The Kerala Livestock Development Board Ltd. was established in the year 1976. The development of the livestock sector has proved to be very important, as it is the major livelihood of over a million households. Established with the sole aim of evolving a new breed of cattle suitable for the state, the KLDB has now come a long way bringing in new technology and prosperity to this sector. The several bull stations, semen banks, breeding centers for pigs, goat and cattle, progeny testing units, training centers and a number of other centers show the progress that it has made in its three decades of existence.

A Brief History

The transformation from Indo Swiss Project Kerala (ISPK) to Kerala Livestock Development Board Ltd.

The Indo Swiss Project Kerala (ISPK) was constituted under a bilateral agreement between the Government of India and the Swiss Confederation in 1963 with the aim of evolving a new breed of cattle adapted to the local environment. To ensure continuity and to strengthen the organization for further expansion, the Project was converted into a Government Department named Indo Swiss Project Department.

By mid 1970s, the Government of Kerala decided to constitute an autonomous body named the Kerala Livestock Development and Milk Marketing Board (KLD & MMB) under the Companies Act 1956, integrating the production, procurement, processing and marketing of milk under one umbrella.

The commercial units of the Board namely chilling plants, dairy plants and cattle feed plants were transferred to the Kerala cooperative Milk Marketing Federation (KCMMF) when it was registered under the Kerala Cooperative Societies Act in 1983. The remaining activities (cattle

breeding, frozen semen production and distribution, fodder development, training etc.) continued with the Board.

In 1990 a pricing mechanism for the Board's products like frozen semen and fodder seeds was introduced. A new staff structure together with staff rules was also introduced. Intensive manpower development programmes and infrastructure development activities were taken up. The Kerala Livestock Development Board Ltd. thus developed into a full fledged company and has not looked back thenceforth.

Objectives

- To provide inputs required for cattle breeding in line with the breeding policy of the State
- To promote fodder production under field condition in support of economic milk production
- To offer training courses in animal husbandry and fodder production.
- To develop Malabari goats through the production and supply of selected breeding stock.
- To produce and supply good quality piglets for breeding and fattening.

Responsibilities

The activities of the Board are carried out by the two technical wings viz :Animal Husbandry and Fodder Development.

The major responsibilities of the Animal Husbandry wing are:

- Management of around 750 heads cattle in 3 cattle breeding farms.
- Production of 80 crossbred young bulls annually through a systematically laid out nominated mating of the elite cows with proven bulls.

- Procurement of about 80 superior male calves, born to elite cows mated with proven bulls from the farmer's herd in the milk recorded area.

- Selection and management of about 160 breeding bulls.
- Management of about 20 pedigreed Murrah buffalo bulls for semen production.
- Production of about 3.0 million doses of frozen semen annually.
- Quality control of frozen semen.
- Applied research on cattle breeding and frozen semen technology.
- Implementation of the breeding policy of the state aimed at the creation of a new breed of cattle, by way of supplying frozen semen of suitable genetic makeup under a definite bull rotation programme.
- Supply of about 1.5 million doses of frozen semen (cattle and buffalo) to over 2900 AI ce ntres
spread across the state through the 7 Regional Semen Banks.

- Sale of around 1 million doses of frozen semen outside the State.
- Production / procurement and supply of 0.5 million litres of liquid nitrogen (LN) annually to over 2900 AI centers for storage and preservation of semen.

- Study on the production and reproduction parameters of about 3000 Sunandini cows in the field every year through an established field performance recording system.

- Evaluation and selection of young Sunandini bulls through the progeny testing scheme.
- Training in various fields of livestock production.
- Liaison with the Department of Animal Husbandry for the successful implementation of the breeding programme of the state.
- Application of the Embryo transfer technique in the bull production programme.
- Management of a herd of about 200 Malabari and 100 Boer goats & supplying high quality breeding stock to the farmers .Building up of breeding stock required for the production of about 10000 piglets to be supplied to the farmers.

The Fodder Development Wing of the Board is responsible for :

- Fodder production in the Board farms as per requirements
- Conduct of trials for the selection of suitable varieties of grasses, legumes and fodder trees.
- Management trials with selected fodder varieties.
- Production of foundation seeds from the selected fodder varieties in the Board farms and seed multiplication in the field through registered seed growers
- Procurement, testing, quality control, processing, storage of fodder seeds and formulation of seed mixtures for different requirements.
- Marketing of seeds and fodder slips through various developmental agencies.

- Promotion of fodder and fodder seeds, demonstration of the package of practices, follow up and feed back.
- Liaison with other agencies of the State in the field of fodder development.
- Training in various fields of fodder production.

Achievements

The Board has emerged as a model organisation in designing and implementation of a planned breeding programme under tropical conditions. The Sunandini breed was evolved from a foundation stock of zebu and taurus cattle through systematic selection. Today, the Board has grown as the largest frozen semen producer in the country. The field AI programme using deep frozen semen, which started in a modest way during 1967-68 was expanded in a phased manner, and by the end of March 2004, the Board was supplying frozen semen to 2971 AI centres covering the entire state. Accurate sire selection methods like progeny testing were employed by the Board from as early as 1977. MOET is being used in the bull production programme of the Board since 1992, complementary to the existing selection programme. The goat unit, started on an experimental basis during the year 1990 at Kulathupuzha was later transferred to Dhoni and further expanded. Boer goats imported from Australia were added to the existing Malabari stock during 2001-02. Freezing of buck semen is successfully done and frozen semen AI applied in the goat breeding centre. Limited quantities of frozen semen doses are also available for sale.

A pig breeding centre has been established by the Board at Puthur in Thrissur district for supplying breeding stock to the satellite breeding units and quality piglets for finishing farms.

In the field of fodder development, the Board has identified and multiplied improved species of grasses and legumes for popularising fodder cultivation. The production of perennial forage seeds by certified seed growers increased from 0.8 MT. in

the year 1976-77 to about 12.98 MT during 2003-04. The seed produced is being subjected to strict quality control before marketing.

The technological developments in the field of livestock production and fodder development could be conveyed to the implementing agencies, viz., the state departments and other semi governmental organisations, through training programmes in various related disciplines. The livestock development programme being carried out by the Board has attracted the attention of many states and there has been a continuous flow of trainees to the training courses organised by the Board from within and outside of the country.

The Board is one of the four approved testing stations for AI equipments and consumables in India. Major achievements of the Board during 2003-2004

No of animals maintained – Cattle	670
No of animals maintained – Buffaloes	11
Malabari goats maintained	224
Boer goats maintained	132
Boer x Malabari goats maintained	84
Pigs maintained	2845
Frozen Semen produced (doses)	2449395
Frozen Semen sold in Kerala (doses)	1501811
Frozen Semen sold outside Kerala (doses)	1448391
Premium Bull Frozen Semen sold (doses)	6045
Malabari goats sold to the farmers	148
Boer goats sold (outside the state)	31
AI centres supplied with Frozen Semen and Liquid Nitrogen (W	2071
AI centres supplied with Premium Bull Semen	88
Fodder Seeds produced/processed (MT)	12.98
Fodder Seeds sold (MT)	15.65
Embryos collected	38
Cows enrolled under milk recording in the Progeny Testing areas	2684
Male calves purchased from the field	54
Piglets produced	8508
Piglets sold	6182

Administration

The Board of Directors is delegated with the overall powers for running the organisation. However, Government approval is obtained wherever necessary. The Managing Director, the Chief Executive of the Board, is vested with both administrative and financial powers. He is assisted by both administrative and technical staff at the
head quarters
. All the units under the Board are directly responsible to the Managing Director.

The Managing Director is assisted by the heads of the various divisions. The Unit Heads of the board are given powers to run the activities of the units in accordance with the targets fixed and budget allotted.

The Board of Directors during the year 2003-04

Chairman Sri . Subratha Biswas

**Agricultural Production Commissioner & Principal Secretary
Dept. of AH & DD Govt. of Kerala**

Directors Dr.K.G Suma

**Director of Animal Husbandry i /c),
Vikas Bhavan, Thiruvananthapuram**

Shri. P.K. Pathak. IFS

**Managing Director, KCMMF Ltd.,
Pattom, Thiruvananthapuram**

Shri. ChandraDas

**Additional Secretary
Finance Department , Govt. of Kerala
Thiruvananthapuram**

Sri. K.T Sarojini

Director of Dairy Development
Pattom, Thiruvananthapuram

Sri. Dr. R. Vijayakumar
Managing Director, Kerala Feeds Ltd.
Kallettumkara , Thrissur

Sri. K.B. Sankaran

Director, State Institute of Rural Development

SIRD, ETC P.O., Kottarakkara

Kollam Dist – 691531

Dr. Maya Devi. K.S

AGM NABARD

NABARD, Kerala Regional Office, PB-5613

Punnen Road, Thiruvananthapuram-695039

Dr. G . K . Sharma

General Manager (Animal Health)

National Dairy Development Board

Anand 388001

Dr. Anil . K . S

Associate professor & Head University Livestock Farm

Kerala Veterinary& Animal Sciences University

MannuthyP . O., Thrissur – 680651

Dr. Ani . S. Das

Managing Director,
KeralaFeeds

Dr.Jose James

Managing Director
KLDBoard,Pattom

Manpower

During 2003-04, the Board had a total personnel strength of 399.

Category	Employee strength
Senior Executives	16
Junior Executives	49
Staff Category	79
Permanent Workers	255
Total	39

Though there has been a considerable expansion in the activities of the Board over the past decade, there has not been any increase in the strength of the employees.

Improvement of efficiency through better employer-employee relations and providing of better facilities to the employees can be cited as major reasons for the increased output.

Research & Development

- Applied research on all aspects of cattle breeding, frozen semen and fodder production is being carried out. The following are the major fields in which trials are undertaken.
- Selection of cows according to individual performance on production, reproduction and growth.
- Selection of bulls based on the various aspects of semen production.
- Studies on the reproductive performance of Sunandini bulls
- Dilution methods for semen processing in cattle, buffaloes, bucks and boars.
- Field studies on the productive and reproductive performance of Sunandini cows.
- Setting up of effective models for sire evaluation under field conditions.
- Studies on the computation of lactation yields from part lactation records.
- Studies on the genetic gain through breeding and selection.
- Embryo technology for genetic improvement.

- Developing methodology for freezing of buck and boar semen
- Crossbreeding trials on the performance of Malabari x Boer crosses
- Effect of sperm concentration on fertility using frozen semen
- Studies on efficacy of "Hypo Osmotic Swell Test" as an indicator of fertility in Sunandini bulls
- Studies on the selection of suitable fodder varieties for different agroclimatic conditions.
- Studies on fodder seed production.
- Quality control systems for fodder seeds.
- Different management practices for fodder production in Kerala.