WELCOME

PRESENTATION ON TOTAL ENERGY MANAGEMENT

CATTLE FEED PLANT
MALAMPUZHA

GENERAL INFORMATION

- Started in the year 1970 by A H DEPARTMENT
- Capacity 60MT/Day at the time of inception
- Factory handed over to KCMMF LTD in the year 1983
- In 1989 capacity enhanced to 100Mts/day mash
- In 1996 capacity again enhanced to 200Mts/day mash
- In 2006 capacity again enhanced from 200Mts/day mash feed to 300Mts/day pellet feed.

Cattle Feed Plant, Malampuzha

Plant Capacity : 300 MT/day Pellet.

No. of shifts in operation : 3

Staff Strength :

Total permanent staff : 100

Staff on contract : 29

Temporary Workers : 55

Storage :Raw Material : 2500 MT

Finished Feed : 500 MT

Grain Silo : 1200 MT

Molasses : 2000

PRODUCTS

- CATTLE FEED MASH
- CATTLE FEED PELLET(Different Category)
- MILMA MIN (FEED SUPLIMENT)

PRESENT PRODUCTION

- Presently we are producing pellet feed(300Mts/day) in our new PLC based fully automated plant with CMMT technology
- Milma Min 4Mts/day

Performance during last 3years

	06-07	07-08	08-09
Production :	51,643	56,294	47,295
Sales :	51,420	56,302	47,325

(Qty in MT)

Performance during09-10

09-10

Production : 53,640

Sales : 53,591

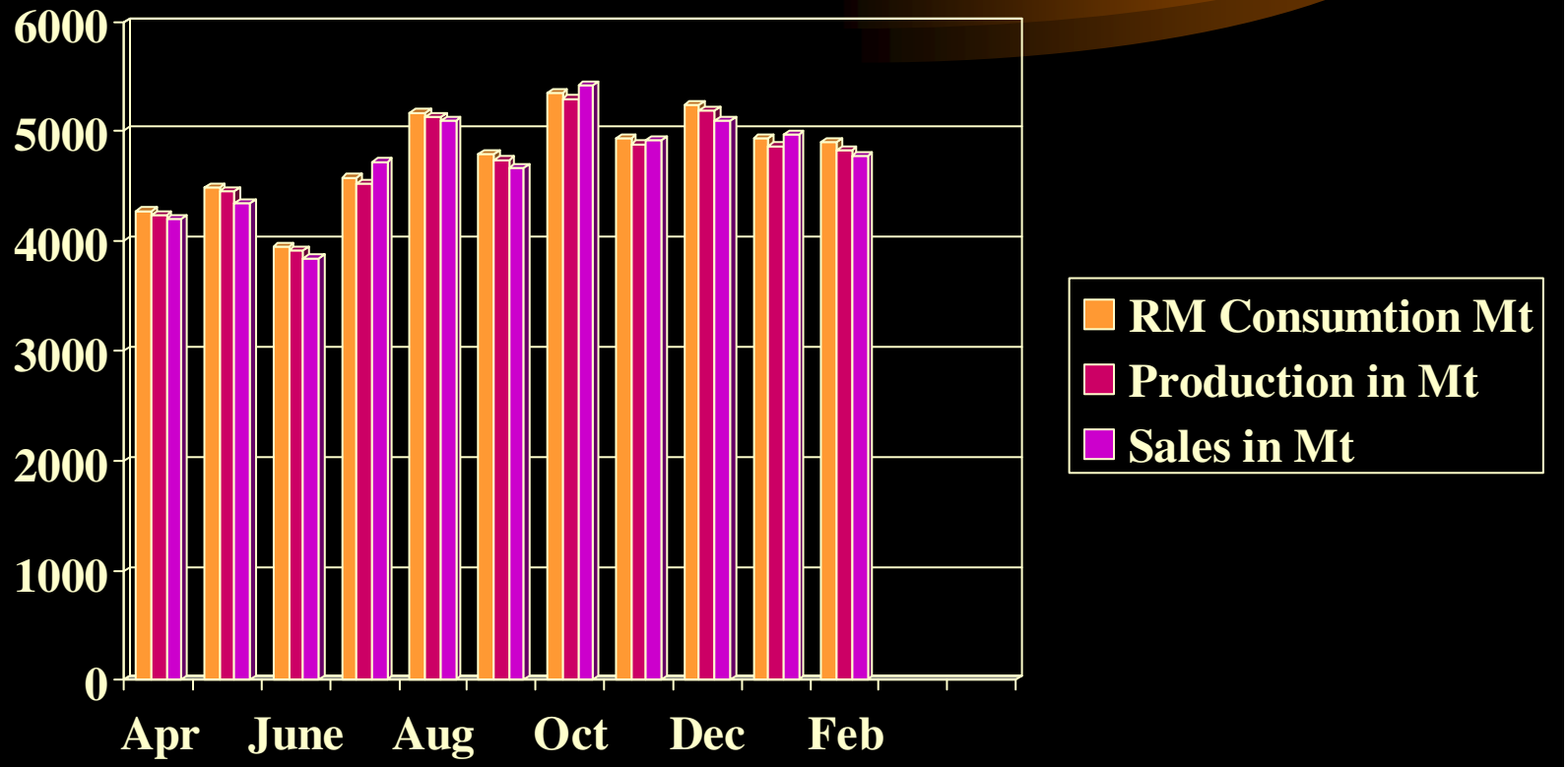
(Qty in MT)

Profit/Loss during09-10

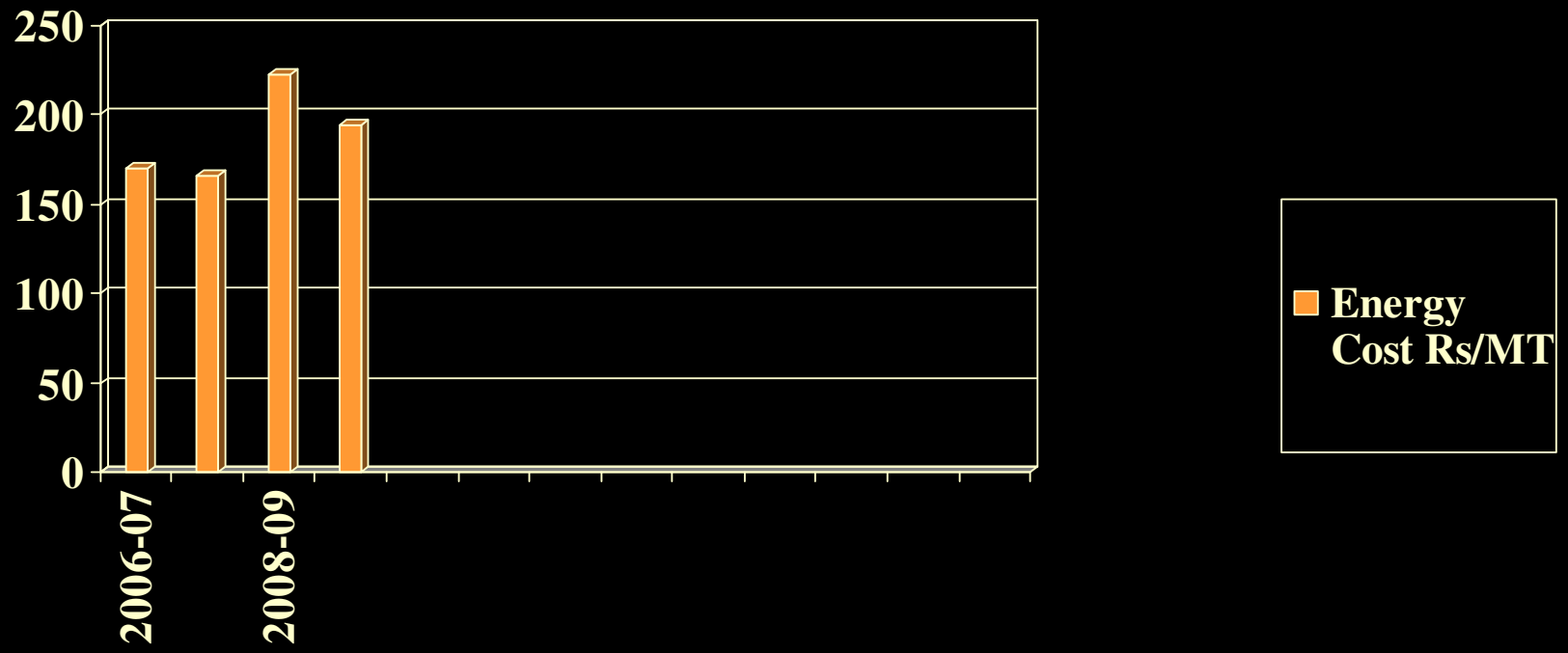
Month	Prof/Loss Lakhs		
April	29.95	Oct	6.43
May	30.37	Nov	8.26
June	10.39	Dec	3.55
July	-0.69	Jan	
Aug	-13.94	Feb	
Sept	-13.31	Mar	

The Cumulative profit during the year is Rs 61.01 Lakhs

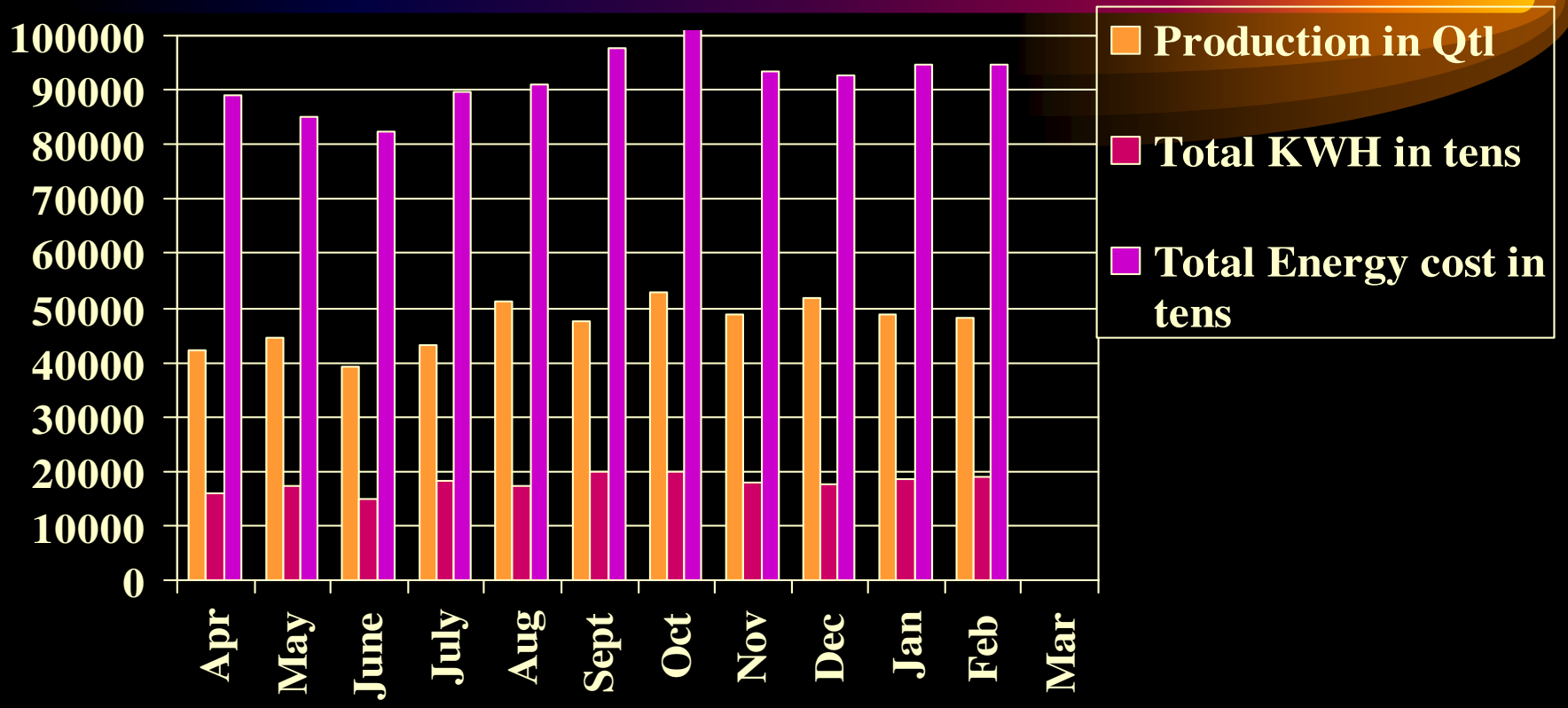
Analysis of Data
Raw Material Consumption,Production and Sales
2010



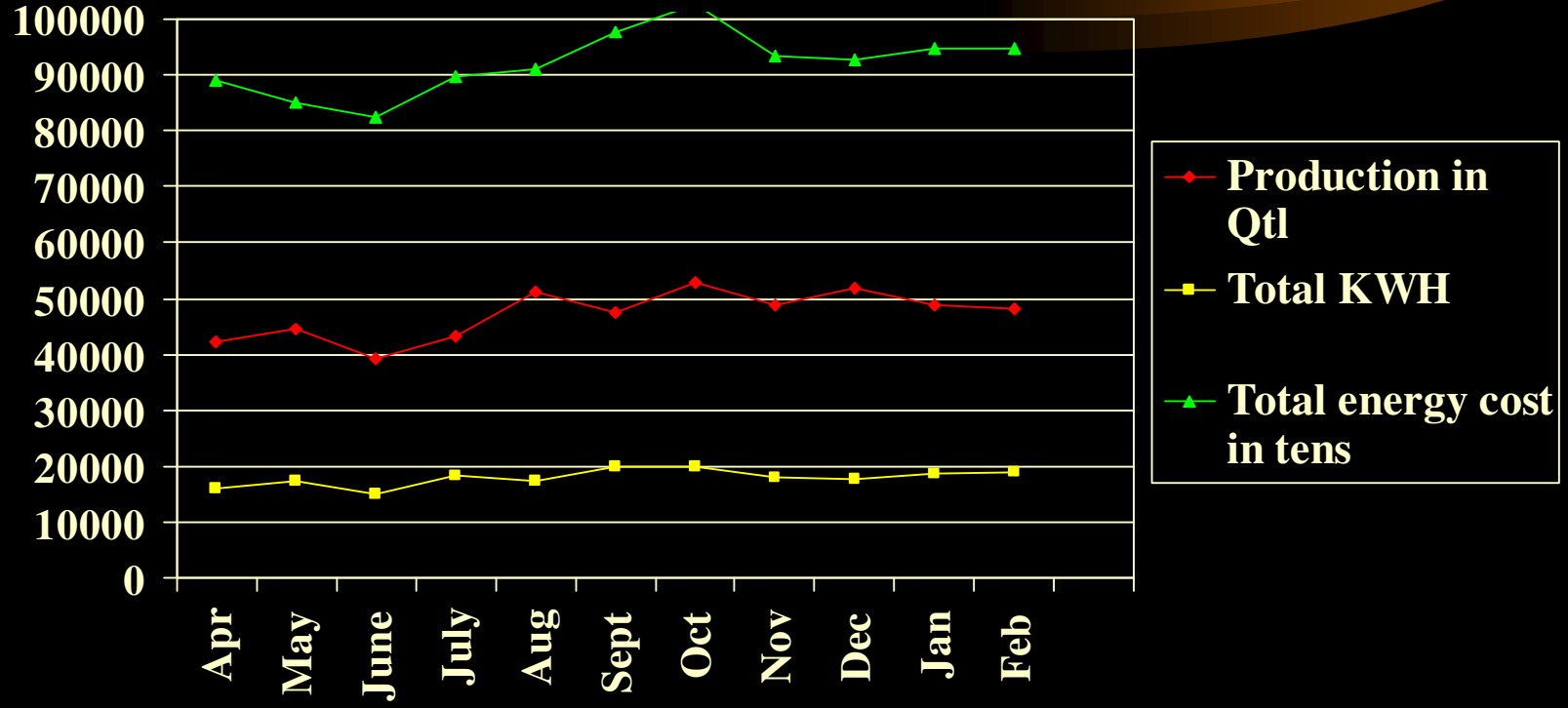
Analysis of Data Energy Cost per MT Year wise



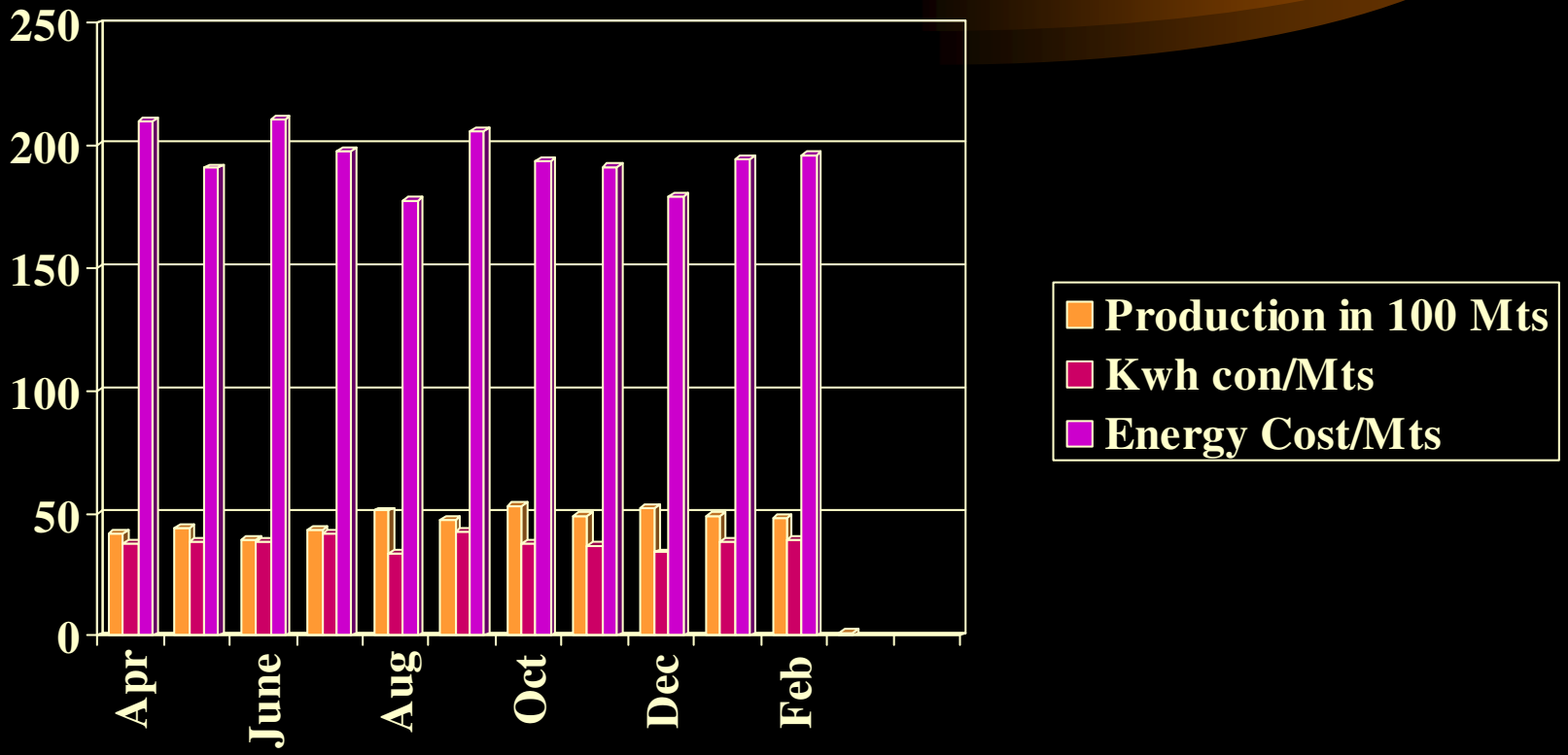
Analysis Data of Energy Consumption



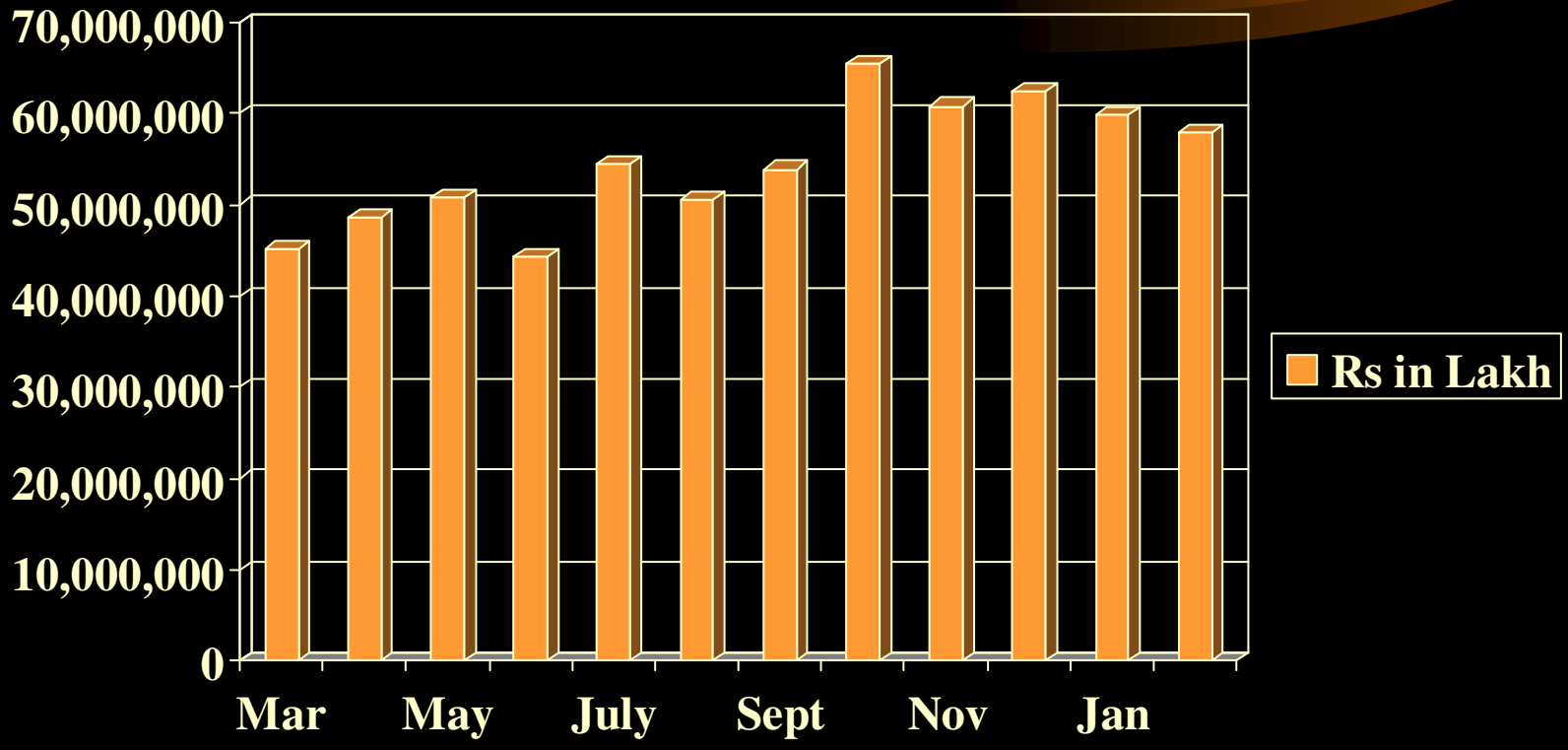
Analysis Data of Energy Consumption



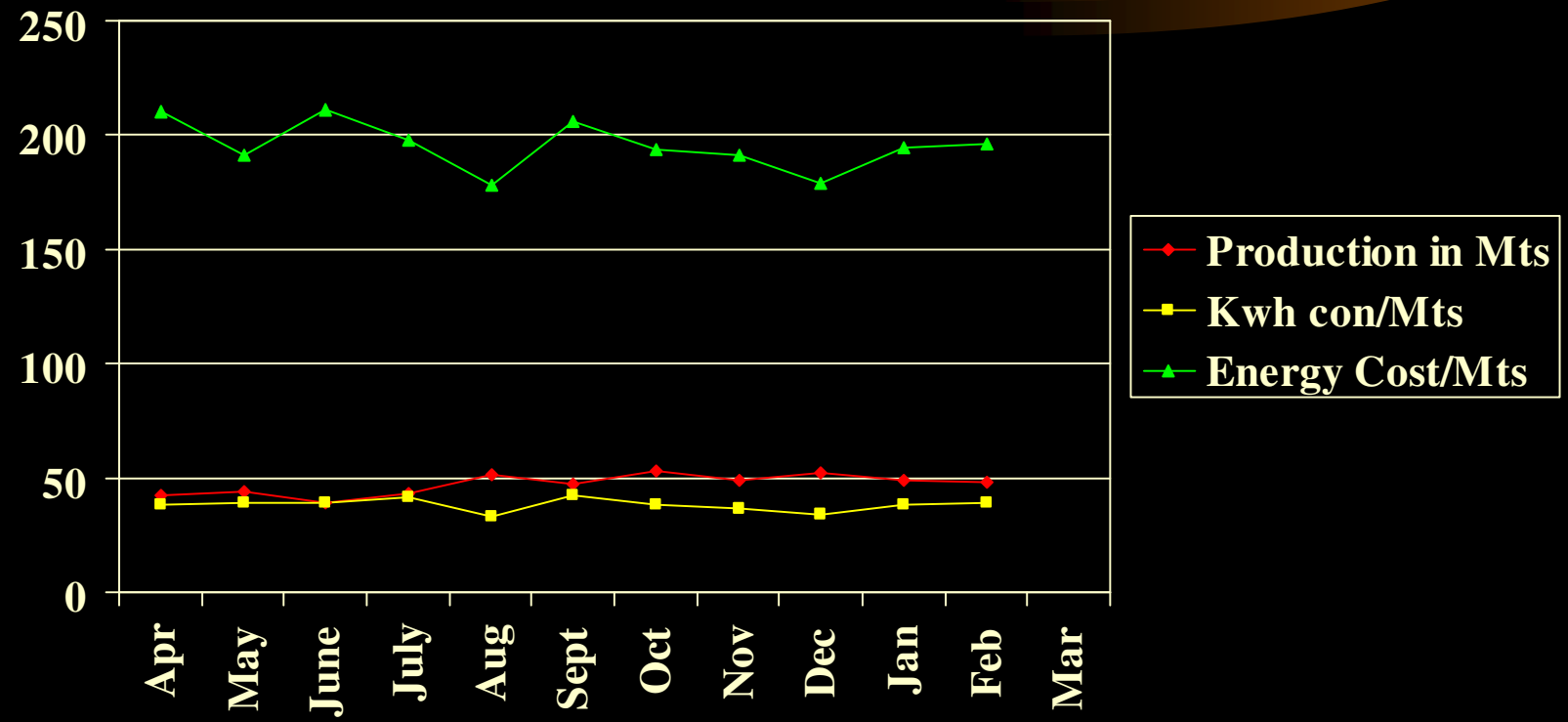
Analysis Data of Energy Cost



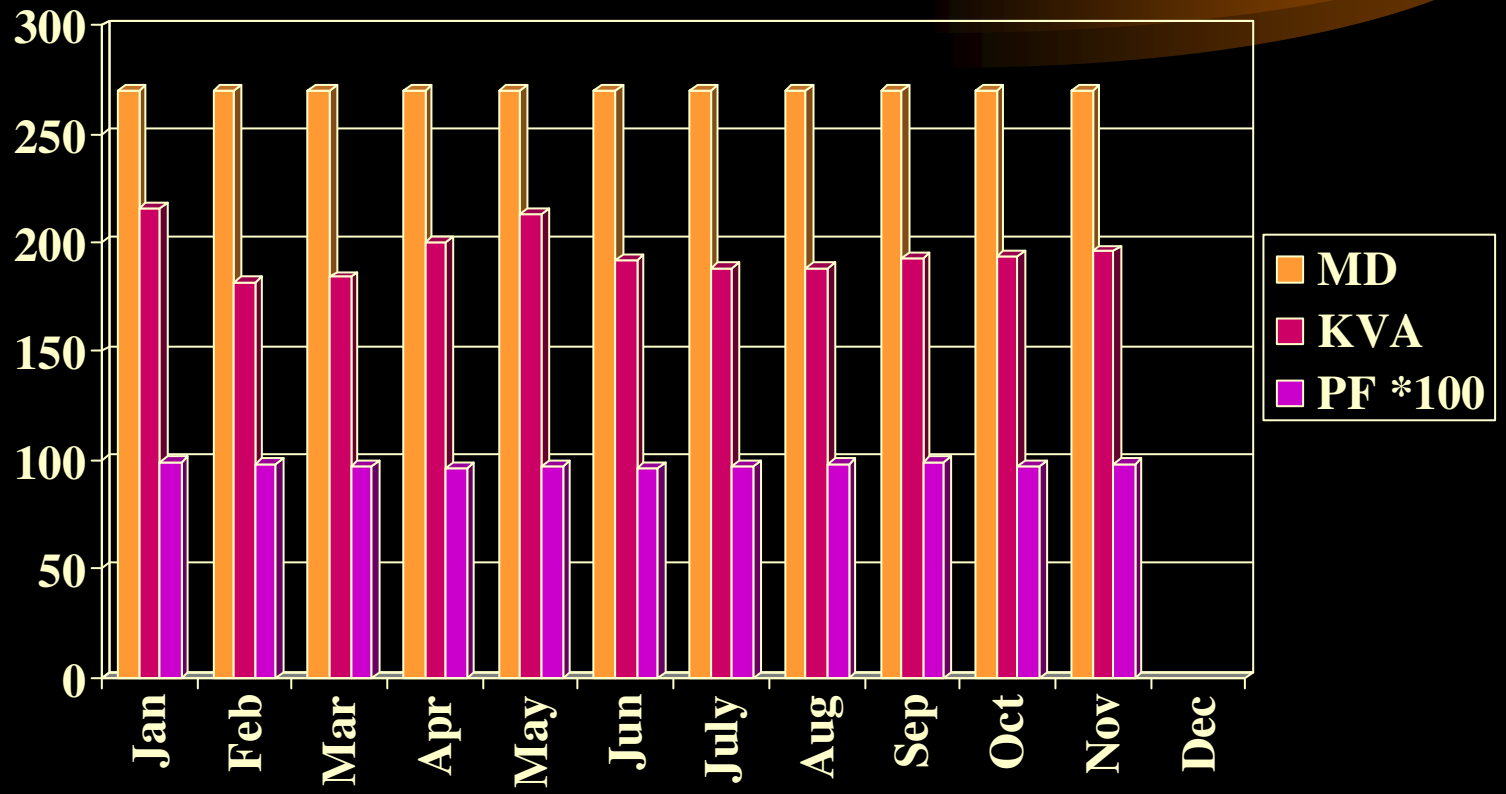
Monthly Sales Turn Over 09-10



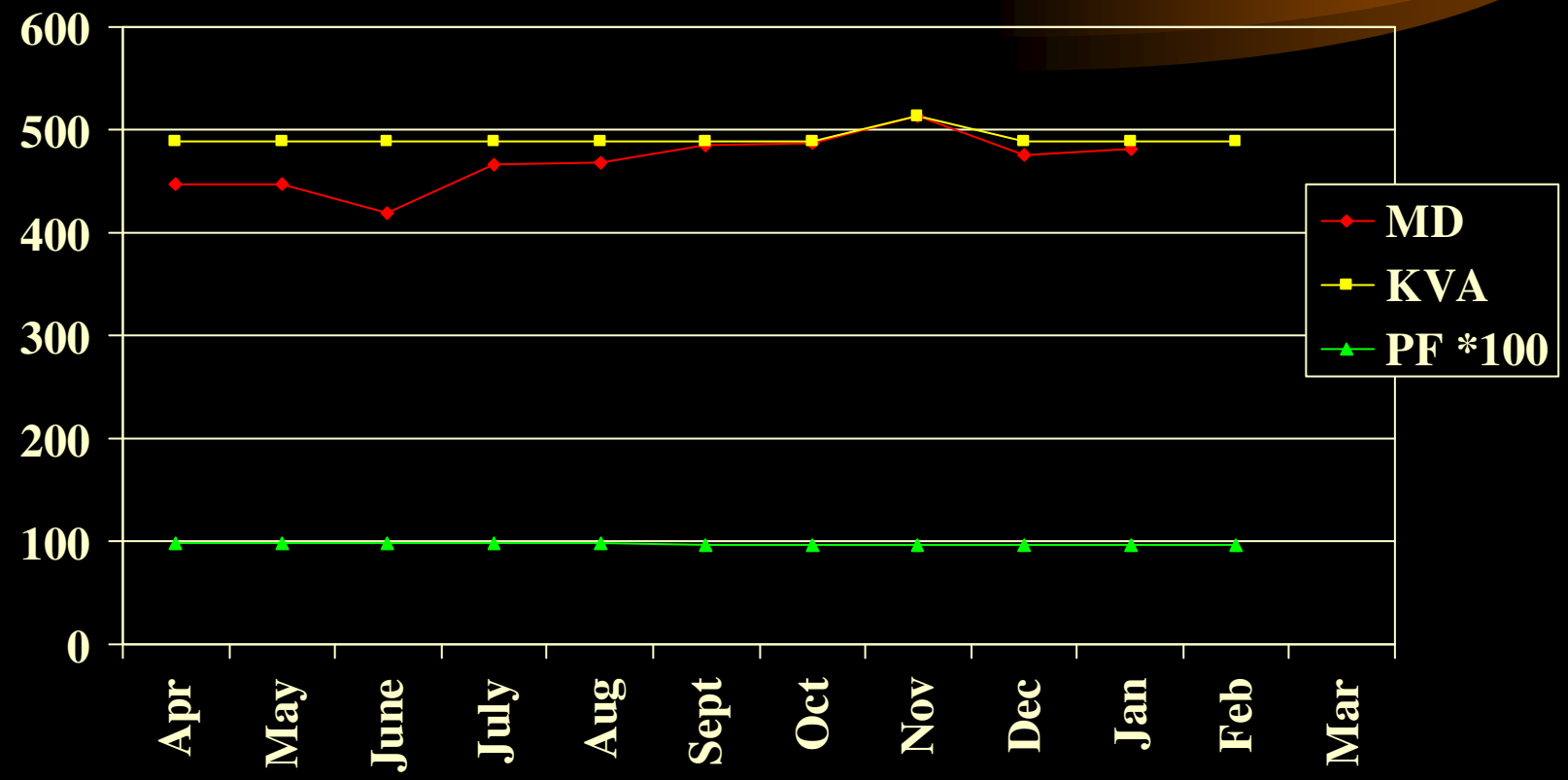
Analysis Data of Energy Cost



Analysis Data of Maximum Demand and Power Factor



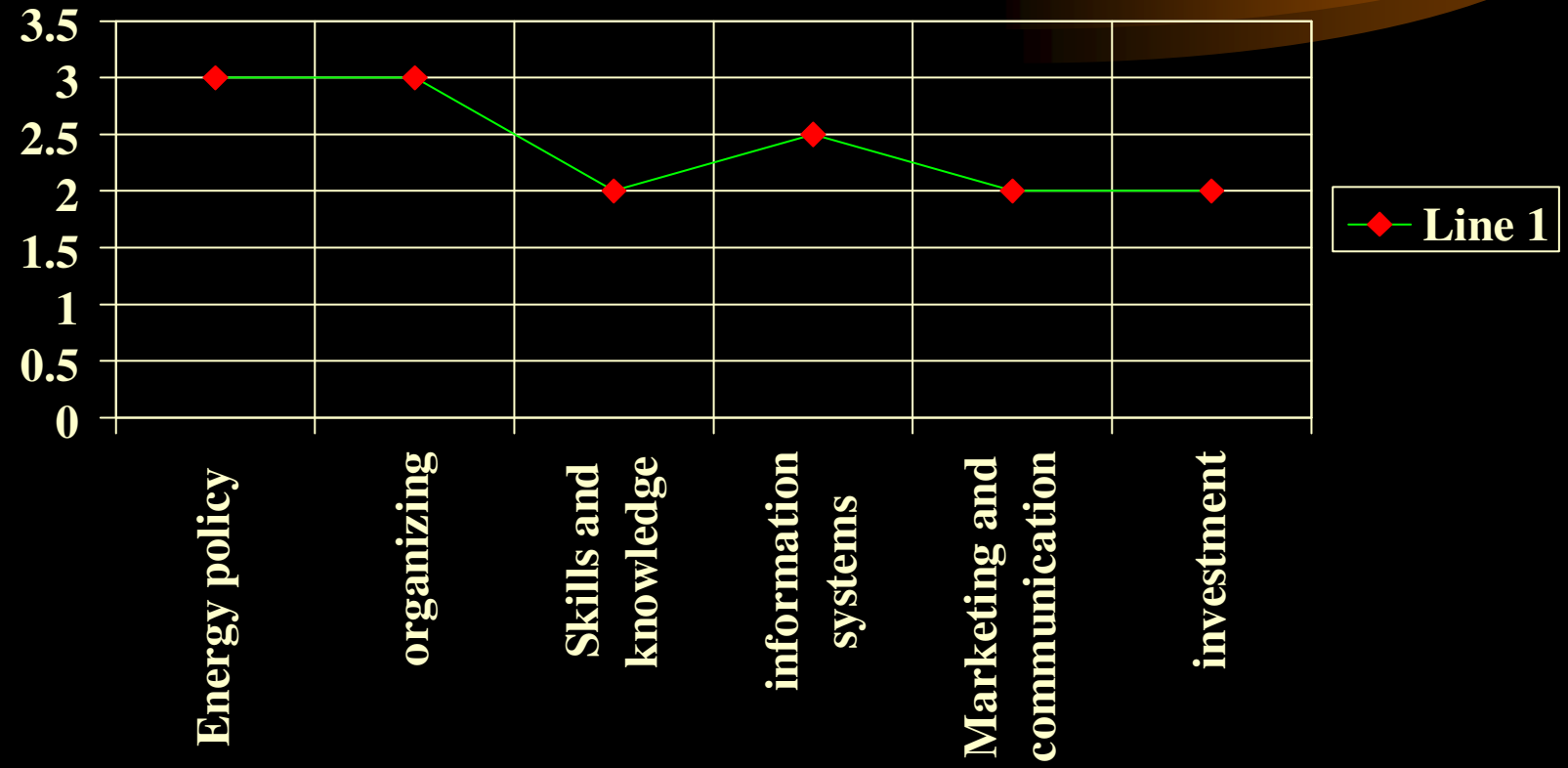
Analysis Data of Maximum Demand and Power Factor



ENERGY POLICY

WE ARE COMMITTED TO UTILISE ENERGY JUDICIOUSLY AND EFFECTIVELY FOR OUR USE AT AN OPTIMUM LEVEL TO GET MAXIMUM OUTPUT , AIMING ENERGY CONSERVATION IN ALL LEVEL THROUGH CONTINOUS COST EFFECTIVE METHODS ADOPTED TO ACHIEVE THE GOAL

The Energy Management Matrix



Implementation of Energy conservation Opportunities

Energy Conservation Opportunities Implemented

- 20 Hp Dust extraction system “A” replaced by reconnecting the lines to B and C.

Savings= 20HPx0.746KWHx0.8x18hrsx24daysx12monthsxRs.4.2

= Rs259880/- per year

Energy Conservation Opportunities Cont..

- 5HP Pellet Chain Conveyor replaced with Gravity line.

Savings= 5HPx0.746KWHx0.8x18hrsx24daysx12monthsxRs.4.2

= Rs64970/- per year

Energy Conservation Opportunities Cont..

- 3HP Mash Conveyor replaced by re-positioning of Molasses Mixer.

Savings= 5x0.746x0.8xRs.4.2=Rs.12.5 per hr of operation for Mash feed.

Energy Conservation Opportunities Cont..

- 15Nos of 100W incandescent lamps replaced with 38W Fluorescent lamps

Savings= (100-38)/1000x12x24x12x4.2

= Rs.900/- per year.

Energy Conservation Opportunities Cont..

- Replaced 10HP intake screw conveyor for DORB with 5HP chain conveyor.

Savings= 5HPx0.746KWHx0.8x18hrsx24daysx12monthsxRs.4.2

= Rs64970/- per year

Energy Conservation Opportunities Cont..

- Replaced 14Nos of CRT monitors of 220w with LCD monitors of 60w

Savings= (220-60)/1000x14x7x24x12x4.2

= Rs.18966.50/- per year.

Energy Conservation

TOTAL SAVINGS PER YEAR IS AROUND

Rs.409687/-

Suggestion for reducing the specific energy consumption

- Avoid idle run of the machineries due to frequent formula change.
- Control the fiber content in the raw materials to minimum possible level to reduce the load current in Pellet Mills.
- Provide CFL lamps wherever it possible

Energy saving Installation Implemented

1. Boiler :- Installed coconut shell/ fire wood fired boilers of capacity 2Ton/hour

Energy Saving compared to FO fired Boiler

Cost per Mt in FO Boiler= 3.15litxRs31.2=Rs98.28

"Do" in coconut shell Boiler = 8.25KgxRs4.25=Rs35.06

Saving – 98.28-35.06=Rs63.22/Mt

Saving per year=50000Mtx63.22=Rs3161000/-

Payback – 2 Years

2 APFC Panels

Installed 2 Nos of 190KVAR APFC Panels

Saving

Energy cost before installation= Rs.5.43/Unit

"Do" After the Installation = Rs.4.29/Unit

Saving per Year= (5.43-4.29)x150000x12

=Rs.2052000/-

Cost of Installation = Rs.6,01,333/-

Payback – 3. months.

3 Soft Starters

- Installed 6 nos of Soft Starters for all 100HP Motors connected to Hammer Mills and Pellet Mills.

Energy saving Installation

TOTAL SAVINGS PER YEAR IS AROUND

Rs.3762333/-

Thank You