

Cebu, Bohol, and most of the Central and Southern Mindanao experience rainfall that is more or less evenly distributed all throughout the year. ("Earth Science: The Philippines in Focus," 1983)

Upon observing the rainfall pattern in Baguio City, the proponents also observed some factors that could massively affect the rainfall in our city. One factor that would affect the rainfall pattern of Baguio City is the season. According to some references, high precipitation occurs during the humid season of the year while low precipitation occurs during the dry season of the year. Since the city is located at a high altitude, the elevation could also affect the pattern of rainfall that will occur. Mountains affect the amount of rainfall. Rains fall more often on the slopes facing the wind than on the slope away from the wind. The reason is that a wind hitting the side of the mountain tends to rise along the slope reaching heights of low temperature. There, the moisture in the wind condenses to form rain. By the time it reaches the other side of the mountain there is not enough amount of moisture to further condense. The eastern coastal areas generally receive more rainfall than the western parts. The eastern areas have high rainfall from October to March when the monsoon blows over the country. For the Philippines as a whole, June to December are the rainy months while January to May are the dry months. ("Earth Science: The Philippines in Focus," 1983)

### **Background of the Study**

Baguio City is a highly urbanized city located in the province of Benguet. It has an altitude of 1610 meters and covers a total land area of 57.5 km<sup>2</sup>. Landslide and flashflood occurrences are highly unpredictable in some areas of the city because rainfall amount does not have a recognizable pattern. Thus, many parts of Baguio City are suffering from landslides and flashfloods during periods of unpredicted heavy rainfall. In order to increase the safety, awareness against such environmental disasters and an analysis regarding the rainfall patterns of Baguio City has to be done to provide basic information.

Such study has been done in different countries such as Northeastern Thailand, India, and Australia. The necessary data shall be collected from the weather station of Baguio City to produce a forecast for the amounts of rainfall every year.