E1-501: Community response to road traffic noise

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A study was carried out to determine community response to noise levels in the vicinity of traffic routes. Noise levels in category A, B and C grade roads were measured and the responses of the residents living within 25 meters from the edge of the traffic routes were assessed through a sample questionnaire.

The questionnaire was administered through personal interviews to 100 residents in randomly selected dwellings in the vicinity of the Colombo – Kandy main road (approximately 30 km from the city of Colombo). The questionnaire contained background questions related to the respondents and their households, annoyance levels and the perception of the respondents. The survey captured factors such as gender, age, education, employment, income, condition of the dwellings, distance to the road, location of bedrooms, windows, living environment, effect of noise on their activities, as well as their views on noise reduction and implementing regulations.

The analysis of the survey data show that most residents living in the vicinity of the traffic routes are disturbed by traffic noise. However, only 38% consider it as an annoyance while 16% consider it as a nuisance at all times. The survey indicates that Sri Lankans do not react strongly to traffic noise except when they watch TV or speak over the telephone. There is a strong relationship between the road traffic noise level and the percentage of respondents feeling "highly annoyed". In general, the closer the dwelling is to the traffic route, the higher the annoyance level of the residents. When the equivalent noise levels reach the recommended permissible level of 63 dB(A), the percentage of highly annoyed reached 60%. Residents in some of the areas are exposed to very high noise levels (above 75 dB(A)) which need to be addressed through policy decisions. The results agree well with the published work carried out for road traffic noise annoyance in Spain and Egypt.

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