

# IoT Based Monitoring and Controlling of Hydroponics System

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**Abstract:** *In India a Agriculture plays an important role in the nations building. 68% Indian population's do the farming and therefore 33% of the national capital comes from agricultural. Indian farmers actually play an important part to provide the food to rest of the world. But due to the fastest growth of urbanization farming filed get reduces day by day. There is a huge concern of food security specifically for country like India who has large populations. By introducing soilless farming will overcome this issue. In the paper we proposed a smart agriculture concept which is hydroponics that is based on soilless farming. This proposed hydroponics system is an auto mated one where human presence not required which will reduces the human effort to monitor and controlling the growth of the plant. Based on the sensors input such as pH sensor, temperature and humidity (DHT 11), our proposed hydroponics system plant will grow by providing water soluble nutrients.*

**Keywords:** Hydroponics, IoT, Node MCU, DHT

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