



M/S Mahindra & Mahindra Ltd., (Farm Equipment Sector)

Unit Profile:

The Mahindra Group's Farm Equipment Sector has a significant presence across six continents. It is among the top five tractor brands in the world, with its own state-of-the-art plants in India, USA, China and Australia, and a capacity to produce 1, 50,000 tractors a year. The Group has a network of 800 dealers world-wide.

In the domestic business, the Farm Equipment Sector has had an unparalleled market leadership for the last 24 years. It is the largest producer of tractors in India. Mahindra & Mahindra recently consolidated its position as the leader of the Indian tractor industry when it acquired 43% stake in Punjab Tractors, the owner of the leading Swaraj brand of tractors.

The international operations of the Farm Equipment Sector are spread across six continents. It has state-of-the-art manufacturing plants in India, USA, China and Australia.

Mahindra Gujarat Tractor, acquired by Mahindra & Mahindra from the Government of Gujarat in 1999, is the oldest running tractor unit in the country. The Mahindra Group has a 60% stake and the balance 40% is with the Government of Gujarat.

Mahindra Agribusiness* integrates the food chain by providing quality inputs and farm solutions to post-harvest management of high value farm produce. The Company's core business is to provide supply chain services to organised retail, to both export and domestic markets for fresh fruits and vegetables as well as to the food processing industry. Mahindra Agribusiness is the first Indian corporate body to be awarded EUREGAP certificate as 'Primary Market Organisation' for Grapes

* Legal Entity Mahindra
Shubhlabh Services Limited

Domestic Operations

The Mahindra Group's Farm Equipment Sector is the largest producer of agricultural Tractors in India. It has enjoyed an unparalleled market leadership in the domestic market for the last 23 years. With a 30% market share, the Bhoomiputra, Sarpanch and Arjun brands of tractors make the Group's Farm Equipment Sector present in all the major segments in India. Mahindra & Mahindra recently consolidated its position as the leader of the Indian tractor industry when it acquired 43% stake in Punjab Tractors, the owner of the leading Swaraj brand of tractors.

It has a large customer base of 12,00,000 satisfied customers and the deepest distribution reach. The Sector has four manufacturing facilities in India, located in Mumbai and Nagpur in Maharashtra, Rudrapur in Uttaranchal and Jaipur in Rajasthan. The Farm Equipment Sector has always been a process driven organisation with a strong focus on its quality systems. The TQM movement in the Sector has brought accolades like the most coveted Deming Application Prize & Japan Quality Medal, making it the first tractor company in the world to win recognition of this stature.

Overseas Operations

With headquarters at Tomball (Texas), Mahindra USA is a wholly owned subsidiary of Mahindra & Mahindra. Over the years, Mahindra USA has grown by leaps and bounds and has reinforced its position in the Compact and Utility segment. It works hand in hand with a network of hundreds of leading tractor dealers throughout the country to provide its American customers complete product support and quality After Sales Service. The Company has also enhanced its capabilities with another assembly plant and distribution centre in Calhoun (Georgia) and Redbluff (California).

Mahindra Australia, based in Brisbane, is a branch of the global farm equipment manufacturer Mahindra & Mahindra. Mahindra Australia currently offers a complete line of 2WD and 4WD Compact and Utility models with an option to have performance matched attachments like Loaders and Mowers.

Mahindra China Tractors, a joint venture between the Jiangling Motors Company Group and Mahindra & Mahindra, started operations in July 2005. It will see Mahindra & Mahindra further expanding the product range and developing more tractors for China as well as other overseas markets.

Mahindra Gujarat Tractor Limited

Mahindra Gujarat Tractor is the oldest tractor unit in India. Established in 1954 as Hindustan Tractors, it was nationalised in 1978 and subsequently renamed Gujarat Tractor Corporation Limited, with the Government of Gujarat assuming a 100% ownership.

A majority stake was acquired by Mahindra & Mahindra in 1999, and the Company underwent yet another change of name: Mahindra Gujarat Tractor Limited. Currently, the Mahindra Group has a 60% stake and the balance 40% is with the Government of Gujarat. It sells about 3000 tractors p.a. under the brand name Shaktimaan and has a manufacturing plant in Baroda.

Mahindra Agribusiness*

The Mahindra Group established Mahindra Agribusiness* in 2000, with an equity stake from International Finance Corporation (IFC, Washington). Mahindra Agribusiness integrates the agriculture and food chain from agri inputs right through to agri commodities. The Company's business is to establish agri centres in various districts of the country either under the Mahindra Krishi Vihar franchisee model or directly as Mahindra Agribusiness.

Currently, the Company's operations cover about 100,000 acres across 8 states. Its primary focus is on crops like basmati, maize, barley, cotton, lentils, soybeans, durum, hyola and other oilseeds such as sunflower and mustard. Steps are also being taken to develop the high value segment of Indian farming: contract farming of crops with organic cultivation, aromatic medicinal crops like geranium, patchouli, etc., and other crops like pomegranates, grapes, gherkins, garlic, onions, potatoes as well as crops destined for Organised Retail and for the Seed Industry. Within the agri inputs area, Mahindra Agribusiness has taken a direct initiative in launching its brand of seed potato, wheat, maize, sunflower, groundnut and a range of vegetable seeds as well as agro chemicals. In addition, the Company has also acquired land in Pune to set up a Research & Development facility for seeds and saplings. The development of biofuels, a top priority for an automotive major like Mahindra & Mahindra is another area Mahindra Agribusiness is looking into. Mahindra Agribusiness is the first Indian corporate to be awarded a EUREPGAP certificate as 'Primary Marketing Organisation' for grapes. The Company has recently taken an initiative in processing and exporting gherkins grown by its farmer network and expects to strongly focus in the area of Supply Chain Management for Modern Retail and processing of horticultural produce out of India.

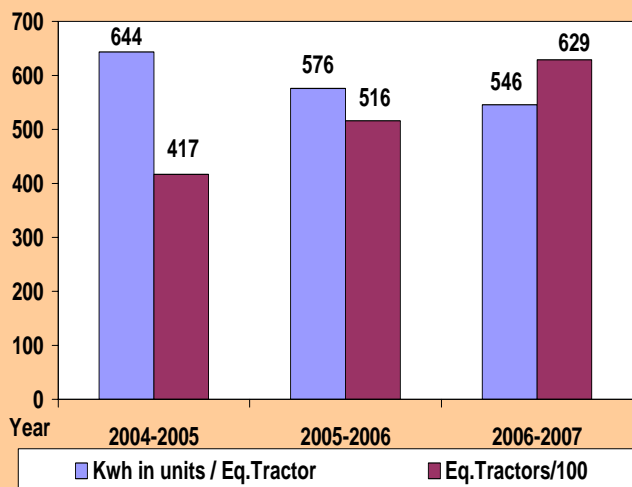
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Energy Consumption:

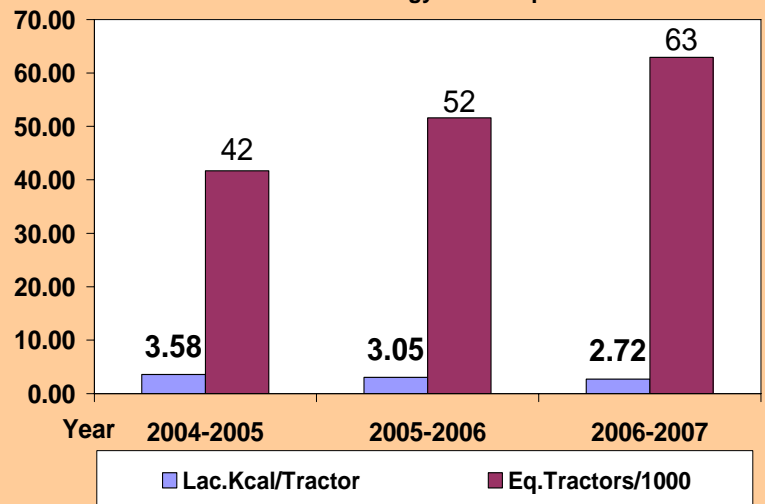
With the implementation of various energy conservation measures as ongoing practice, there is steady decline of specific energy consumption. Last three years specific energy consumption figures are shown below, which depicts continual reduction in energy consumption over last three years due to our sustained efforts to conserve it with the implementation of various energy conservation measures & ideas to increase efficiency of equipments.

Description	Unit	2004-2005	2005-2006	2006-2007
Electrical Energy	Kwh/Tractor	643.68	576.22	545.91
Thermal Energy	M.Kcal/Tractor	0.35750	0.30461	0.27182
Total Mfg Cost	Rs.Lakhs	71840	82206	110626
Total Energy Bill	Rs.Lakhs	1313	1550	1797
Energy as % of total Cost of production	%	8.30	9.33	9.89

Electrical Energy Consumption



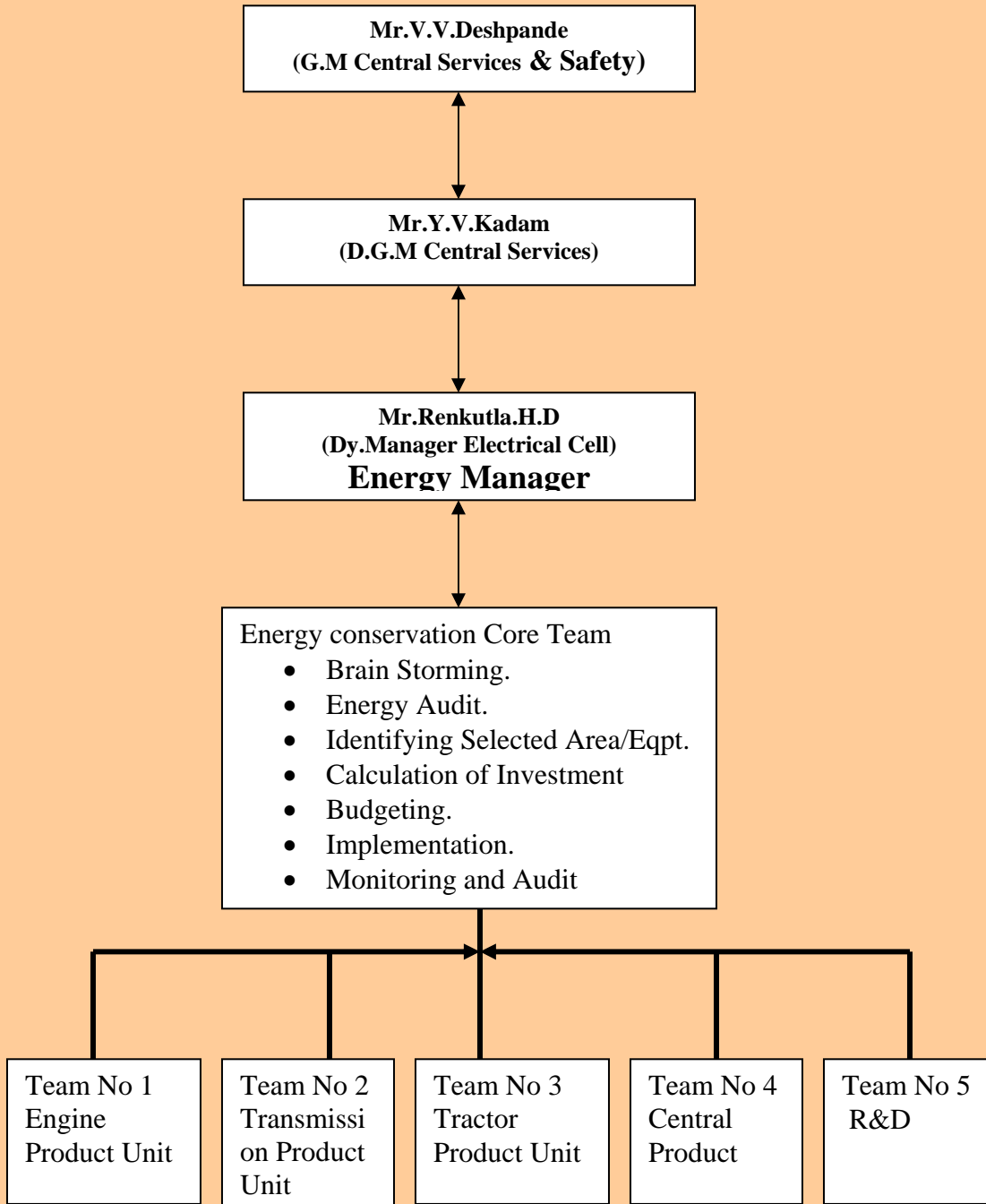
Thermal Energy Consumption



Energy Conservation Commitment, Policy and Set up

M & M visualized importance of energy conservation way back in 1997. Since then M&M has been involved in continuous improvement & energy conservation. The Core team led by GM (CS&S) & headed by V.P (MFG & SM) constitutes 5 nos. of subcommittees in the plant. Subcommittee consist 2 to 4 members from different areas. All the teams meet periodically for review & implementation of new identified energy saving schemes. At M&M ENCON Cell, energy cost accounts 10 % of production cost and the unit gives utmost importance to energy conservation

Energy Conservation Team Structure





Mahindra & Mahindra Ltd Farm Equipment Sector

Energy Policy

We at Mahindra & Mahindra Ltd., Farm Equipment Sector, are committed to continually improve our Energy Conservation in all our activities, product & services so as to make it environmentally sustainable for our future generations.

These shall be achieved through.

- Closely controlling & monitoring the consumption of various forms of Energy through an Effective Energy Management System.

- Adopt appropriate Energy Conservation Technologies.

- Maximize the use of Cheaper & easily available forms of energy.

- Make Energy conservation a mass movement with the involvement of all our Employees through Continuous Improvement.

- Maximize conservation of natural resources.

20th October 2007

S.P.Pathak

(Sr.Vice President Mfg & SM)

Energy Conservation Achievements

During the period F05 -F07, the unit implemented **54** energy saving ideas generated through periodic brain storming sessions. Savings of Rs.**97.18** lakhs was achieved with an investment Rs. **24.80** lakhs with payback period of approx. twelve months only. It has resulted in percentage reduction of 2 % in electrical energy and 1% in thermal energy during last 3 years shown in the attached File.

Safety Health & Environment



Mahindra & Mahindra Ltd.

Farm Equipment Sector

SAFETY, OCCUPATIONAL HEALTH & ENVIRONMENTAL POLICY

We at Mahindra & Mahindra Ltd., Farm Equipment Sector, Kandivli, are committed to provide Environment-Friendly, Safe and Healthy work place.

These shall be achieved through: -

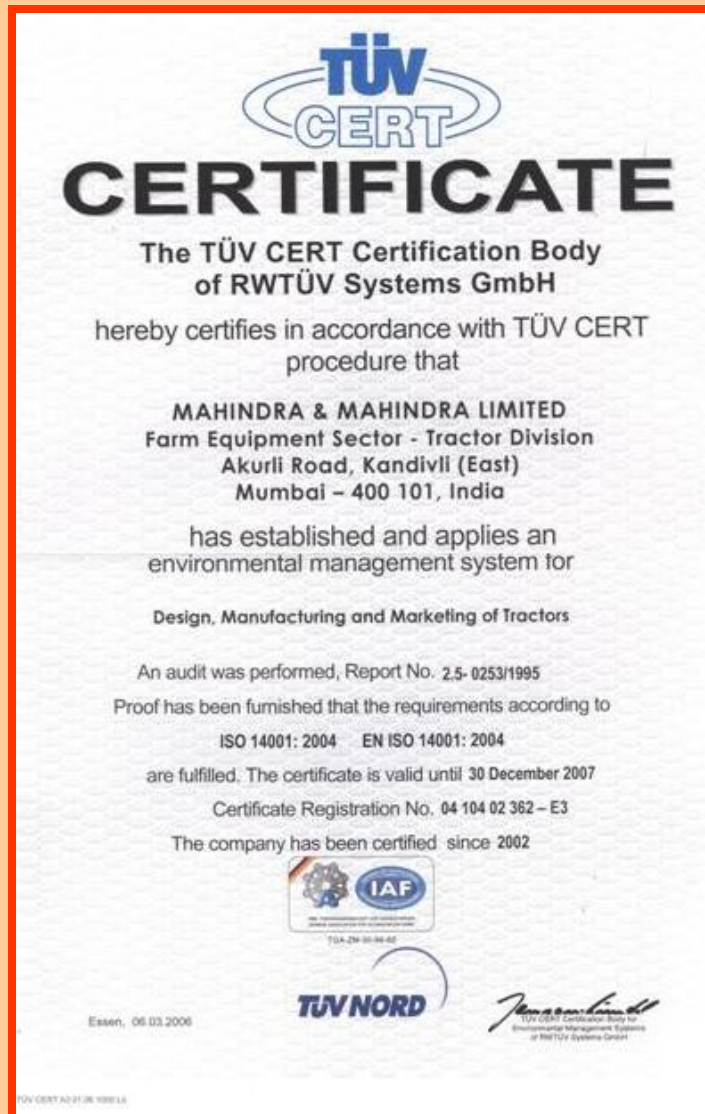
- Striving to design and produce Eco-friendly and safe products, activities and related services.
- Continual improvement and prevention of pollution, accidents and occupational health related hazard would be achieved by setting time bound objectives and targets.
- Complying to relevant legal and other requirements relating to environment, safety and occupational health.
- Continuously looking for conservation of natural resources, being used in our manufacturing and other processes.
- Establishing Safety, occupational Health and Environmental Management System and undertaking structured review to improve occupational health, safety and environmental performance.
- Ensuring disposal of all types of wastes generated in proper and Eco-friendly manner
- Providing healthier and safe working environment for employees and others working at our locations on our behalf.
- Continuously promoting Safety, occupational Health and Environmental awareness amongst all people working at our location on our behalf and making this policy available to, interested parties.
- Encourage employees and associates to actively participate in environment friendly social activities, as a part of our Corporate Social Responsibility.

4th March 2006


B Mishra
Chief Operating Officer

Akurli Road, Kandivli (East), Mumbai – 400 101

We adopt Environment Management system
and are ISO14001 Certified since year 2002



Effluent Treatment Plant



- **Plant designed and commissioned by:** M/s. Ion Exchange.
- Date of commissioning - Oct'2001.
- Area: - 15 m. X 25 m.
- Effluent Treatment Capacity :- 300 KL / Day
- Equipment :- Total no. of stages 11

A. Trees & Plants

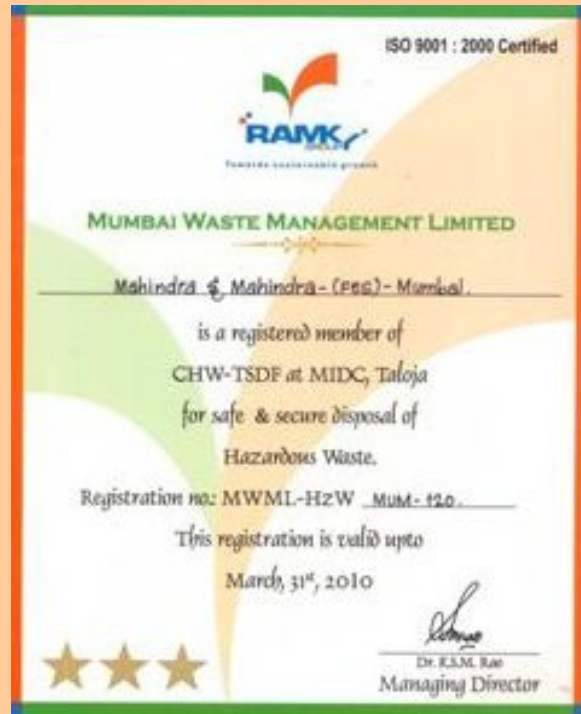
1. Total No of Trees - 557 Nos.
2. Small Plants / Trees (Shrubs) - 3693 Nos.
3. Flower Pots - 1880 Nos.
4. Flowerpots along Akurli road (Bogainvilla)-120 Nos

B. Green Area development - 9449.5 Sq. Mtr.

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- Date of commissioning - Oct'2001.
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- Effluent Treatment Capacity :- 300 KL / Day
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Clean Technologies

- We use clean energies for our activities like **PNG, LPG, Solar Water Heater for the Canteen etc.**
- Also Clean Development Mechanism (CDM) projects worth **1655.07 Tons of carbon savings accepted by** Ministry of Environment & Forest Govt. of India and forwarded to UNO.
- Our Biomedical waste is disposed off through authorized Contractor, Mumbai Municipal Corporation on authorized site.
- The treated water is used for the Gardening and Toilet Flushing in the plant
- We are the Member of CHW-TSDF of Mumbai Waste Management Ltd since 1St November 2002.
- Our registration number: MWML-HzW MUM-120 valid up to March 2010.



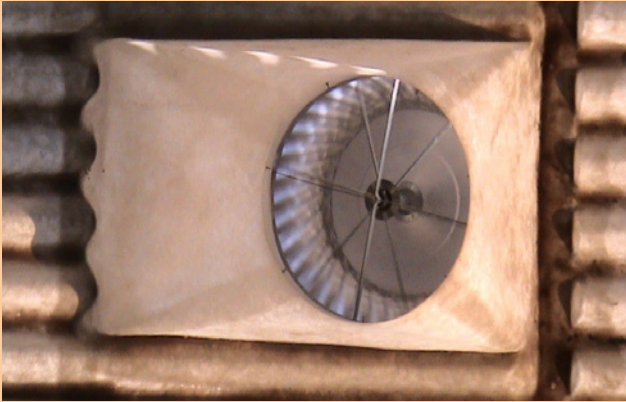
All Canteen waste converted into Manure. Same is used for the In-house gardening



Maximum Usage of Natural Lights



Use of Eco Friendly Ventilation System



Air pollution prevention



All the DG sets are acoustically enclosed.
Ambient Air monitoring.
Stack Monitoring
Energy Saving

Environment friendly products

- Our Tractors confirm to BS –III Norms.
- We have developed the Tractor Engine on CNG.
- Trials for the Tractor Engine running on Bio fuel are going on.
- We Export our tractors to
 - USA,
 - Europe and
 - AustraliaConfirming to their Emission Norms.