## Present Status of Vehicle Repair Facilities in Sri Lanka: Identification of Resource Requirement for Successful Implementation of Vehicle Emission Testing Programme

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## ABSTRACT

The availability of adequate number of well-equipped vehicle repair facilities together with well-trained technicians and skilled mechanics is one of the essential requirements of successful implementation of the Vehicle Emission Testing (VET) programme in Sri Lanka. This study presents findings of a detailed survey conducted on the above aspect, with the objective of identifying the key features of the industry that include the number of establishments and their geographical distribution, number of employees, equipment, tools and other facilities available, type of repairs carried out, number of vehicles repaired per month, etc.

The preliminary survey conducted to obtain basic characteristics of garages covering more than 4,500 establishments shows that majority of the establishments are micro level with less than 10 employees and less than 25 vehicles repaired per month. The estimated total number of establishments is about 21,000, of which about 23% is in western province and 8% in Colombo district. Based on the data obtained through preliminary survey, 200 garages were selected to conduct a detailed survey to gather comprehensive information on the present status of garages in the country. Among these, 54 are medium- and large scale establishments with more than 10 employees. The results show that about 60% of the garages undertake repairs of all types of vehicles. Among the small-scale garages with less than 10 employees, only about 40% undertake repairs of all

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categories of vehicles. Among the same group, about 25% undertake repairs of only three-wheelers and / or two-wheelers. About 60% of the garages also undertake body repairs. Further, more than 60% of the garages undertake petrol fuel systems repairs and about 40% undertake diesel fuel system repairs, of which (in both cases) majority do not have the facilities or resources to carry out repairs in modern vehicles having electronics systems. In particular, among the 200 garages tested, only 14 garages have scan tools such as Engine Scope Analyzers, Oscilloscopes, Onboard diagnostic tools (OBD), etc. Another important finding is that most of the garages do not have emission testing facilities and equipment.

Another important aspect covered is the number and category of staff. The total number of staff in the selected 200 garages varies from one to 177. Among the 146 small-scale garages surveyed, about 70% have a total number of staff of five or less, indicating the dominance of micro-scale repair facilities. It is estimated that the total number of employees in the vehicle repair sector is about 115,000 with about 38% of Senior Mechanic and Mechanic, 26% of Helpers, Apprentices and Trainees, 15% of Vehicle body repair staff, 6.5% Auto Electricians and 13.5% of Senior Staff (including Managers, Engineers, Service Advisers, Technical Officers and Supervisors).

It is concluded that the facilities and resources available with the existing vehicle repair industry are not adequate to implement the VET programme successfully and therefore should be given due consideration to improve the situation.