

**UNIVERSITI TEKNOLOGI MARA**

**Greenhouse Monitoring System**

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# CHAPTER 1

## INTRODUCTION

In this chapter, discussion will be centered on the greenhouse remote monitoring in which the facility can be monitored remotely. This chapter will also view the problem statement, objective of the project, the scope and project significance.

### 1.1 Background of Study

A greenhouse (also called a glasshouse or a hothouse) is a building or complex in which plants are grown. The idea of growing plants in controlled environment can be traced back to the ancient Roman times. At that time, the Roman emperor Tiberius ate a cucumber-like vegetable daily. Method that have been used by the Roman gardeners are similar to that greenhouse system so that the emperor can had that vegetables every day of the year.

It is not until the discovery of ‘active’ greenhouses, in which it is possible for the temperature to be increased or decreased manually which appeared at a much later time. *Sanga yorok* written in the year 1450 in Korea, stated a house which was designed to regulate the temperature and humidity requirements of plants and crops.

Compare to the ancient Roman, greenhouse technology has advanced in some way that no longer like the latter, but the concept -- an enclosed structure providing a special environment for plants -- is essentially the same today. Nowadays, most of the greenhouse still uses the in-site monitoring and controlling technique. A step forward from this technique is by using internet to monitor flow of water, soil humidity and temperatures and thus eliminating the uses of manual labour monitoring.