

# Virtual Site Visit at Noakhali Municipality on Kitchen Market Construction

**Objectives:** Visual monitoring of environmental infrastructure facilities in Noakhali Kitchen Market as agreed in approved Environmental Assessment Report submitted by Noakhali Municipality

**Tools used for monitoring:** WhatsApp video call, individual discussion with SE-BMDF over mobile phone

**Participants:** Supervision Engineer (BMDF) and Executive Engineer, Noakhali Municipality.

Name of Sub-Project	Proposed environmental infrastructure	Present status	Comments
Construction of Kitchen Market at Noakhali Municipality	Labor shed (male/female)	There is a labor shed which has been rented for Noakhali Municipality kitchen market construction purposes. The labor shed is a tin shed old building having reasonable number of windows and doors. The inner arrangements of the labor shed do not meet the required cleanness as required. As prerequisite, fans and lights have been provided for labors. Social distancing is not maintaining by the labors inside the labor shed.	As per Environmental Assessment report and EMP submitted for Kitchen Market of Noakhali, there are tentative cost allocated for labor sheds and basic facilities. But the Contractor of Noakhali Kitchen market did not constructed any separate accommodation/facilities for labors. Hence, respective Contractor should not be allowed to have new labor shed construction bill.
	Safe water supply,( labor shed)	It has been observed that water Jar has been placed in the labor shed. The source of drinking water is deep tube well.	The overall water supply and water dispensing method is moderate in the labor shed.
	Toilet-male (labor shed)	There are male toilets for labors adjacent to the labor shed with broken ring and slabs. Feces are discharging into the adjacent canal which is polluting surface water.	It has been advised to repair rings and stop leakage of feces in to the surface water.
	Toilet (male/female)(Building)	There are toilets for male, female and disabled people.	Only brick works have been completed without demarcation of user based (male, female and disabled)

			toilets. Finishing works are going on.
	Septic tank	There is a septic tank under construction.	The size of the septic tank considered through projection of users.
	Soak well	No soak well has been constructed yet.	The Municipality has informed that they construct at the end of main construction works.
	Disabled toilets	There are provision of disable toilets in the market.	Disable toilets provisions are there but yet not demarcated by brick walls.
	Ramp	There is a provision of ramp at ground floor for disabled, elderly people.	The construction of ramp has yet not been started.
	Safe water supply (Building)	As construction work is going on as a result no scope to provide water supply system.	Municipal water supply will be provided in future.
	Janitors closet	Janitor's location not yet settled.	The location will be fixed after completion of all construction and finishing works.
	Fire protection	Provision of fire protections have been designed.	Fire protection equipment will be fixed after finishing of work.
	Solid and Waste water management	As per design and Environmental Management Plan, there will have brick bin outside the building for dumping daily waste generated from the market.	As the building is under construction, so no physical existence of Solid Waste bin and waste water disposal system has seen in the building.

**Completion Status of the sub-project:**

The super structure of the building (market) is complete but internal partition wall of toilets, washing point, fixing of fire protection items, water supply, plumbing, waste collection system, waste dumping etc. remained unfinished. As a result, environmental compliances through providing infrastructure facilities remained incomplete. Need further field/virtual site visit at Noakhali.

**Environmental threat:**

- The Contractor of the Noakhali Municipal Market has rented a tin shed building which is average standard for living.
- Monitoring of body temperature of each person engaged in construction site are needed to prevent COVID-19 contamination. There is no such devices/facilities provided by the Contractor.
- In the labor shed, the laborers are not maintaining social distancing (at least 3 feet) which has risk of COVID-19 contamination and violation of GoB COVID-19 guideline.

- After completion of Noakhali Municipal Market, volume of solid waste and waste water will generate which are needed to manage carefully as per EMP submitted by Noakhali Municipality.
- Clear comments on disposal of solid waste and waste water system can be placed after completion of full facilities.
- Construction of soak well has yet not started.
- Air quality around the market has to be monitored during operational period for contents of PM 10 and CO. If it is remain higher than the Bangladesh Standard then it will have negative impact on community health. PM10 are minute particles present in the air and exposure to it is very harmful for health. When the level of these particles increases and penetrate deeply in to the lungs, visitors will experience number of health impacts like breathing problem, burning or sensation in the eyes etc. The PM contains instance dust, pollen, soot, smoke, and liquid droplets. As mitigation measures, burning of wood in hotel kitchen, brick fields, smoke from vehicles, dust in dry season should be controlled by using natural gas in kitchen and brick fields etc. and water spray in dry season in the market area.
- Traffic congestion may arise in front of kitchen market for mechanized and non-mechanized vehicles movement. Community police, separate parking for non-motorized vehicles, awareness and sign board on parking messages should be placed.

### Environmental Parameter (Air, Noise) analysis of Noakhali Kitchen Market.

Environmental parameter like air quality and noise level have been monitored during baseline and construction phases. Construction phase environmental monitoring data like SPM, PM2.5, PM10, CO have crossed the baseline data level. Unexpectedly, PM10 and CO contents in air have crossed the standard set by of Department of Environment, Bangladesh. The possible reasons of the crossing of Bangladesh air quality standard are due to construction works, use of machineries for construction works, nearest location of Noakhali Bus Stand, huge traffic movement adjacent to the Kitchen Market and visitors movements.

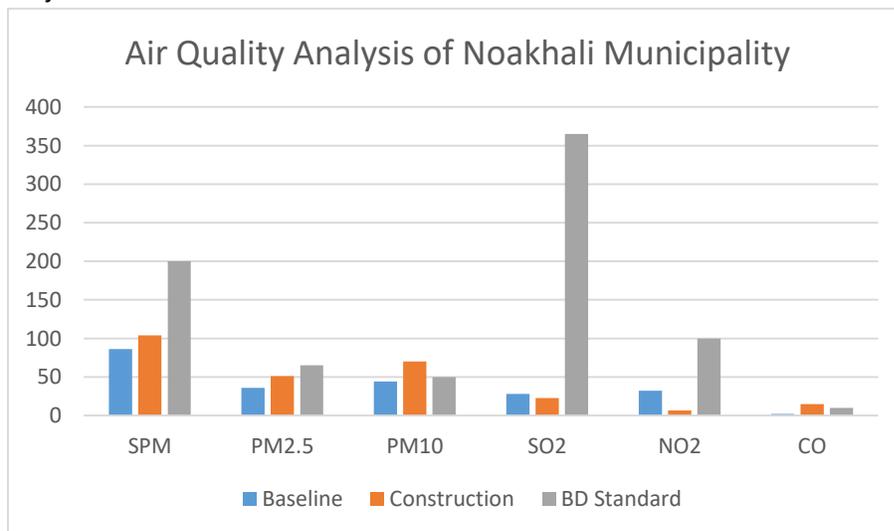
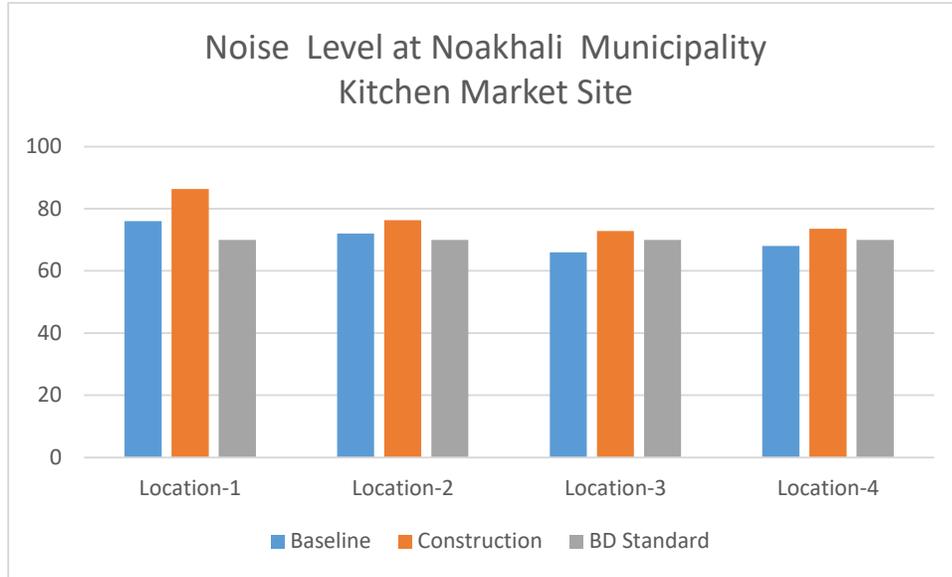


Figure-1

**Noise level:**



**Figure-2**

The above figure shows the comparison between baseline and construction phase noise levels at site. There are four locations at four corners of the Noakhali kitchen market from where noise levels were collected during both baseline and construction phases. Noise levels during construction phases at four locations are higher than the base line and Bangladesh Standard noise level parameter. Different influencing factors like movement of light and heavy vehicles at north side of the market, visitor movements towards relocated temporary markets, construction works influenced the noise level to become higher.

For noise control, horn, noise from vehicles, mechanized and non-mechanized vehicles parking system have to be controlled through awareness, engaging community police and fixing signboards at strategic points in front of the Market.

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