



## Smart and Efficient Irrigation System using Wireless Sensor Network and IoT

### Reviewer 1: --

1. In several sections sentences has spelling and grammar mistakes, which needs to be corrected.
2. In several sections sentences has space problem, which needs to be corrected.
3. Proper sentence construction in several sections to be modified.

| Actual  | Suggested   |
|---|---|
| <i>control unit which will receive the sensor</i>   | <i>control unit that will receive the sensor</i>        |
| <i>a web server using Wi-Fi and Internet.</i>       | <i>a web server using Wi-Fi and the Internet.</i>       |
| <i>locations where there is scarcity of water.</i>  | <i>locations where water is scarce.</i>                 |
| water resource are used by human beings, industry   | water resources are used by human beings, industry      |
| With growing population, there will be simultaneous | With a growing population, there will be a simultaneous |
| optimize water use by means of a crop water         | optimize water use using a crop water                   |
| A data acquisition system deployed for              | A data acquisition system is deployed for               |
| Though drip irrigated area is about 3.60 Mha        | Though the drip-irrigated area is about 3.60 Mha        |
| In view of worsening water scarcity and raising     | Given the worsening water scarcity and rising           |
| increasing the use of drip system in the world      | increasing the use of the drip system in the world      |
| a significant role for the adoption of different    | a significant role in the adoption of different         |
| Irrigation costs varies from region                 | Irrigation costs vary from region                       |
| water and higher cost of irrigation                 | water and the higher cost of irrigation                 |
| large-scale adoption of efficient irrigation        | large-scale adoption of an efficient irrigation         |
| and through other sources including drip            | , and through other sources including drip              |
| precious water resource should be used              | precious water resources should be used                 |

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|--|--|
| Irrigation scheduling depends on soil,           | Irrigation scheduling depends on the soil,           |
| labour and also brings the plant nutrients       | labor and also brings the plant nutrients            |
| Under Irrigation leads to plants stresses        | Irrigation leads to plants stresses                  |
| The goal of effective scheduling program         | The goal of an effective scheduling program          |
| water while minimizing loses to deep percolation | water while minimizing losses to deep percolation    |
| defines the amount of pores                      | defines the number of pores                          |
| Irrigation Interval which are explained in       | Irrigation Interval which is explained in            |
| The water storage in a soil must always          | The water storage in the soil must always            |
| The Table 1 below gives an example of            | Table 1 below gives an example of                    |
| method for calculating next irrigation day       | method for calculating the next irrigation day       |
| Different methods in Climatological approach     | Different methods in the Climatological approach     |
| Irrigation water and a ratio 0.78, irrigation    | Irrigation water and a ratio of 0.78, irrigation     |
| about 0.5 to 1.3 after establishment of the crop | about 0.5 to 1.3 after the establishment of the crop |
| One or more of plants growth stages could        | One or more plant growth stages could                |
| calculated well before hand, by analysing        | calculated well beforehand, by analyzing             |
| the characteristics of crop, soil                | the characteristics of the crop, soil                |
| on a daily basis and hence leading               | daily and hence leading                              |
| savings of water over a period of time           | savings of water over some time                      |
| Each WSU are placed at the most suitable         | Each WSU is placed at the most suitable              |
| data from the neighbouring WSU                   | data from the neighboring WSU                        |
| range of the neighbouring WSU                    | range of the neighboring WSU                         |
| computed using scheduling algorithm and the      | computed using a scheduling algorithm and the        |
| through the Wi-Fi module and Internet.           | through the Wi-Fi module and the Internet.           |
| need to be stored for the computation            | needs to be stored for the computation               |

|  |   |
|--|---|
| Soil Water Storage in the beginning of         | Soil Water Storage at the beginning of            |
| meter of soil. This data can be obtained       | the meter of soil. This data can be obtained      |
| meter can also be obtained by repeatedly       | the meter can also be obtained by repeatedly      |
| for estimating the Plant Water Usage           | for estimating Plant Water Usage                  |
| The sample implementation is for smaller       | The sample implementation is for a smaller        |
| Wait until next day. The program is re started | Wait until the next day. The program is restarted |
| languages like html, php, java                 | languages like HTML, PHP, java                    |
| restart the irrigation with a new scheduling.  | restart the irrigation with new scheduling.       |
| This will lead to optimal usage of water       | This will lead to the optimal usage of water      |
| Coverage of large areas using minimum number   | Coverage of large areas using a minimum number    |

#### Comments to Editor :

1. After modifying the content, paper can be accepted for possible publication.

**Reviewer 2: --**

1. Paper should be written in JMCMS Journal format.
2. References and in-text citations are not in JMCMS format. More references should be included and sequentially/adequately arranged, as cited in the text.
3. In many places, sentences are started with abbreviations. When it is introduced for the first time, the full form should be given.
4. Authors need to Modify Abstract and conclusion more appropriately.
5. In section three, sentences end with few numbers of the full stop, which needs to be removed.
6. Conflict of interest regarding article should be mention in the text.

**Comments to Editor :**

1. After modifying the content, paper can be accepted for possible publication.

**Reviewer 3: --**

1. Paper should be written in JMCMS Journal format.
2. References and in-text citations are not in JMCMS format. More references should be included and sequentially/adequately arranged, as cited in the text.
3. Authors need to describe the literature survey in introduction section more elaborately
4. The Abstract and conclusion are needed to be Modified in accordance to fulfill the paper aim.
5. Conflict of interest regarding article should be mention in the text.

**Comments to Editor :**

1. After modifying the content, paper can be accepted for possible publication.

Regards  
Editorial Manager

**[Note: This is a computer-generated Report hence, no need of any Signature.]**