ABSTRACT

Urban Farming is a modern agricultural concept that takes advantage of limited land in urban areas to become more productive land. One of urban farming concept is Aeroponik, that is cultivation technique in air without using soil as planting medium. Plants grow by hanging the roots and get the water & nutrition intake through the process of spraying automatically and periodically.

Monitoring process of plant growth, especially potato plants should be considered in order to facilitate the management of these plants. Therefore developed a Wireless Sensor Network application (WSN) which serves to monitor the growth of potato crop development. This application connects every sensor contained in Arduino and Raspberry pi connected to the access point, so information such as temperature & humidity, light intensity and video streaming from the growing room conditions can be known.

Keywords: Urban Farming, Aeroponics, Wireless Sensor Network Application, Arduino Uno, Raspberry pi