CHAPTER THREE

3 METHODOLOGY

3.1 Study area

The selected area is the villages along with the expressway trace from Kurudugahahetekma to Matara which is covered 30km. Nine divisional secretarial divisions have been taken to the data collection including Elpitiya, Karanadiya, Baddegama, Bope-Poddala, Akmeemana, Habaraduwa, Welipitiya, Malimbada, and Matara. High level of rural population live in this area is engaged in self employment and agriculture mainly paddy and tea.

3.2 Sampling procedure

Data was collected from the houses which were located within 50m from the expressway trace. Random sampling was adopted to collect necessary data. 1547 houses were randomly selected and inspected and gathered data through structured questionnaire survey.

3.3 Data collection

3.3.1 Primary data

Data was collected through survey research methods using a carefully designed questionnaire in order to collect the required data. According to the objectives mainly considered the structural damages in houses due to compaction activities. Structural damage was identified by doing the crack survey in existing condition and compares it with respect to the post crack survey data which was taken after the compaction activities. Data was collected along the highway trace from Kurudugahahetekma to Matara by covering all the compaction activities area. 1547 Houses are inspected and recorded the data.
3.3.2 Secondary data
In addition to survey data, structured interviews and discussions were carried out as and when necessary to get more in-depth information. Secondary data including company records also used to clarify certain issues.

3.4 Data analysis
Collected data were analyses by using Microsoft Excel and SPSS software.