

The objectives of this study "Application of Geographic Information Systems to Land Use Planning in The Queen Sirikit Botanic Garden" are: 1) to develop, design and construct Geographic Information Database in the study area and collect data concerning plants in this garden; and 2) to apply Geographic Information Systems for Land Use Planning on the development of the Botanic Garden regarding land use management. The methods used in this study include application of Geographic Information Systems and descriptive techniques.

The study results have shown that the Land Use Planning of total land use in The Queen Sirikit Botanic Garden can be classified in to 4 zones, namely: preservation zone; the natural forest in north and south directions of the garden, living collection and plant exhibition zone; the biggest zone and locate in the middle of the garden, scientific research zone; locate in living collection and plant exhibition zone due the use of associated area and general use zone; close to Mae Rim - Samoeng road in north - south direction. For plant database, plant position and characteristic list of each plant unit area included in the database are provided.

Although the Botanic Garden has been operated since 1993, it should be noted that the going on activities should be developed for its most benefit. Therefore, Land Use Planning must be designated to support the physical aspects for both short - term and long - term management of the Garden.