AUTOMATIC FERTIGATION SYSTEM IN URBAN FARMING

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ABSTRACT

Fertigation system is a well-known system in the agriculture where it is used to distribute water, fertilizer and other water-soluble product into the soil. This project aims to ease urban farming in high volume by introducing an agricultural system that is automated and monitored.

The system is divided into 2 separate scopes: Hardware development and software development. The hardware development is talk about the project framework, the flowchart, and circuit framework. While the software development is talk about the codes and the algorithm of the system.

The project is done with the objective to reduce water and fertilizer wastage and also to create an automatic system that can ease the farmers.

ACKNOWLEDGEMENT

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INTRODUCTION

1.1   Research Background

Farming is a method of producing food through cultivating of plants and animals. Urban farming is a cultivating, distributing and processing plants and animal in urban areas, they also called city farming *aka* city farm[1]. City farm usually run by community's in that particular area and the sole purpose is to built relationship with the community and offer awareness about agriculture to the suburban people[1].

Urban farming trend has progress a lot in these past year but farming in urbanized areas is not easy. Lack of manpower and excessive use of resources has always been a challenge for urban farmers. This is because the farms run by community and some of them maybe elderly people. Hence, labour as always been an issue that need to be solve. There also the issue of excessive use of resource like water and fertilizer. According to Network(May 2015), some city farmers still used water from their own district and these can cause deficit of water supply in the city[2]. It also include that excessive use of fertilizer can pollute the soil and potentially create health problems if not tended properly[2].

Therefore, the purpose of this research paper to create and design a system that can solve the problems and to ease the urban farmers so that they can tend their farms more easier than before.