# **CHAPTER 2**

# MATERIALS AND METHODS

### Study area and period:

The study was carried out in twelve different dairy farms from August to September 2017 at the Chittagong Metropolitan Area (CMA). The selected farms were Shahnaj Dairy Farm, Moinuddin Dairy Farm, Molla Dairy Farm, Khamar Dairy Farm, Jarif Dairy Farm, Jahan Dairy Farm, Ajijia Dairy Farm, Bandhan Dairy Farm, Super Dairy Farm, Bhuiyaan Dairy Farm, Yusuf Dairy Farm and Liza Dairy Farm.

## Figure 1: Maps of study area





## Figure 2: Measuring feed passage in dairy farm

#### **Data Collection:**

A pre-structured questionnaire was used for the data collection in different farm on environmental effects (net covering, ventilation, lighting, total fan, temperature, humidity, feed passage, water passage, milk yield, light distance from the ground, water source, manger passage, flooring system, bedding materials, shed height and foot bath) on milk production of Holstein crossbred. In addition farm management related data was also collected. Both primary and secondary data were taken into consideration. Primary data were collected directly from the dairy farms and secondary data were collected from other intern vets whose were also working as intern.

#### Data analysis:

All compiled data were analyzed by using Microsoft Excel. The environmental parameters were used for observing efficiency of milk production through environmental factor. Pearson correlation co-efficient (r) was calculated using excel (Pearson 1905).