AI |
| Additional testing at sevual maturity | | Serum ELISA/SNT before bulls are used for semen distribution in field Al |

Annexure-IV

Testing of bulls for management of Infectious Bovine Rhinotracheitis (IBR) in Semen Stations

| Name of the test | Enzyme Linked Immunosorbent Assay (ELISA), Real time PCR | | |
|---|---|--|--|
| Sample (s) required | Serum for ELISA, semen for real-time PCR | | |
| Induction of new animals into herd/semen stations | Only negative animals will be inducted. All the animals to be inducted irrespective of their age should be put on hold and inducted only if test negative after the age of 9 months. | | |
| Sero positive bulls at IBR positive Semen Station | Action in order of priority:- (i) Immediately cull sero-positive animals and castrate them (ii) If culling not possible, immediately isolate the animal and process and store their semen separately. Test each ejaculate with RT-PCR. Discard by burning positive ejaculate. Use only negative tested semen. | | |
| Action to be taken on bulls at the IBR free Semen Stations | (i) All positive bulls culled immediately (ii) Retest remaining bulls at 30 -60 days after culling last positive animals. Repeat (i) & (ii) until the remaining herd tested negative. Thereafter test at 6 monthly interval. (iii) The negative herd should be tested at 6 monthly interval. | | |

Annexure-V

Testing bulls for management of Bovine Viral Diarrhoea (BVD) at Semen Station

| Name of the test | Enzyme Linked Immunosorbent Assay (ELISA) for antibody detection (Ab-ELISA) for detection of antigen (Ag-ELISA). | | |
|---|---|--|--|
| Sample (s) required | Serum | | |
| Induction of new animals into herd/semen stations | Only negative animals will be inducted. | | |
| Action to be taken for positive animals | Immediately isolate and cull | | |
| Semen dosses of positive animals | Destroy by incineration frozen semen doses of the positive animals since last negative test. | | |
| Bulls at the semen stations | (i) All positive bulls for Ag ELISA and Ab ELISA shall be culled immediately. If bulls are positive for Ab ELISA retesting done after 30 days and if titre increases bulls are culled. (ii) Retest remaining bulls at 30 -60 days after culling last positive animals. Repeat (i) & (ii) until the remaining herd tested negative. Thereafter test at 6 monthly intervals. (iii) The negative herd should be tested at 6 monthly intervals. | | |

Annex VI

Bovine Genital Campylobacteriosis Management

| Screening test details | Name | Bacterial isolation & identification |
|-----------------------------------|---------------|--|
| | Sample | Preputial washing, semen |
| | Testing at | RDDL/CDDL/NDDB |
| Eligible animals | | All male animals |
| Prevention | | Annual sheath lavage |
| Frequency of testing | Positive herd | 30 days after culling of positive animal. |
| | Negative herd | Exactly one year (± 1 week) after last whole herd negative testing |
| Action on finding a positive bull | Animal | Treat the animals |
| | Semen . | Destroy semen doses produced since the last negative test |

Annex VII

Bovine Trichomoniasis Management

| Screening test details | Name | Agent isolation & identification |
|--|------------|---|
| test details | Sample | Preputial washing |
| | Testing at | RDDL/CDDL/NDDB |
| Eligible animals | | All male animals |
| Prevention | | Annual sheath lavage |
| Frequency of testing | | Annual |
| Action on | Animal | Treat the animals |
| finding a positive animal | Semen | Destroy the semen doses produced since the last negative test |
| Additional testing at sexual maturity | | Protozoa isolation before bulls are used for semen distribution for Al |
| | | The 4-20 city lives along the city of the |

Annex VIII

Foot and Mouth Disease (FMD) Management

| Action during | Animal | Isolate diseased animals till recovery, do |
|---------------|-------------------------|---|
| FMD outbreak | | not cull. |
| | Semen | Semen from FMD infected bulls : |
| | | Destroy semen collected during one month before onset of outbreak. Do not collect semen from bulls during the outbreak and three months after the last case of FMD in the farm. |
| | | Infected animals must be given 90 days rest |
| | | Semen from healthy bulls maintained in FMD infected farm: |
| There Board | | Destroy semen collected during one month before onset of outbreak. Do not collect semen from bulls during the outbreak and one month after the last case of FMD in the farm. |
| | | Semen, other than the above mentioned periods could be used, if no new case of FMD is observed during three months after the last FMD case in the farm. |
| | Semen for export | Test each batch by virus isolation and PCR |
| Vaccination | Oil adjuvant vaccine | As per manufacturer"s recommendations in farm and 10 km around the farm |
| | | |
| | | Test for seroconversion, by collecting serum on the day of vaccination and 21 days later. |

STATEMENT OF OBJECTS AND REASONS

The Artificial inseminations are carried out to cows and Buffaloes with disease free Semen. The private semen stations have recently registered in the state from which the Semen is collected from infectious bull's which is causing ill health and production losses.

The following diseases may be transmitted to a large population if the breeding bulls are not screened effectively.

- (a) IBR (Infections Bovine Rhino-traechities)
- (b) JD (Johne's Disease)
- (c) BVD (Bovine Viral Diarrhoea)
- (d) T. B. (Tuberchlosis)

The Andhra Pradesh Bovine Breeding (Regulation of Production & Sale of Bovine Semen and Artificial Insemination Services) Bill, 2021 provides the Authority of facilitate and check the private semen stations immediately to prevent irreparable loss to the livestock.

- 1. The Bill facilitates the authority to arrest the indiscriminate breeding with poor quality semen to cows and buffaloes which prevents the production losses to farmers.
- The Artificial Inseminations are carried out by A.I Technicians in the State. The Bill facilitates
 the Authority to register the trained personnel in the state immediately, thereby unregistered
 Artificial insemination technicians can be avoided, thus improving the conception rate in livestock and thus minimizing the loss to the Dairy farmers.
- 3. To curb indiscriminate use of unauthorized and inferior quality semen.
- 4. The control spread of infectious diseases like Brucella, IBR, TB & JD in animals.
- 5. To provide quality breeding services through qualified and registered A1 technicians.
- 6. To implement the Andhra Pradesh State Bovine Breeding policy for improving productivity in animals reared for milk /meat.
- 7. The Bill also envisages use of sex sorted semen technology.
- To advise the Government on instituting an incentive mechanism for encouraging the rearing of indigenous bovine breeds.
- 9. To create new business avenues in the Dairy Husbandry sector.
- 10. The farmers involved in dairy industry will be immediately benefitted from high milk yielding buffaloes and cows through disease free quality frozen semen.
- 11. The Bill ensures the demand for high genetic merit frozen semen from the dairy farmers can be addressed in a positive manner. The sex sorted semen is in high demand among dairy farmers, as it producess more female calves and thus making the dairy industry a profitable venture.

As the Legislature of the State was not then in session, having been prorogued, and it has been decided to the give effect to the above decision immediatly, the Andhra Pradesh Bovine Breeding (Regulation of Production & Sale of Bovine Semen and Artificial Insemination Services) Ordinance, 2021 (Andhra Pradesh Ordinance No. 17 of 2021) was promulgated by His Excellency the Governor of Andhra Pradesh on 22.09.2021, which has been published in the Andhra Pradesh Gazette on the 14th October, 2021.

The Bill seeks to replace the said Ordinance and to give effect to the above decision.

Dr. SEEDIRI APPLARAJU MINISTER FOR ANIMAL HUSBANDRY, DAIRY DEVELOPMENT AND FISHERIES.

MEMORANDUM REGARDING DELEGATED LEGISLATION

Clauses 1(4), 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 19, 21, 24, 27 and 29 the Bill authorize the Government of issue notifications in respect of the matters specified therein and generally to carry out the purposes of the Act.

All such notifications issued, which are intended to cover the matters mostly of procedural in nature are to be laid on the table of the both Houses of the State Legislature and will be subject to any modifications made by the Legislature.

The above provisions of the Bill regarding delegated legislation are thus of normal type and mainly intended to cover matters of procedure.

Dr. SEEDIRI APPLARAJU
MINISTER FOR ANIMAL HUSBANDRY,
DAIRY DEVELOPMENT AND FISHERIES.

MEMORANDUM UNDER RUL 95 OF THE RULES OF PROCEDURE AND CONDUCT OF BUSINESS IN THE ANDHRA PRADESH LEGISLATIVE ASSEMBLY.

The Andhra Pradesh Bovine Breeding (Regulation of Production & Sale of Bovine Semen and Artificial Insemination Services) Bill, 2021, after it is passed by the Legislture of the State, may be submitted to the Governor for his assent under article 200 of the Constitution of India.

Dr. SEEDIRI APPLARAJU
MINISTER FOR ANIMAL HUSBANDRY,
DAIRY DEVELOPMENT AND FISHERIES.

P. BALAKRISHNAMACHARYULU, Secretary to State Legislature.