

Short Communication

Road Traffic Noise Level at Different Locations of Faisalabad (Pakistan)

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ABSTRACT

Noise level in cities is increasing day by day because of the flow of heavy traffic. This paper reports the road traffic noise level at four different locations of Faisalabad (Pakistan). Noise level at the selected sites was found to be higher than the permissible limits.

Key Words: Noise; Traffic

INTRODUCTION

An ecological imbalance among the constituents of the environment causes environmental pollution. When noise level increases beyond the permissible limits, it causes noise pollution and traffic is one of the sources of noise pollution. An increase in traffic density at the roads enhances the noise level, and adds to the noise pollution. According to the local vehicle registration office there were 146898 vehicles in 1984 that increased to 198757 in 1990. It became 258510 in 1996, and the non-registered were the exceptions. Such heavy traffic causes enormous noise pollution, which results in annoyance, discomfort and trouble and even fear or limitation in the behaviour. The predominant health effect of noise is auditory damage, which includes in hearing loss. This is frequently caused by heavy traffic noise. In this way, noise pollution also causes sleeplessness, vegetative hormonal reaction and damage of hearing organs. This research was conducted as an awareness program and reports noise levels at four different selected sites in Faisalabad City.

MATERIALS AND METHODS

Four sites, namely Satiana road, Jaranwala road, Jhang road and Sargodha road were selected and the study was conducted in May-June 2001. A sound level meter model EP629 set was used to measure the noise level. Data was calculated for $L_{eq} = 10 \log_{i=1}^N 10^{L_i/10}$ every six working days in a week, from 700 hrs to 1900 hrs. Noise level was calculated by using the above formula. The noise was measured at a distance of 25 feet from the centre of the road.

RESULTS AND DISCUSSION

Following tables show weekly variations in noise level at the four different locations. Tables indicate high level of

noise pollution in the study area. This situation can be improved if drivers do not use horns unnecessarily, roads

Table I. Noise level at satiana road near saleemi chowk

Days	Week 1	Week 2	Week 3	Mean
Saturday	74.98	75.50	76.50	75.70
Sunday	75.25	75.35	75.35	75.48
Monday	75.35	75.46	75.46	75.69
Tuesday	75.39	75.58	75.58	75.32
Wednesday	75.68	75.55	75.55	75.60
Thursday	75.86	75.92	75.92	75.91
Friday	75.42	75.56	75.73	75.67

Table II. Noise level at Jaranwala road near Kohinoor

Days	Week 1	Week 2	Week 3	Mean
Saturday	73.38	73.60	73.10	73.36
Sunday	74.98	73.50	73.90	74.12
Monday	75.60	74.10	73.75	74.48
Tuesday	73.90	73.89	74.21	74.00
Wednesday	74.30	73.89	74.67	74.29
Thursday	75.99	74.97	73.92	74.96
Friday	74.69	74.00	73.93	74.20

Table III. Noise level at Sargodha road near crescent mills

Days	Week 1	Week 2	Week 3	Mean
Saturday	63.80	61.59	60.74	62.04
Sunday	64.65	65.66	62.07	64.12
Monday	64.88	65.21	65.6	65.39
Tuesday	64.06	64.21	65.26	64.51
Wednesday	63.02	65.55	65.56	64.71
Thursday	64.41	64.31	62.48	63.73
Friday	64.14	64.46	63.65	64.08

Table IV. Noise level at Jhang road near Ayub Agriculture Research Institute

Days	Week 1	Week 2	Week 3	Mean
Saturday	73.37	70.87	72.20	71.48
Sunday	72.26	71.30	67.45	70.34
Monday	68.09	69.20	72.39	69.89
Tuesday	72.57	70.58	72.16	71.77
Wednesday	72.33	71.39	71.97	71.90
Thursday	71.97	69.38	70.19	70.51
Friday	71.43	70.45	71.06	70.98

are improved, auto vehicles conditions be checked regularly and general awareness about noise pollution be created.

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