

Thesis Title	A Study of Motor Vehicle and Fuel Usage Pattern in The Provincial Areas
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### Abstract

The purpose of this research was to study the usage pattern of motor vehicles and fuels and the factors influenced the usage of motor vehicles and fuels in the provincial areas. Data were collected from 4,597 questionnaires answered by vehicle users. The findings are as follows:

Saloon cars are mostly spark ignition engines fueled with unleaded super petrol (61.9 %). The piston displacements are in a range of 1,000 - 1,999 c.c. (84.6 %). The drivers are the car owners (99.1 %) . The drivers are government official or private sectors officers (583 %). They are for private use (83.1 %).The average fuel consumption was 11.84 km./liter.

Pickup trucks are mostly compression ignition engines with piston displacement in a range of 2,000 - 3,999 c.c. (85.7 %). The drivers are the pickup trucks owners (87.8 %).The drivers are government official or private enterprise employees (32.7 %). They are for private use (57.4 %). The average fuel consumption was 12.66 km./liter.

Vans are mostly compression ignition engines with piston displacement in a range of 2,000 - 3,999 c.c. (95 %). The drivers are the van owners (67.4 %). They were used for general services (36.7 %). The drivers work as employee (51.0 %) and the average fuel consumption is 11.9 km./liter.

Taxis are mostly compression ignition engines with piston displacement in a range of 2,000 - 3,999 c.c. (66.7 %). The drivers are the taxis owners and general they were services (66.7 %). The drivers work as driving employee (66.7%). The average fuel consumption is 12 km./liter.

Motortricycle taxis are mostly spark ignition engines fueled with unleaded petrol (46.9 %). The piston displacement is in a range of 300-599 c.c. (81.6 %). The drivers are the motortricycle taxis owners (44.9 %). The drivers work as driving employee (75.5 %), and general employee (93.9 %). The average fuel consumption is 13 km./liter.

Fixed route buses are mostly compression ignition engines with the piston displacement in a range of 2,000-3,999 c.c. (61.2 %). The drivers are fixed route buses owners (49.3 %). The drivers work as driving employee (70.1 %), and general employee (52.2 %). The average fuel consumption is 9.71 km./liter.

Non fixed route buses are mostly compression ignition engines with the piston displacement in a range of 2,000 - 3,999 c.c. (49.9 %). The drivers are non fixed route buses owners (66.7 %). The drivers work as driving employee (50 %), and general employee (83.3 %). The average fuel consumption is 8.8 km./liter.

Private buses are mostly compression ignition engines with the piston displacement in a range of 2,000 - 3,999 c.c. (100 %). The drivers are private buses owners (66.7 %). The drivers work as driving employee (100 %). Others (100 %). The average fuel consumption is 12 km./liter.

Non fixed route trucks are mostly compression ignition engines with the piston displacement in a range of 6,000 c.c. or higher (53.6 %). The non fixed route trucks belong to company and firms (67.9 %). The driver occupations are the office workers (53.6 %). The average fuel consumption is 7.78 km./liter.

Private trucks are mostly compression ignition engines with the piston displacement in a range of 6,000 c.c. or higher (51.9 %). The private trucks belong to company and firms (62.3 %). The drivers work as driving employee (44.4 %). The average fuel consumption is 7.66 km./liter.

Motorcycles are mostly spark ignition engines fueled with unleaded super petrol (46.1%). The piston displacement is less than 150 c.c. (99 %). The drivers are the car owners (99.2 %) and house wives or students (69.2 %). They are for private use (89.6 %). The average fuel consumption is 22.02 km./liter.

Tractors are mostly compression ignition engines with the piston displacement in a range of 2,000 - 3,999 c.c. (50.5 %). The tractor belong to company and firms (62.4 %). The drivers work as driving employee (42.2 %). The average fuel consumption is 7.2 km./liter.

Farm's vehicles are mostly compression ignition engines with the piston displacement in a range of 300 - 5,99 c.c. (43.8 %). The drivers are the car owners (86.3 %) The drivers work as driving farmers (75 %). The average fuel consumption is 15.03 km./liter.

**Keywords :** Motor vehicles / Provincial Areas / Fuel usage pattern / Spark  
ignition engine / Compression ignition engine / Fuel Consumption