



KERALA LIVESTOCK DEVELOPMENT BOARD

TRAINING BROCHURE

2022-23



TRAINING CENTRES

- MATTUPATTY
- DHONI
- KULATHUPUZHA
- KOOTHATTUKULAM
- KOLAHALAMEDU





Mattupatty Farm - Bird's Eye View.....





Short Term Training Courses on Livestock & Fodder Production Sciences

KLD BOARD TRAINING CENTRES CONTACT DETAILS

MATTUPATTY

Manager (Trg)

KLD Board Ltd.,
Mattupatty-685 616
Munnar, Kerala, India Mob:
+91 9446004283
E-mail: kldbtcmtpy@gmail.com

DHONI

Co-ordinator

KLD Board Ltd.,
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Mob : 9446004285
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KULATHUPUZHA

Manager (AH)

KLD Board Ltd., Kollam,
Kerala, India
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KOLAHALAMEDU

Manager (FD)

KLD Board Ltd., Livestock
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Idukki, Kerala, India
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KOOTHATTUKULAM

Assistant manager (AH)

Pig Breeding Centre
KLD Board, MPI, Joint Venture Project
MPI Campus, Edayar P.O.,
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Mob : 9446004280
E-mail: pbcjvedayar@gmail.com



2022-2023-TRAINING COURSES AT A GLANCE

Sl No	Name of the course	Minimum qualification for admission	Duration (days)	No.of courses offered	Participants/ batch	Tuition Fee(Rs) per person	Venue**
1	Modern Trends in the cryopreservation of bovine semen	Degree in & Veterinary Animal Science	14	1	10	33,000/-	Mty.
2	Frozen semen production & it's handling for optimum fertility	-do-	10	1	10	25,000/-	Mty.
3	Bull Breeding Soundness Evaluation	-do-	6	on request	10	22,000/-	Mty/Dni.
4	Field performance recording and sire evaluation under tropical conditions	-do-	14	1	15	31,000/-	Mty/Kpz.
5	Fertility problems in female bovines	-do-	14	2	10	31,000/-	Mty.
6	Tropical pasture seed production & Quality Control	Degree in Agricultural Science	21	1	10	28,000/-	Dni.
7	Fodder Production and its utilization	Degree in Agricultural/ Veterinary/ Animal Science	21	2	15	28,000/-	Dni.
8	Basic Course in Artificial Insemination	S.S.L.C/ equivalent	90 (30+60)	on request	15	35,000/-	Mty/Dni/Kpza/Kmd
9	Field Embryo Transfer Programme	Degree in Veterinary Science	21	1	4	95,000/-	Mty.
10	Refresher course in AI with Frozen Semen	Field AI Technicians	6	on request	15	19,000/-	Kpz/Mty/Dni/Kmd
11	Management of Large scale AI operations	Degree in Animal production Sciences	14	1	12	31,000/-	Mty.
12	Management of breeding operations in pigs	Degree in Veterinary Science	14	2	5	29,000/-	Ktkm

Sl No	Name of the course	Minimum qualification for admission	Duration (days)	No.of courses offered	Partici pants/ batch	Tuition Fee (Rs)	Venue**
13	Dairy entrepreneurship	Degree in veterinary Science	5	1	10	19,000/-	Mty.
14	Goat management and A.I. in Goats	Degree in veterinary Science	5	3	10	19,000/-	Mty/ Dni.
15	Minimum standard protocol for Frozen semen Production	Degree in Veterinary Science, Animal Science	14	1	12	50,000/	Mty/ Dni.
16	Quality control aspects of Frozen semen Production	Degree in Veterinary/ Animal Science	10	1	4	45,600/-	Mty/ Dni.
17	Advanced Techni - ques in Cattle Production	Degree in Veterinary/ Animal Science	6	1	15	19,000/-	Mty.
18	Dairying and Clean Milk Production	Dairy Farmer	5	on request	15	7,000/-	Dni.
19	Artificial Insemination in goats	Field Veterinarian/ AI Technicians	2	on request	15	6,000/-	Dni.
20	Advanced Basic Course in Artificial Insemination	SSLC/ Equivalent	120	on request	15	77,000/-	Mty/ Dni.

**Mty - Mattupatty, Dni - Dhoni, - Kpz - Kulathupuzha,

Mpz- Muvattupuzha, Ktkm - Koothattukulam-KMD-Kolahalamedu.

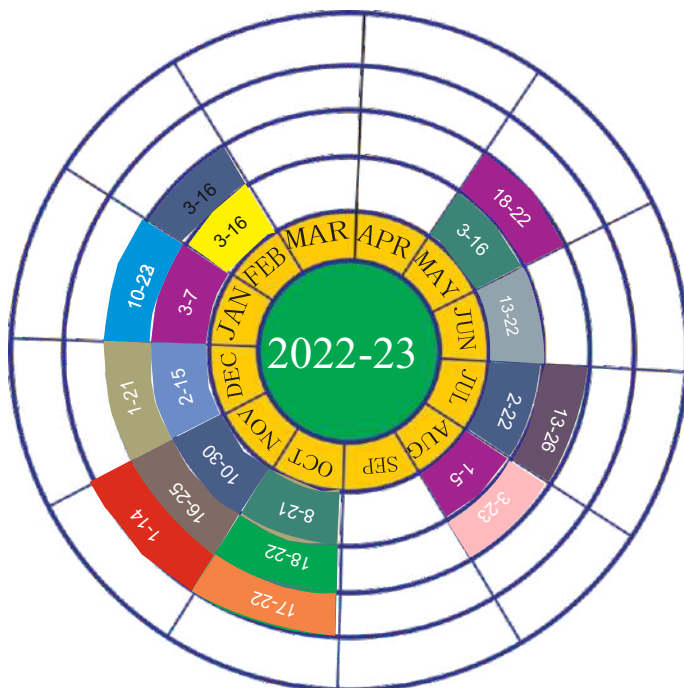
i) Advance booking is necessary to ensure seats. See course calendar annexed.

ii) Last date of receipt of application is fixed as 30 days prior to commencement date of the course

iii) Guidance to reach the venue may be seen in page 12

iv) Courses will be cancelled in case more than 50% of the stipulated candidates fail to report.

TRAINING SCHEDULE FOR 2022-23



Moderns trends in cryopreservation of semen	Feb.3-16
Frozen semen production & its handling for optimum fertility	Jun.13-22
Field performance recording and sire evaluation under tropical condition	Nov.1 -14
Fertility problems in female bovines	May 3-16
	Oct 8-21
Field E.T. Programme	Aug 3-23
Management of large scale AI Operations	Dec. 2-15
Tropical Pasture seedproduction	Dec. 1-21
Fodder production and its utilization	July 2-22
	Nov 10-30
Management of Breeding operations in pigs	July 13-26
	Feb 3-16

Diary Entrepreneurship	Oct18-22
Goat Management & AI	Jan. 3-7
	May 18-22
	Aug. 1-5
Minimum standard protocol of FS production	Jan.10-23
Quality control aspects of FS production	Nov.16-25
Advanced Techniques in Cattle production	Oct.17-25

Timely access to new scientific information and innovations is important for the professionals and field technicians to prove their skill. There are various media available to pass on such informations to field technicians. Training is one among them. Training programmes offer not only an opportunity to pass on such new information, but also help in refreshing the knowledge of the participants. Further, several creative observations and experiences gained by field technicians can be discussed and shared for mutual benefit. With these objectives in mind, then Indo-Swiss Project. (now the Kerala Livestock Development Board), started offering practical training courses to professionals and technicians in the area of animal production sciences

COURSES

The Training Centres under the Kerala Livestock Development Board (KLDB) at present offer various short term training courses. All these courses are designed for field workers who require specialization in their respective fields. The courses include a combination of theory, practicals, group discussions, seminars and field visits. Apart from the courses announced through this brochure, the Training Centre is also taking up programmes as required by the Sponsor on mutual agreement of the syllabus and duration, provided the concerned Sponsor is willing to depute the full complement of trainees to justify conduct of such course.

FACILITIES

All the necessary requirements for the successful conduct of the Courses are available at the Training Centres. Boarding and lodging facilities wherever available, are given in the premises itself. Well established technical library, reading hall, classrooms with modern facilities like interactive Board and practical halls facilitate proper training. A separate laboratory with all necessary equipment and instruments has been established for the trainees on "Frozen Semen Technology". A well established Embryo Transfer laboratory with all facilities is available for offering training courses on "Field Embryo Transfer Programme". Enough culled female animals are kept in the units for handling by the trainees attending courses on "Fertility problems in female bovines" and "Artificial insemination etc. High tech Bull mother farm with milking parlor is available at mattupatty, kolahalamedu, kulathupuzha.

A well esting Laboratory is available at Dhoni. A Fodder Seed Store with a capacity of storing up to 50 MT of fodder seeds is also available at Dhoni. These facilities are made available to the trainees attending courses on "Tropical pasture seed Production" and "Fodder production and its utilization". Modern teaching aids and demonstration units are amply used in order to improve the quality of training.

In addition to the above The Mattuppatty and Dhoni stations of KLDB have the following facilities

	Mty	Dni
Bull Mother farm	100	-
Bull Station with semen processing	100	100
Regional Semen Banks	-	1
ET-lab (Mattupatty)	1	-
Calf rearing station	1	1
Slaughter house	1	1
Grassland (Ha)	160	55
Leys (Ha)	30	50
Basic fodder seed farm (Dhoni)	-	10
Quality Control Division	1	1

Other facilities available Into KLDB

- Bull station with similar facilities as that of Mattupatti and Dhoni at Kulathupuzha.
- Bull Mother Farm with a capacity for 200 Bull mothers at Kulathupuzha
- Field Progeny Testing Scheme
- Large scale frozen semen distribution system
- Fodder Promotion Activities.
- Fodder seed Production programme
- Fodder Seed Testing and Quality Control Station
- Central Seed Store
- Data Processing Station
- Quality Control Unit
- Goat Breeding centre at Dhoni farm
- Pig Breeding Centre at Koothattukulam
- Herd of indigenous breeds of dairy cows at Puthur
- Sperm station with SMILE, and flowcytometer etc..
- Regional Semen Banks
- Bull Mother Farm with a capacity for 300 Bull Mothers at Kolahalamadu
- Centre for Applied Live Stock Genomics - for Genomic Study of live Stock

GENERAL INFORMATION

Hostel/ accommodation facilities are available for trainees at Mattupatty, Dhoni and Kulathupuzha. Candidates have to pay Rs. 100/- per day as lodging charges. In the case of scheduled courses, food expenses will also have to be met by the trainees.

There is no provision for family accommodation for trainees

At Muvattupuzha and Koothattukulam, the trainees are expected to stay outside the premises. Enough hotels are available at these places on reasonable rent.

VISA

Participants from outside the country require a visa for their stay in India. The participants have to themselves obtain the required visas. If required, KLD Board will give a letter of recommendation on request.

COURSE FEE

The tuition fee for the courses, other than the ones mentioned and conducted on special request would be decided by the Managing Director, K.L.D. Board, Thiruvananthapuram

The applicant/sponsor on confirmation of seat has to remit the course fee in advance or at the time of joining for the training at the venue specified.

MODE OF PAYMENT

For Courses at Mattupetty

The registration fee/ tuition fee shall be remitted by demand draft drawn in favour of the Manager (AH) KLD Board Ltd., Mattupetty, payable at Munnar or through NEFT/RTGS. Bank details for account transfer are as follows.

Account Holder Name :	Manager (AH)
Account Number :	57064109127
Name of the Bank :	State Bank Of India
Name of the Branch :	Munnar
IFSC Code :	SBIN0070135

For Courses at Dhoni

The registration fee for the tuition fee shall be remitted by demand draft drawn in favour of the Manager (AH) KLD Board Ltd., Dhoni payable at Palakkad or through NEFT/RTGS. Bank details for account transfer are as follows.

Account Holder Name :	Manager (AH)
Account Number :	57028693728
Name of the Bank :	State Bank Of India
Name of the Branch :	Palakkad
IFSC Code :	SBIN0070177

For Courses at Koothattukulam

The registration fee or tuition fee shall be remitted by demand draft drawn in favour of the Dy.General Manager (BT) KLD Board Ltd., Koothattukulam payable at Muvattupuzha or through NEFT/RTGS. Bank details for account transfer are as follows.

Account Holder Name :	Dy. General Manager (AH)
Account Number :	57021212613
Name of the Bank :	State Bank Of India
Name of the Branch :	Muvattupuzha
IFSC Code :	SBIN0070151

For Courses at Kolahalamedu

The registration fee or tuition fee shall be remitted by demand draft drawn in favour of the Special officer payable at Vagamon or through NEFT/RTGS. Bank details for account transfer are as follows.

Account Holder Name :	Special Officer
Account Number :	67270325681
Name of the Bank :	State Bank Of India
Name of the Branch :	Vagamon
IFSC Code :	SBIN0070315

ROUTE MAP

The route maps for reaching the training centers may be seen in the last page. The various places at which the courses are conducted are marked.

TRAVEL PLAN

Mattupatty : Those traveling by may get down at aluva railway station. From aluva, a number of private buses are and government buses are plying to munnar which is 13 kms away from mattupatty.

Dhoni : Those traveling by train may get down at palakkkad railway station. Dhoni is 5kms away from the railway station.

Kulathupuzha: Those traveling by train may get down at kollam railway station. Kulathupuzha is 65 kms away from the station.

Koothattukulam : Those traveling by train may get down at aluva railway station. Kuthattukulam (Edayar is 60 kms away from the railway station. Nearest air port to kuthattukulam is kochi airport. Which is 39.7 kms away.

Kolahalamedu : Those traveling by train may get down at Kottayam railway station. Kolahalamedu 75kms away from the station.

APPLICATION

The application form annexed. The completed application should reach the training center, at the address given below, at least 30 days prior to the commencement of the respective courses.

MANGER (Trg),
Training centre, KLD board unit,
indo swiss project, Mattupatty, munnar, Kerala-india-685 616
Telephone : 04865 242201, Mobile number : 9446004283
Email : kldbtcmtpty@gmail.com, indoswisskldb@gmail.com

BSNL cellular network is available at the all the training centres. Only BSNL network is availble at Mattupatty. Separate application is not required when candidates are sponsored by Govt. department/semi government organaisations/Co-operative.

CURRICULA

1. MODERN TRENDS IN THE CRYOPRESERVATION OF BOVINE SEMEN

A course specially designed for those working in frozen semen laboratories and connected areas. The main emphasis of the course is on the advanced techniques in the deep freezing of bull and buffalo semen. Handling of frozen semen at the field levels is also dealt into in great detail.

Duration - 2weeks.

Eligibility - Graduation in Veterinary Science or it's equivalent.

Venue - Training Centre, Mattupatty

Syllabus	Theory (hrs)	Practical (hrs)
Management of breeding bull-Methods to maximise semen production	4	4
Clinical examination of bulls and laboratory examination of semen for reproductive disorders	3	5
Selection of bulls for seminal characteristics and sexual behaviour	2	2
Cryobiological aspects of sperm preservation(French system)	4	10
MIS for sperm production stations	2	2
Minimum standards for semen production, field handling of frozen semen and Cold chain management	6	6
Total	21	29
Library, Discussion/Seminar	1 day	
Study tour	1 day	

2. FROZEN SEMEN PRODUCTION AND IT'S HANDLING FOR OPTIMUM FERTILITY

This is a condensed course on Frozen Semen technology targeted towards Veterinarians managing frozen semen production, distribution and utilisation. The course covers the production, quality control (at different levels) distribution methods for a large scale AI programme and handling techniques of frozen semen, in detail

Duration - 10 days

Eligibility - Graduation in Veterinary Science or it's equivalent.

Venue - Training Centre, Mattupatty

Syllabus	Theory (hrs)	Practical (hrs)
Management of breeding bulls	4	4
Semen collection, ultra low temperature processing of semen, its storage and despatch	4	10
Quality assessment of semen & fertility	4	6
Distribution systems of frozen semen	2	6
Field handling of frozen semen and cold chain management	6	6
Total	20	32
Library, Discussion/Seminar	1 day	
Study tour	1 day	

3. BULL BREEDING SOUNDNESS EVALUATION

This is a course designed for Veterinarians working in semen stations and focuses mainly in the evaluation of bull with emphasis on practical training

Duration - 6 days

Eligibility - Graduation in Veterinary Science or it's equivalent.

Venue - Training Centre, Mattupatty

Syllabus	Theory (hrs)	Practical (hrs)
General Orientation	3	-
Breeding Soundness Evaluation	3	-
Physical/structural/Andrological Examination of bulls and evaluation of semen quality	3	3
Monitoring Sexual Ethology & Harvesting Semen	-	3
Semen Cryopreservation	-	6
Quality tests for Semen	-	3
Maximization of sperm output from Breeding Bulls	-	3
Total	9	18
Discussion/Seminar-	1 day	
Study tour	1 day	

4. FIELD PERFORMANCE RECORDING AND SIRE EVALUATION UNDER TROPICAL CONDITIONS

The course is meant for officers working in the area of bull selection for milk production, through progeny testing. The main emphasis is on testing of bulls under field conditions. Apart from animal breeding and biometrics in general, the practical application of progeny testing is covered in great detail. The facilities of Field performance recording areas and the bureau of animal breeding are available for the trainees.

Duration - 2 weeks

Eligibility - Graduation in Veterinary/Animal Science or Post graduation in animal breeding or its equivalent

Venue - Training Centre, Mattupatty/ Muvattupuzha

Syllabus	Theory (hrs)	Practical (hrs)
Breeding policy formulations and reviews	2	4
Breeding scheme	3	4
Genetic selection methods	4	6
Breeding operations and Management of information	2	4
- Selection procedure for female stock	4	4
- Bull selection system	4	6
- Progeny testing programme	4	8
- Production and rearing of bull calves	2	4
- Evaluation of breeding operations	2	4
- Case studies on breeding programme	2	3
Total	29	47
Discussion/Seminar-	1 day	
Study tour	2 days	

5. FERTILITY PROBLEMS IN FEMALE BOVINES

A course concerning the fertility problems of female bovines meant for Veterinarians. It exposes the trainees to animals with varying physiological conditions and pathological problems. A lot of opportunities are provided to examine cows (with or without specific problems) brought to infertility camps specially organised by the Training Centre.

Duration - 2 weeks

Eligibility - Graduation in Veterinary Science or its equivalent.

Venue - Training Centre, Mattupatty

Syllabus	Theory (hrs)	Practical (hrs)
Physiology of the female reproductive tract- development and functions- cyclic changes	2	4
Artificial insemination-detection of heat-handling of semen-A.I.using frozen semen	4	4
Sexual health control programmes Classification of fertility problems Morphological, Functional and Management problems with reference to actual situation in India	4	10
Role of nutrition on fertility	2	2
Infertility related to semen and its usage	2	2
Remedial measures to fertility problems	4	8
An introduction to embryo transfer techniques	2	4
Reproductive management, Infertility camps	4	6
Total	24	40
Discussion/Seminar-	1 day	
Study tour	1 day	

6. . TROPICAL PASTURE SEED PRODUCTION AND QUALITY CONTROL

A course with a strong practical base covering the techniques of tropical forage seed production and quality control. Special emphasis is given on seed testing with the aid of modern techniques in a well equipped laboratory.

Duration - 3 weeks

Eligibility - Graduation in Agricultural Science or its equivalent

Venue - Training Centre, Dhoni

Syllabus	Theory (hrs)	Practical (hrs)
Introduction to fodder development and seed testing procedures	4	-
Study of commercial seed production, seed identification, selection and handling, marketing, harvesting, cleaning, grading, drying, testing, transport and storage, pest control, seed multiplication	15	35
Field inspection of seed production areas	4	6
Economics of seed production	4	4
Total	27	45
Discussion/Seminar-	1 day	
Study tour	3 days	

7. FODDER PRODUCTION AND IT'S UTILISATION

The course is on the technical, economic and social components of forage production under tropical conditions involving lectures and practicals. The emphasis of the course is on the cultivation, management and conservation practices of fodder crops. 'Fodder under different agroclimatic conditions' exposes the trainees to various systems of forage production.

Duration - 3 weeks

Eligibility - Graduation in Agricultural Science, Veterinary Science, Dairy Science or its equivalent or post graduation in forage production.

Venue - Training Centre, Dhoni

Syllabus	Theory (hrs)	Practical (hrs)
Ecological classification of forage crops	1	-
Soil-its importance in agriculture - role of fodder crops in enhancing soil fertility and status	1	-
Cultivation practices and utilization of different fodder crop grown in tropical and sub-tropical agroclimatic condition	2	4
Operation of farm machinery - general principles	1	2
Pasture-its importance and classification of pasture-natural grass land and introduced pasture-management and utilization	2	4
Ley-establishment and management	2	8
Fodder production-utilization and preservation	3	4
Seed production in forage crops-seed testing, quality control and marketing	2	4
Relationship between cattle breeding and fodder promotion	1	-
Principles and economic feeding of different categories of livestock	1	2
Fodder extension programme-mixed cropping with fodder	2	6
Role of fodder crops in controlling soil erosion-agrostological measures of soil conservation strip cropping with grasses and legumes etc.	2	3
Total	20	37
Discussion/Seminar-	1 day	
Study tour	3 days	

8. BASIC COURSE IN ARTIFICIAL INSEMINATION

A course designed to equip persons to do Artificial Insemination in cattle and buffaloes. The main emphasis of the course is on accurate detection of heat in cattle and buffaloes, handling of frozen semen, correct technique of Artificial Insemination using frozen semen and pregnancy diagnosis. The course is highly practical oriented.

Duration	- 90 days (30+60)
Eligibility	- S.S.L.C or its equivalent.
Medium of instruction	- English
Venue	- Training Centre, Mattupatty/Dhoni/Kulathupuzha

Syllabus	Theory (hrs)	Practical (hrs)
Functional anatomy of male and female reproductive organs	4	8
Physiology of male and female reproductive organs	4	-
Oestrus	4	6
Physiological changes in female reproductive organs during oestrus cycle	4	6
Systematic rectal examination	6	10
Collection, dilution and preservation of bull semen	4	4
Handling of frozen semen	6	6
A.I. Practice	6	10
Pregnancy diagnosis	4	8
Reproductive management and pathology of female reproduction	4	6
Fertility measures-record keeping	2	-
Breed improvement and A.I.	2	-
Proper feeding for better fertility	2	2
Infertility conditions	4	4
A.I. and extension work	2	-
Total	58	70

60 days Practical Sessions with AI service provider

9. FIELD EMBRYO TRANSFER PROGRAMME

This is a course designed for field professionals in order to equip them for the preparation of donors for super ovulation, flushings and cryopreservation of embryos, recipient preparation and thawing and transfer of embryos

Duration	-	21 days
Eligibility	-	(1) Graduation in Veterinary Science or it's equivalent. (2) Minimum 3 years experiance in field A.I. programme
Venue	-	Training Centre, Mattupatty

Syllabus	Theory (hrs)	Practical (hrs)
Physiology of female reproduction and Principles of oestrous synchronisation	4	2
Selection of donors and recepients	2	4
Preparation of donors and recepients	4	12
Various media and their preparation	4	8
The principles and practice of embryo flushing methods	30	-
Embryo searching and handling	6	16
Embryo classification	4	16
Freezing and thawing of embryos	4	10
Transfer technique	4	15
Total	62	83
Discussion/Seminar-	1 day	
Study tour	1 day	

10. REFRESHER COURSE IN ARTIFICIAL INSEMINATION WITH FROZEN SEMEN

A course designed for Para Veterinarians and A.I. Technicians exposing them to the latest techniques in A.I. handling of frozen semen, physiology of female reproduction, reproductive management etc.

- Duration - 6 days
Eligibility - Para Veterinarians /A.I. Technicians
Venue - TC Mattupatty / Dhoni/ Kulathupuzha

Syllabus	Theory (hrs)	Practical (hrs)
Reproductive management of breedable female stock	2	-
Field handling of frozen semen	4	8
Techniques of A.I. with frozen semen	6	8
Monitoring sexual functions of cattle	4	6
Records and record keeping	2	2
Total	18	24

11. MANAGEMENT OF LARGE SCALE AI OPERATIONS

A course specially designed for those engaged in large scale AI operation activities. The main objective of the course is to support efforts of developmental agencies engaged in large scale AI the operations by sharing the experience and expertise gained in Kerala over the past five decades. The course covers, the planning and execution of large scale AI network in detail

- Duration - 14 days
Eligibility - Graduates in Veterinary/ Animal Production Sciences with at least 5 years experience in the field. (Middle level executives)
Venue - Training Centre, Mattupatty

Syllabus	Hours
Breeding Policy/Breeding Programmes in general /KLDB programme & its suitability to other situation (Theory)	2
Three tier AI organisation-Bull Mother farms/ bull production/ storage/dispatch/quality control of semen/reproductive management of male & female cattle/selection of bulls/ semen production/ cattle nutrition/fodder production and it's importance in economic milk production	10
Organization of Regional Semen Banks & Their functions/ LN management/semen distribution/Bull Rotation Program/Care and maintenance of LN containers/ Quality Assurance of AI consumables data collection storage & monitoring of AI operations/Laison with Customers	10
Agencies involved/location of AI centers/ Net working of Centers/Training of AI technicians in AI, handling AI equipments, handling of frozen semen, extension work etc./ farmers training	10
Evaluation of AI Programme/Data base, storage processing and retrieval methods/ Feed back of information to Production Stations and Semen Banks etc.	2
Cold Chain Management	3
Conditions favorable for AI/Socio-Economic conditions and benefits/Kerala Experience	3
Discussion/Seminar	one day
Study tour	one day

12. MANAGEMENT OF BREEDING OPERATIONS IN PIGS

This is a practical oriented programme meant for officers involved in managing Pig Breeding Farms/working in the areas of Pig breeding. The main areas of thrust in the programme are feeding, management and reproductive management of pigs (both male and female) semen collection and AI related operations, pregnancy diagnosis, activities related to farrowing, maintaining weaners and replacement stock, housing and waste management etc

- Duration - 14 days
- Eligibility - Graduation in Veterinary Science or it's equivalent
- Venue - Pig Breeding Centre, Koothattukulam

Syllabus	Theory (hrs)	Practical (hrs)
Genetics and Breeding in Pigs	2	
Management Activities in Pig Husbandry	3	6
Male & Female Reproductive systems	4	2
Heat detection	2	4
Care & Management of Boars	3	2
Semen collection and Evaluation	2	6
Semen Lab, AI and related activities	2	10
Pregnancy Diagnoses	2	3
Farrowing and related activities	2	4
Housing and Nutrition of Boars	3	2
Effluent treatment	1	2
Introduction to Farms MIS	1	-
Total	27	41
Discussion/Seminar	1 day	

13. DAIRY ENTREPRENEURSHIP

- Duration - 5 days
- Eligibility - Graduation in Veterinary Science or its equivalent.
- Venue - Training Centre - Mattupatty

Syllabus	Theory (hrs)	Practical (hrs)
Approach and vision to dairy industry Visit to organized dairy farms	3	-
Planning for sustainable dairy farming	3	-
Role of fodder cultivation in economic farming	-	2
Visit to successful private dairies	-	5
Record keeping and management information systems to be followed in dairy	3	-
General management practices of Dairy husbandry	-	2
Costing of dairy and production of value products	3	-
Discussion/Seminars	-	2
Total	12	14

14. GOAT MANAGEMENT AND ARTIFICIAL INSEMINATION IN GOATS

- Duration - 5 days
- Eligibility - Graduation in Veterinary Science or it's equivalent.
- Venue - Training Centre - Mattupatty/Dhoni

Syllabus	Theory (hrs)	Practical (hrs)
Importance of Goat Husbandry in rural economy	3	-
Visit to organized goat farms	-	2
Breeds of goats and their utilization in different agro climatic conditions and purposes	3	-
Selection, management and housing of goats in general	-	2
Feed and Fodder Management for Goats	3	-
Fodder Cultivation, and grazing management	-	2
Reproduction in Goats	-	3
A.I. Practice	-	2
Common Diseases, treatments and vaccinations	-	3
Common ailments and their remedies	-	2
Discussion/Seminar	-	2
Total	9	18

15. MINIMUM STANDARDS PROTOCOL FOR FROZEN SEMEN PRODUCTION

A course specially designed for Veterinary Officers working in frozen semen production stations. The main emphasis of the course is on the minimum standard protocols for frozen semen production, as approved by Government of India.

- Duration - 14 days.
Eligibility - Degree in Veterinary / Animal Sciences
Venue - Training Centre - Mattupatty

Syllabus	Theory (hrs)	Practical (hrs)
Broad outline of MSP	3	-
Bio security Measures in a breeding farms	3	3
Good laboratory practices	2	2
Standard Operating Procedures (SOP) for Bull Management	5	6
Standard Operating Procedures (SOP) and precautions for hygienic semen collection.	5	5
Standard Operating Procedures (SOP) for Semen processing, evaluation and freezing	5	8
Standard Operating Procedures (SOP) for frozen semen quality control measures	5	8
Total	28	32
Library/Discussion/Seminar	1 day	
Study Tour	1 day	

16. QUALITY CONTROL ASPECTS OF FROZEN SEMEN PRODUCTION

A course specially designed for Quality Control Officers working in the frozen semen production stations. The main emphasis of the course is to provide hands-on training for frozen semen quality control measures.

Duration - 10 days.

Eligibility - Degree in Veterinary / Animal Science

Venue - Training Centre - Mattupatty

Syllabus	Theory (hrs)	Practical (hrs)
Frozen semen quality control parameters	2	4
Motility Examinations	2	5
Assessment Sperm concentration in frozen semen	2	3
Percent Intact Acrosome	3	3
HOST	1	2
Sperm morphology	3	6
Study of Micro-organisms in frozen semen straw	3	5
Enumeration of living microorganisms in laboratory environment	1	4
Validation of Photometer	2	3
Andrological examination of bulls, optimum Management of bulls for clean semen production	2	2
Salient aspects of disease screening	2	-
Total	23	37
Library/Discussion/Seminar	1 day	
Study Tour	1 day	

17. ADVANCED TECHNIQUES IN CATTLE PRODUCTION

A course specially designed for Veterinary Officers working in the field of cattle production, frozen semen production stations and embryo transfer centres. The main emphasis of the course is on acquainting them with the modern trends in cattle production. .

Duration - 6 days.

Eligibility - Degree in Veterinary / Animal Science

Venue - Training Centre - Mattupatty

Syllabus	Theory (hrs)	Practical (hrs)
Cattle production techniques in the era of globalization	2	3
Genetic selection and improvement of animals	3	4
Modern trends in nutrition for better economic production and reproduction	2	-
Controlled breeding for better production Advances in reproductive management for better returns	2	3
Processing and deep freezing of bovine spermatozoa in an automated sperm station	3	6
Embryo transfer technology	3	6
Total	15	22
Library/Discussion/Seminar	1 day	

18. DAIRYING AND CLEAN MILK PRODUCTION

A course designed for dairy farmers to improve their overall knowledge and skill in dairy cattle rearing and clean milk production.

- Duration - 5 days.
Eligibility - Dairy Farmer
Venue - Training Centre Mattupatty/Dhoni.

Syllabus	Theory (hrs)	Practical (hrs)
Scope of dairy farming	1	-
Husbandry practices	2	5
Selection of animals	1	3
Clean milk production/Shed design	2	3
Fodder production	2	3
Milking & milk quality	1	1
Total	9	15
Library/Discussion/Seminar	1 day	

19. ARTIFICIAL INSEMINATION IN GOATS

A course designed to equip field Veterinarians and AI Technicians to do artificial Insemination in goats. The main emphasis of the course is on accurate detection of heat in goats, handling of frozen semen and correct technique of artificial insemination using frozen semen.

- Duration - 2 days.
Eligibility - Field Veterinarian /AI Technician
Venue - Training Centre Dhoni.

Syllabus	Theory (hrs)	Practical (hrs)
Importance of goat husbandry in rural economy	1	-
Reproduction in goats	1	1
Heat detection in goats	1	2
AI practices	2	4
Total	5	7

20. ADVANCED BASIC COURSE IN ARTIFICIAL INSEMINATION

A course designed to equip persons to do Artificial Insemination in cattle and buffaloes. The main emphasis of the course is on accurate detection of heat in cattle and buffaloes, handling of frozen semen, correct technique of artificial Insemination using frozen semen pregnancy diagnosis. The course also includes practical training in the field with the AI service provider Institutions for 75 days.

Duration - 120 day [45+75 (practical)].

Eligibility - SSLC or Equivalent

Venue - Mattupatty/Dhoni.

Syllabus	Theory (hrs)	Practical (hrs)
Functional anatomy of male and female reproductive organs	4	8
Physiology of male and female reproductive organs	4	-
Oestrus	4	6
Physiological changes in female reproductive organs during oestrus cycle	4	6
Systematic rectal examination	6	10
Collection, dilution and preservation of bull semen	4	4
Handling of frozen semen	6	6
A.I. Practice	6	10
Pregnancy diagnosis	4	8
Reproductive management and pathology of female reproduction	4	6
Fertility measures-record keeping	2	-
Breed improvement and A.I.	2	-
Proper feeding for better fertility	2	2

Infertility Conditions	4	4
A.I. and extension work	2	-
Breeds of cattle and buffaloes -Production and reproductive parameters	-	2
Conservation of indigenous breeds	2	-
Breeding policy of the state	2	-
Care and management of new born calves, heifers, dry pregnant animal, calving etc.	3	2
Housing of animals	2	-
Fodder Production	2	-
Record keeping and use information technology in AI	2	
Case study	2	-
Total	73	77
Study Visits	1 day	

BACKGROUND INFORMATION OF THE TRAINING CENTRES OF KLDBOARD

Indo-Swiss Project, the fore-runner of "Kerala Livestock Development Board" under which the training centre is functioning, started in the year 1963 at Mattupatty as a joint venture by the Government of India and Swiss Confederation

The basic objectives:-

To evolve a new breed of cattle suitable for Kerala conditions through scientific crossbreeding.

To promote fodder production under field conditions in support of economic production.

To organise technical training courses for the systematic development of manpower for animal husbandry and dairy development.

The Project has been fully integrated with the Kerala Livestock Development Board with effect from 1.5.1976

A new breed of cattle "Sunandini" had been evolved with a combination of indigenous cattle with exotic donor breeds like Jersey, Brown Swiss and Holstein Friesian, limiting the exotic inheritance to 50%. The programme was first launched in the cattle breeding research centre at Mattupatty and later extended throughout Kerala in a phased manner with a view to enhance milk production. The resultant picture is that Kerala is having the pride of place in cross breeding activities in India, with the unique distinction of providing A.I. facilities with frozen semen to the entire breedable population available in the state, together with the privileged position of developing the best suited forage crops and the best crossbred bulls.

Frozen semen technology was introduced by the Project in 1965, for the first time in India for large scale application under the tropical conditions. During that year, the total production was 500 doses. The Board now has an annual production capacity of 3.5 million doses.

The field A.I. programme using deep frozen semen, which started in the year 1967-68 with an annual total A.I. of 3300, has grown to 1.44 million during 2017-2018. Being the first frozen semen production station in India, several organisations from different parts of the country, desirous of introducing frozen semen technology, sent their selected candidate to Mattupatty for informal training. This encouraged the project to start a full fledged training centre which could then handle various subjects related to cattle breeding. All the three sperm stations have both ISO 9001-2015 and HACCP certifications and are graded "A" by the CMU, G. O.I.

The KLD Board has screened, identified and multiplied improved species of both grasses and legumes for promoting fodder cultivation within the state and outside. The production and sale of perennial fodder seeds has grown from 800kg. in the year 1976-77 to about 68 metric tons in the year 2017-2018. The seed thus produced and supplied is subjected to strict quality control at our central seed testing laboratory situated at Dhoni.

The Board is now maintaining 5 breeding farms at Mattupatty, Kulathupuzha, Dhoni, Kolahalamedu and Puthur with a herd strength of more than 1200 heads of cattle. The Board has recently established high-tech dairy farms at Mattupetty, Kulathupuzha, Kolahalamedu. In order to provide an uninterrupted supply of frozen semen and liquid Nitrogen (LN) to all the A.I. centres functioning in the State, 7 Regional Semen Banks were established.

The Board started its embryo transfer work on experimental scale by 1990-91 at Mattupatty and now the technique is used for production of breeding bulls. A cattle breeding and progeny testing co-ordination centre was established at Muvattupuzha for monitoring the cattle breeding programmes of the State in collaboration with the sister establishments.



KLD BOARD INSTITUTIONS

Head: Managing Director

Sl	Address	Designation	Phone	E-mail
1	KLD Board, HO., Gokulam, Pattom Thiruvananthapuram Pin-695 004	Managing Director	9446004275	kldboard8@gmail.com
2	KLD Board, HO., Gokulam, Pattom Thiruvananthapuram Pin-695 004	General Manager	9446004276	kldboard8@gmail.com
3	KLD Board, Training Centre Mattupatty, Munnar- 685616	Manager (Trg)	9446004283	kldbtcempty@gmail.com
4	KLD Board, Mattupatty, Munnar, Kerala- 685616	Manager (AH)	9446004281	indoswisskldb@gmail.com
5	KLD Board, Seed Farm & Training Centre Palakkad - 678009	Co-ordinator	9446004285	kldbseed@gmail.com
6	KLD Board, Bull Station Dhoni, Palakkad-678009	Manager (AH)	9446004295	kldb dhoni@gmail.com
7	KLD Board, Kulathupuzha Farm, Quilon Dist. - 691 310	Manager (AH)	9446004282	kldbkpza@rediffmail.com
8	Cattle Breeding Co-ordination Centre, KLD Board, Mudavoor (PO) Muvattupuzha - 686 669	Deputy Genral Manager (AH)	9446004280	kldbmvpa@gmail.com
9	KLD Board, Progeny Testing Scheme, Mudavoor Muvattupuzha - 686 669	Manager (PT)	9446004368	kldbpt@gmail.com
10	KLD Board, Regional Semen Bank Muvattupuzha - 686 669	Asst. Manager (AH)	9446004298	rsdmuvattupuzha@gmail.com
11	KLD Board, Regional Semen Bank, Mavelikara - 690 102	Asst. Manager (AH)	9446004300	rsdmavelikara@gmail.com

KLD BOARD INSTITUTIONS

Head: Managing Director

Sl	Address	Designation	Phone	E-mail
12	KLD Board, Regional Semen Bank, Kannur - 670 562.	Asst. Manager(AH)	9446004303	rsbkannurkldb@gmail.com
13	KLD Board, Regional Semen Bank, Puduppady - 680 673	Asst. Manager(AH)	9446004304	rsbputhupady@gmail.com
14	KLD Board, Regional Semen Bank, Chalakudy - 680 307	Asst. Manager(AH)	9446004299	chalakudyrsb@gmail.com
15	KLD Board, Livestock Farm, Puthur, Trichur.	Manager (AH)	0487-2316467	managerahk@gmail.com
16	KLD Board, Regional Semen Bank, Dhoni, Palakkad - 678 009	Asst. Manager(AH)	9446004302	kldb dhoni@gmail.com
17	KLD Board, Regional Semen Bank, Kulathupuzha	Asst. Manager(AH)	9446004301	rsbkpza@gmail.com
18	KLD Board, Centre for Applied Livestock Genomics, Kudappanakunnu, Trivandrum - 695043	Deputy Manager (AH)	0471-2733545	kldbcalg@gmail.com
19	KLD Board Livestock Farm, Kolahlamedu, Peerumedu, Idukki	Manager (FD)	9446004284	kldbklamu@gmail.com

KLDB Training Centres - Location Map

■ TRAINING CENTRES

- Mattupetty** - (Heritage) 1700 mtr (150 km from Kochi)
Nearest Airport - Kochi International
Nearest Railway station - Aluva
- Dhoni** - Plains/160 km from Kochi or 45 km from coimbatore
Nearest Airport - coimbatore International airport
Nearest Railway station - Palakkad
- Kulathupuzha** - (Highrange) 65 km from kollam
Nearest Airport - Thiruvananthapuram International
Nearest Railway station - Kollam
- Koothottu Kulam** - Plains/60 km from Kochi
Nearest Airport - Kochi International
Nearest Railway station - Aluva
- Kolahalamedu (High range)** -
Nearest Railway station - Kottayam
75 Km From kottayam



KERALA LIVESTOCK DEVELOPMENT BOARD RELENTLESS PURSUIT OF EXCELLENCE



KERALA LIVESTOCK DEVELOPMENT BOARD

(GOVT OF KERALA UNDERTAKING)

“GOKULAM” PATTOM, 695004, 0471-2440920,

e-mail: kldboard8gmail.com, website : www.livestock.kerala.gov.in

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