CHAPTER 3

3 METHODOLOGY

3.1 Introduction

The main component in this research which must be achieved is to identify the hazard map of landslides for Cameron Highlands, Pahang. The objectives of this research are to quantify spatial hazard of landslide using logistic regression method in Cameron Highlands, Pahang using ILWIS and also to enhance the application of geo-spatial information systems and earth observation technology technique in landslides modeling for Cameron Highlands, Pahang that can be observed and managed effectively.

The methodologies are computational study and building up the information that we get from data collected and by studying the past journals and research about GIS application to chronicle the objectives stated. The method must suitable with the information for application and software. The flowchart demonstrated the progress work (Weerawansha et al., n.d.).

Several considerations are required when select the a suitable study area such as type of problem, availability of data and information needed, related tools and software to analyze the problem in the study area. In a first order approach to the problem, it is essential to identify potentially unstable areas through a methodology that does not require substantial resources or time and that produces reliable results.
Figure 3.1: Flowchart of Methodology
3.2 Study Area

In this research, Cameron Highlands is chosen for the execution of landslide susceptibility model analysis due to frequent occurrence of landslides. Cameron Highlands is experiencing fast advancement with land clearing for housing estates, hotels, and apartments causing erosion and landslide.

The study area covers an area of 712 square kilometers (275 sq mi). Toward the north, its limit touches that of Kelantan; toward the west, it imparts part of its outskirt to Perak. Masterminded at the northwestern tip of Pahang, the "Camerons" is pretty almost 90 kilometers (56 mi) from Ipoh or around 200 kilometers (120 mi) from Kuala Lumpur. It is the smallest body electorate in Pahang.

The station includes three territories, to be particular Ringlet (5,165 hectares), Tanah Rata (2,081 hectares) and Ulu Telom (63,981 hectares). Its eight sub-locales are Ringlet, Tanah Rata (the legitimate center), Brinchang, the Bertam Valley, Kea Farm, Tringkap, Kuala Terla and Kampung Raja. All are settled at heights running from 1,100 meters (3,600 ft) to 1,600 meters (5,200 ft) above sea level.

The mean yearly temperature of the retreat is around 18 °C (64 °F). In the midst of the day, the temperature now and again climbs more than 25 °C (77 °F); amid the night, it occasionally drops to as low as 9 °C (48 °F) exactly at the higher reaches.

The resort has a various people of more than 38,000 people. It contains Bumiputeras (Malay (7,321); others (5,668), Chinese (13,099), Indians (6,988), non-Malaysian subjects (5,193), and distinctive nationalities (202). Most of the occupants here are businessmen, organization industry specialists, farm experts, retirees or government employees. The dialects talked are Malay, Mandarin, Tamil and English.