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Investigation of Ground Level PM_{2.5} with Different Mode of Transports

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Introduction

- United-Nations predicts population of Dhaka will continue to rise 27.37 million by 2030
- 34,48,77,000 trips generate everyday
- “Traffic capital of the world”
- Air pollution is considered to be one of the serious and prominent types of environmental pollution and
- Congestion, noise, accidents, social disruption



Scenario of motorization in Dhaka

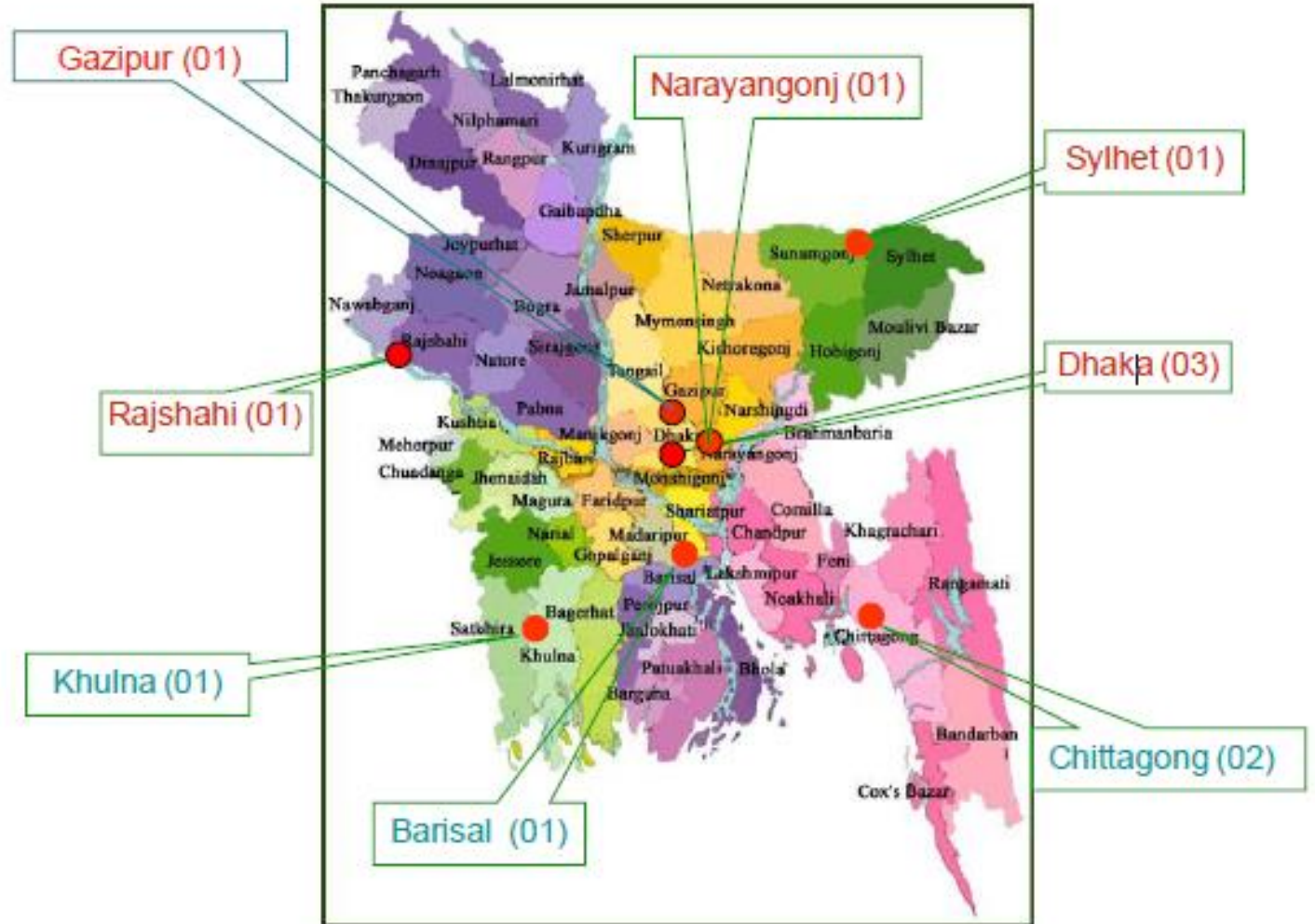
- Private cars, vans, trucks and busses have increased by 30-50% since 2010
- Lack of efficient public transit networks
- Lack of coordinated transit infrastructure
- Lack of safe and efficient walking/biking routes

	2010	2016	% Increase
Private Car	163004	240038	32.09
Jeep	19520	32218	39.41
Vans	19498	40434	51.77
Truck	26922	51698	47.92
Pick-up	20481	60868	66.35
Bus	16783	27302	38.52
Total	83684	180302	53.58

Source: BRTA

Air Quality Study in Bangladesh

- Limited air quality Study in Bangladesh
- CAMS by government
- Lack of Equipment's



Objectives of the Study

The main objective of the study is to determine the correlation existed between increased concentrations of PM_{2.5} and motorization in Dhaka. The specific objectives of the study are as follows:

- To define the road categories in Dhaka.
- To determine the variation of PM_{2.5} concentration between different categories roads in Dhaka.

Data Collection

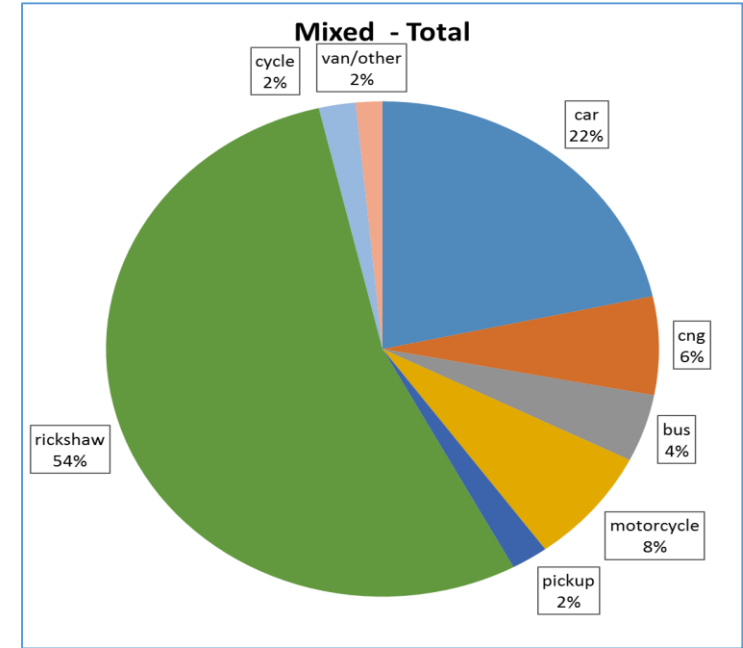
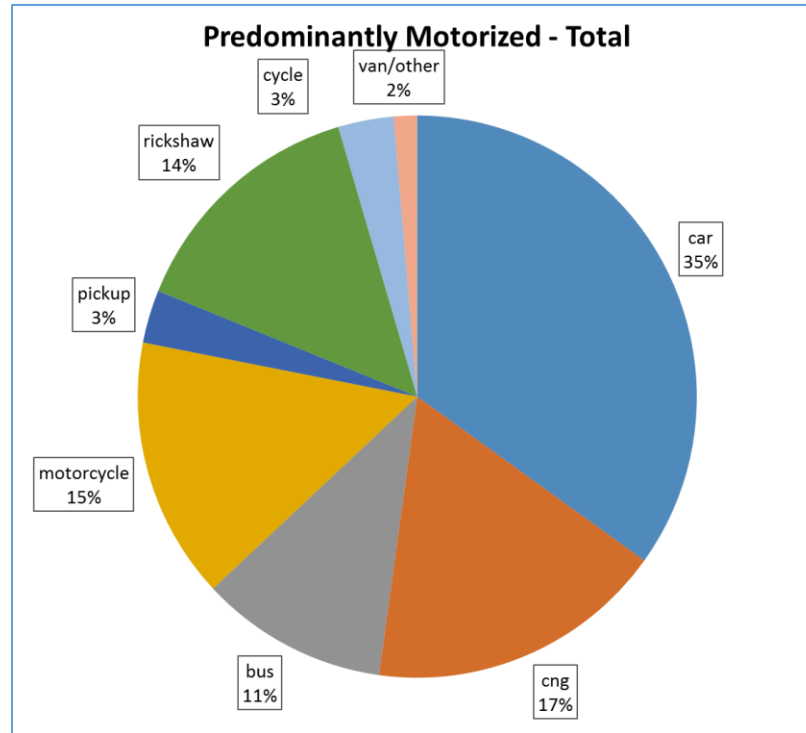
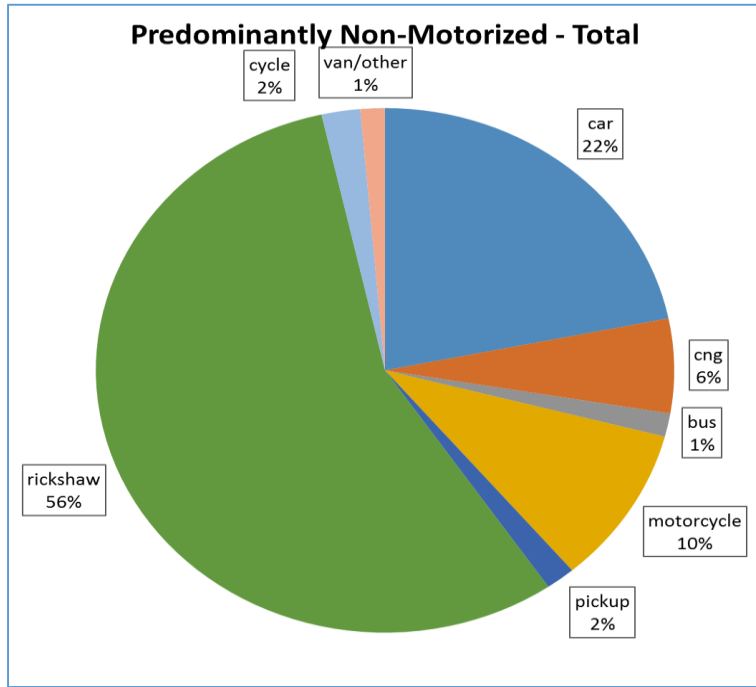


Data Analysis

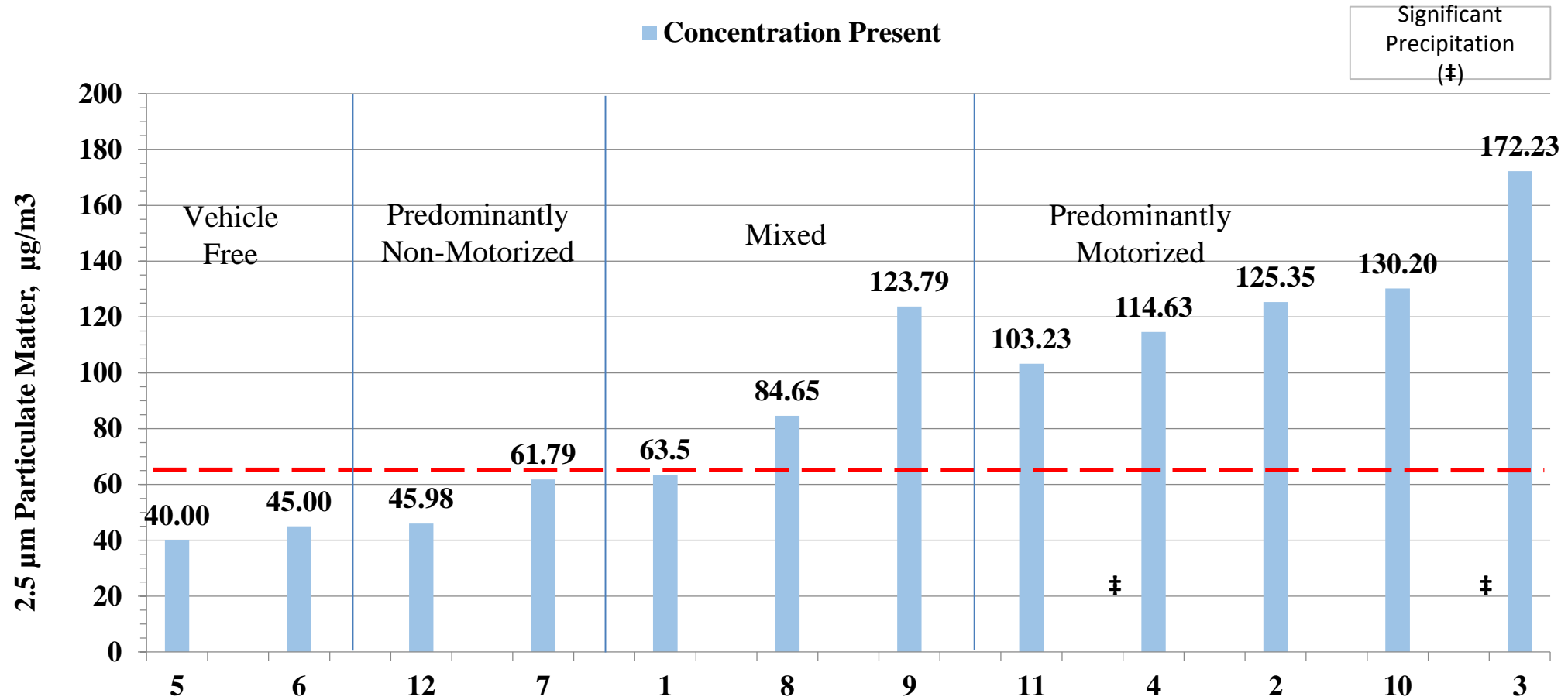
- Fine Particulate sampler has been used for collecting air samples at different locations in Dhaka city.



Result



Result



Conclusion



Thank you!