

## **EXECUTIVE SUMMARY**

The Metal and Light Engineering Industry is basically related to processing of Metal sheets with the use of arc or gas welding and lathe work. Since the processing involved in production is less complicated, the Industry is dominated by private sector informal units and their distribution is not restricted to any identifiable locations. It is an Industry where production units are scattered throughout the country based on demand for its products and availability of related infrastructural facilities for establishment. One reason for the scatter of Industry units is that it requires minimal infrastructure facilities for their establishment.

Metal and Light Engineering Industry produces a vast range of goods, from simple structures to production of machinery and equipment, sometimes used by the large Automobile Industries, with more labour intensive simple technologies. The Industry achieved a rate of growth of 13.4 % in 2006 as against a rate of growth of 11.4 % of the overall Manufacturing Industry.

As in the case of all other sectors, the growth of Metal and Light Engineering Industry depends on the Economic Environment of the country and also closely linked to the mechanization of agriculture and the rate of growth of Construction Industry. Accordingly, the Government, in its 2007 Budget, provided various concessions and incentives to the Small and Medium Industries which could be automatically enjoyed by the Metal and Light Engineering Industry as well. The incentives and concessions provided include provision of credit facilities, introduction of a tax rebate for fabricated metal products, exemption of value added tax on income earned from Agricultural processing (This will invariably lead to more activity in the Metal and Light Engineering Industry) and introduction of a Credit Scheme for 500 Mahaweli Small and Medium agro - processing Industries, are few examples.

There was no reliable database to estimate the total employment in the Metal and Light Engineering Industry. As per Census of Industry 2003/2004, the Metal and Light Engineering Industry, directly includes the sub sectors of fabricated Metal products and, manufacture of machinery and equipment, consists of 12,081 Industry units and 39,960 employed persons. Out of this total employment of Metal and Light Engineering Industry, almost 80 % is employed in the fabricated Metal products sub sector and the balance 20 % in the machinery and equipment sub sector. In other words, Metal and Light Engineering Industry, as stated

earlier, is mainly involved in the production of fabricated Metal. Further, according to the Census of Industry, the total employment of the Metal and Light Engineering Industry in 2004 was only 2.5 % of the total employment of the manufacturing sector.

Over the years, the Industry has moved slowly from the traditional labour intensive technology to a more and more capital intensive equipment-based technology. Since the two technologies tend to generate two different levels of employment, the present study made an attempt to forecast two separate employment projections, one based on the use of capital intensive high technology and the other based on the use of labour intensive technology. At the same time, the capital intensive high technology production system demands different types of skills as against the labour intensive technologies. The high technology estimate gives a total employment forecast of 42,930 in 2007 to 47,000 in 2010, at the end of the Plan period. This projection is basically consistent with the trend of employment generation in the Metal and Light Engineering Industry during the past three years.

Similarly, during the past few years, some new Industries were emerging in the Metal and Light Engineering Industry. One good example is the establishment of 8 factories Smelting Scrap Metal and producing steel bars and rods for the construction Industry. These factories employ about 400 persons per factory and produce a total of about 15 tons of steel per day. Since there are no trained persons produced in the country to work in these factories, mostly Indian skilled personnel have been employed with Sri Lankans as trainees.

It is also important to note that manufacturing of water pumps in Sri Lanka has become one of the most important components of the Light Engineering Industry, competing successfully with International products. It is high time that the Government provides all facilities to develop these Industries further, especially providing necessary high level Training to meet the demand of advanced skills required for such Industries.

Since there is no reliable database for the Metal and Light Engineering Industry to estimate the composition of current employment among different occupations, Survey data was used to compute the total employed among occupational categories. Survey data reveals the following results.

<b>Employment Category</b>	<b>Number</b>	<b>Percent</b>
1. Managerial	336	10.54
2. Technical	451	14.15
3. Clerical and related	426	13.38
4. Sales and Services	151	4.74
5. Crafts and related	1,824	57.25
Total	3,188	100.00

Survey further revealed that the main occupations in the Metal and Light Engineering Industry are machinists, foundry men, welders, sheet Metal workers, fitters and painters / finishers. In the Technical category, the main occupation is the Foremen. It also revealed that to meet the future demand of technologically advanced Metal and Light Engineering Industry, modern occupations such as ‘Non-destructive Testing Technicians’ need to be introduced from now onwards.

Projected manpower demand for the period 2007 – 2010 indicates that direct employment of Metal and Light Engineering Industry will be as follows: (All occupational categories)

<b>Year</b>	<b>Total Number</b>	<b>of which Craftsmen</b>
2007	42,930	24,470
2008	44,280	25,240
2009	45,660	26,000
2010	47,000	26,790

In addition, there is a considerable demand for Metal and Light Engineering Industry related occupations in foreign countries. Data available at the Foreign Employment Bureau shows that during the past four years, Sri Lanka managed to supply only 18 % of the total vacancies received by the country. It is estimated that at least a total of 10,000 vacancies are available during the next four years for foreign employment.

Demand for Training in the Metal and Light Engineering Industry has been estimated on the basis of future growth of the Industry using employment coefficients derived from the

Survey. Results of the Demand estimate (technical and craft related occupations) are given below.

<b>Year</b>	<b>Local Demand</b>	<b>Foreign Demand</b>	<b>Total</b>
2007	30,490	7,480	37,970
2008	31,620	7,900	39,100
2009	32,910	8,450	41,960
2010	34,260	9,120	43,380

There are a few Institutions providing Training on Metal and Light Engineering Industry occupations. The Department of Technical Education and Training, Vocational Training Authority, Ceylon German Technical Training Institute, Industrial Development Board and Colombo Dockyard Ltd are the main Institutions. The total capacity for Training of all these Institutions is about 5,500 trainees per year, which is far below the total Training requirement of the Industry.

At present, about 65 % of the persons engaged in the Industry, mainly as Craftsmen, have received their skills Training while working in the Industry as helpers or support personnel to skilled Craftsmen. However, the Industry now needs trained and qualified personnel to be recruited as skilled Craftsmen to produce goods that could compete with imports. Accordingly, the Training Institutions in the private and public sector need to increase their capacities to train the required personnel.