MAHINDRA & MAHINDRA



M&M is the market leader in the Indian MUV and tractor segments of the automotive industry.

Background

Mahindra & Mahindra Limited (M&M), the flagship company of the US\$ 3 billion Mahindra Group, was set up in 1945 to make general-purpose utility vehicles for the Indian market. It soon branched out into manufacturing agricultural tractors and LCV and later expanded its operations from automobiles and tractors to other sectors. The company has recently started a new division, Mahindra Systems and Automotive Technologies (MSAT) in order to focus on developing components and to offer engineering services.

M&M has two main operating divisions - Automotive division and Farm Equipment division. The company entered into collaboration with Willys Overland Corporation (now part of the Daimler Chrysler group) to import and assemble the Willys Jeep for the Indian market. Thereafter, in 1965 the company started producing LCV. It went on to develop its manufacturing technology to indigenously produce vehicles within a short time of signing the collaboration agreement with Willys. Today, the Automotive Division of M&M manufactures and markets MUV, LCV and three-wheelers.



In 2005, the company entered into a joint venture with Renault of France for the manufacture of a mid-sized sedan, Logan, a newly developed vehicle that meets all the European regulations for emissions and safety. The Logan is expected to be launched in the Indian market in 2007. M&M has also launched a joint venture with International Truck & Engine Corporation, one of the leading commercial vehicle producers in the USA, for manufacture of trucks and buses in India.

The Farm Equipment division was established in 1963 in the form of a joint venture with International Harvester Inc., and Voltas Limited, and christened as the International Tractor Company of India (ITCI). In 1977, ITCI merged with M&M and became its Tractor Division. After M&M's organisational restructuring in 1994, this

Company	Products	Established	Founder	Distribution	Production plants
M&M	Automobiles Tractors, Auto Components	1945	K.C. Mahindra & J.C. Mahindra with Ghulam Mohammed	Europe, Russia, Asia, Africa, USA, South America	India

division was re-christened the Farm Equipment Sector Division. Today M&M is the largest manufacturer of tractors in India. It designs, develops, manufactures and markets tractors as well as implements which are used in conjunction with tractors.

In addition to these two divisions, M&M has a defence system division. The Mahindra Defence System (MDS) was set up in mid 2000 with a view to providing a sharp focus to service the Defence sector. With the announcement by the Government regarding participation of private sector in defence, MDS intends to become a major defence equipment/ product manufacture and supplier. The company now plans to set up Mahindra Research Valley, a facility that will house the company's engineering research and product development wings under one roof. M&M's operations are also supported by its subsidiary Mahindra and Mahindra Financial Services Ltd, that finances around 40 per cent of the company's MUV sales and 20 per cent of the tractor sales.

The Automotive division of M&M has manufacturing plants at Mumbai, Nashik and Igatpuri in the state of Maharashtra, at Zaheerabad (Andhra Pradesh) and at Haridwar (Uttaranchal). The Farm Equipment division has two main tractor manufacturing plants located at Mumbai and Nagpur in Maharashtra and satellite plants located at Rudrapur (Uttarachal), Jaipur (Rajasthan) and Jiangling (China).



Type of vehicles	Name of Products	
Utility Vehicles	Commander, Maxx, Bolero, Scorpio	
Pickups / Vans	Pik-up, Utility, Bolero Camper	
LCV (for JV with ITEC)	Cabking, Tourister Minibus, Loadking	
Three-Wheelers	Champion, Alfa	
Defence vehicles	Rakshak, 550 XD	
Alternative Fuel Vehicles	Bijlee, Tourister, CNG Minibus	

The promoters of the company along with persons acting in concert hold 22.97% of the Company's shares. The total foreign investment in equity constitutes 46.91%, the largest contributor being FIIs with 34.45% (excluding Aranda Investments Mauritius Pte. Ltd, as it is included in persons acting in concert). Domestic Financial Institutions including insurance companies hold 15.26% of the equity with the remaining being held by public and other corporate bodies.

Products and brands

Over the years, the Mahindra brand of vehicles has come to represent high quality, ruggedness, durability, reliability, easy maintenance and operational economy. The Automotive division

Category of tractor	Brand	
< 30 HP	Yuvraj, 265 DI Sarpanch, 265 DI Bhumiputra	
30 - 40 HP	Arjun 445 DI, 275 DI TU Sarpanch, 275 DI TU Bhoomiputra, 475 DI - Sarpanch, 475 DI - Bhoomiputra	
> 40 HP	Arjun 555 DI, Arjun 605 DI, 575 DI - Sarpanch , 575 DI Bhoomiputra , 585 DI - Sarpanch	
Farm Implements	Rigid Tine Cultivator, Mounted Offset Disk Harrow, Spring Loaded Tiller, Mounted Disc Plough, Leveller	



that manufactures and markets MUV and LCV has a customer profile that includes individuals, traders, entrepreneurs, contractors, tour operators, taxi owners, car hire companies as well as government departments and institutions and the Indian Army. In the year 2004 vehicle production and sales reached an all-time high for the company and crossed the 100,000 mark for the first time. In 2005, the company sold more than 1,45,000 vehicles, including exports. The company's indigenous development of its model Scorpio has received international attention for the fact that it cost barely US\$ 120 million to develop, whereas globally developing such a vehicle can cost US\$ 0.6-1.5 billion .

The Farm Equipment division manufactures agricultural tractors, implements that are used in conjunction with tractors and industrial engines. The tractor industry in India is segmented by

horsepower (HP) - below 30 HP (lower segment), between 30-40 HP (mid-segment) and above 40 HP (higher segment). M&M's Farm Equipment division has a presence in all three segments with sales of more than 65,000 tractors in 2005, including exports.

Under the MDS division, M&M supplies MUV to the Indian security forces. It has extended its product range to include variants like double stretcher ambulances, weapon carriers, rapid intervention vehicles, water trucks, light logistic carriers and station wagons. MDS also carries out bullet proofing of vehicles and cash in transit vans. MDS has offered RAM 2000 light armoured multi-role vehicle for trials to the Indian army. RAMTA Division of Israel Aircraft Industries, Israel, has developed these vehicles and MDS intends to eventually manufacture this vehicle in India with a high degree of indigenisation.

Financial analysis

Sales revenues have increased at a CAGR of 10.6 per cent between 1999 and 2005. This is a result of the continued growth in the automotive industry as well as a substantial recovery in the tractor industry. Export revenues have grown at an impressive CAGR of 18.6 per cent during this period as the company has ventured into new overseas markets. Profitability of the company has improved over the years due to a restructuring exercise that has resulted in optimal utilisation of capacities and improved cost competitiveness. The company has outsourced some of its non-core activities in addition to rightsizing business operations.

In 2004 the company raised US\$ 100 million through the issuance of a five-year zero coupon foreign currency convertible bonds (FCCB) which has provided the company with substantial low cost funds to finance its expansion and product development plans. The debt-equity ratio remained low at 0.52 in 2005, thus giving the company financial flexibility for the future.

In 2006, Mahindra & Mahindra Ltd successfully completed its US\$ 200 million FCCB issue with broad geographical distribution of investors from Europe and Asia. The issue received overwhelming response and was oversubscribed. The proceeds



are to be used for product development, modernisation, and expansion by internal growth as well as overseas acquisitions.

M&M's contribution in making "Made in India" global

M&M has nurtured ambitions to be a global player in the auto industry and has been active in developing relationships that would enable it to access technology and markets. This is evident from the joint ventures that it has formed with International Truck and Engine Corporation of the US and the Renault Group of France. M&M holds majority stake of 51 per cent in both these joint ventures.

M&M's joint venture with International Truck and Engine Corporation was formed in June 2005 to

Global presence

Americas	Europe	Asia Pacific & Middle East	Africa
Argentina	France	Australia	Angola
Costa Rica	Georgia	Bangladesh	Ethiopia
Dominican Republic	Italy	China	Mozambique
Maxico	Russia	Kuwait	Nigeria
Surinam	Turkey	Malaysia	Rwanda
Uruguay	Ukraine	Maldives	South Africa
USA		Nepal	Tanzania
West Indies		Oman	Uganda
		Saudi Arabia	_
		Sri Lanka	

manufacture and market LCV, MCV and HCV for both the domestic and export markets in Asia, Middle East, Africa, Russia and Central Europe. The company, christened Mahindra International Pvt Ltd, will have a project outlay of US\$ 90 million. M&M has sold its LCV business to the venture. This venture would also source components for International's North American operations and provide engineering services to it.

In February 2005, M&M flagged off Mahindra Renault Ltd, a joint venture with France's Renault Group, which would make and sell Renault's car, Logan in India. This joint venture will invest US\$ 155 million and target to sell around 50,000 cars annually under the Mahindra Renault name in the mid-size car segment in India. Similarly, the company has also entered into an agreement with Malaysia-based USF-HICOM Sdn Bhd to market its sports utility vehicle Scorpio in that country.

M&M's Automotive division exports its products to several countries in Africa, Asia, Europe and Latin

America. M&M crossed a global milestone - for the first time the company launched a new vehicle overseas even before introducing it in the domestic market. The Scorpio Pik-Up saw a maiden unveiling in Johannesburg, South Africa in April 2006. The all new Scorpio was also launched globally at the same venue simultaneously, a month after its India launch.

It entered the markets of South Africa, Uruguay and Malaysia for the first time in 2004-05. It exported 3046 fully built vehicles in fiscal 2005 and is expected to near double its exports in fiscal 2006. The indigenously developed Scorpio is being exported to the markets of South Africa, Italy, France, the Middle East and Malaysia. In the long run, the company plans to set up assembly operations in countries such as Russia and Malaysia once demand from overseas markets reach a minimum economic demand size.

Under its Farm Equipment division, M&M has grown to become the fifth largest tractor manufacturing company in the world with sales





of more than 11 lakh tractors since inception. Besides being the leader in the domestic market for 23 consecutive years, the Farm Equipment division has also found significant success in the international market. Around 90 per cent of the tractor exports are to the developed market of the USA for which the company has indigenously designed higher HP models (75 HP). M&M operates two assembly facilities in the US - one at Tomball, Texas and the other at Calhoun, Georgia, both of which are fully functional units, along with full service capabilities. M&M's tractor business in the US, which clocked a turnover of US\$ 128 million in FY05 is supported by a strong dealer network. Mahindra USA clocked sales of 10,000 tractors for the first time last fiscal. Other major export markets for tractors include Nepal, Bangladesh, Sri Lanka, Uganda, Nigeria, and Zambia.

M&M launched its Australian operations with the launch of Mahindra Australia in February 2005,

supported by its branch office and assembly operations at Brisbane.

A few months later the company entered China, the third largest tractor market in the world after India and USA.

It launched its Chinese operations in July 2005, through Mahindra (China) Tractor Co Ltd, an 80-20 joint venture with Jiangling Motor Co Group (JMCG), with M&M having a greater equity stake. Mahindra (China) Tractor Co Ltd has acquired the tractor manufacturing assets from Jiangling Tractor Company, a subsidiary of JMCG. The plant has the capacity to produce 12,000 tractors per year in the 18-33 HP segment. Strategically this venture confers on M&M a quick entry in China as well as export markets. M&M also plans to utilise the partnership with JMCG to source components from China and to sell tractors in China through IMCG's network.

Factors fuelling M&M's global initiatives

M&M's global ventures have been strategically thought out and well planned for. There are several factors for its success in the international markets, some of which are:

- Presence in key markets: After establishing its leadership in the Indian automotive market, M&M has begun to seek opportunities in global markets that have growth potential. M&M has set up subsidiaries in South Africa and Italy for accessing the African and European automotive markets. M&M has been selling its vehicles globally under the "Mahindra" badge. USA and China are key markets for tractors globally. Besides establishing a sizeable presence in the US market, M&M acquired a tractor facility from Jiangling Motor Group of China to get access to the Chinese market.
- Emphasis on quality and R & D: M&M has focused on improving the quality of its products,

which is critical to gain acceptance in key global markets. The farm equipment sector created history by becoming the first tractor company in the world to secure the coveted Deming Prize. M&M has also developed capabilities to develop new products that can meet global standards. Scorpio, which was launched in 2002 has been successful in the market and was declared to be the "Car of the Year" by CNBC Autocar, BBC Wheels and Business Standard Motoring.

• Capitalising on outsourcing opportunities:

One of the emerging trends in the global auto industry is outsourcing of sourcing and business processes to low costs countries like China and India. This has been primarily driven by the increasing competitiveness of the advanced markets and the need to cut costs in order to remain profitable. This has created a number of opportunities to Indian players. M&M has acquired expertise to capitalise on these opportunities and can offer global OEM and tier



1 suppliers, products and services across the chain, right from the sourcing of steel to the design of systems.

 Joint ventures to access markets and technology: M&M has adopted the route of strategic partnerships to ensure access to products, technology and new markets. Its joint ventures with Renault, International Truck and Engine Corporation and JMCG are pointers to this fact. Simultaneously, M&M will continue its focus on achieving cost leadership through focused cost optimisation, value engineering, improved efficiency measures like supply chain management and countrywide connectivity of all its suppliers and dealers and exploiting synergies between its divisions.

Future plans

Going forward, the company's growth is expected to be driven by the Farm Equipment division in the backdrop of greater focus on the farm sector by the Government, improved agriculture infrastructure like irrigation and easier availability of rural credit. M&M with its range of tractors across all segments is well placed to keep pace with the market. The emerging second hand tractor market provides an interesting opportunity for the company. The Farm Equipment division has started an initiative 'Mahindra Vishwas' that aims at organising the second hand tractor market. This initiative will help generate additional new tractor sales as well as expanding the second hand tractor market.

Under the Automotive division, the Logan, expected to be introduced in 2007, will give M&M a world-class product in the mid size passenger car segment, which is expected to be one of the fastest growing segments in the Indian passenger car industry. With MUV gaining popularity, the Scorpio's sales will continue to grow. With the company entering new export markets, it is expected to double its volume of exports within a year. This increase in volume will be driven by entry into selected large potential markets like Russia and launch of new products like the Scorpio Pick-ups.

Globalisation at a glance

- Joint ventures that it has formed with International Truck and Engine Corporation of the US and the Renault Group of France
- Exports of Automotive division to Africa, Asia and Europe and Latin America
- Fifth largest tractor manufacturing company in the world
- Around 90 per cent of the tractor exports are to the developed market of the USA for which the company has indigenously designed higher HP models (75 HP)
- Assembly operations in the US and Australia
- Entered China through acquisition of a tractor company

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