



an Open Access Journal by MDPI

# Precision Irrigation Strategies for Sustainable Water Budgeting

Guest Editors:

#### Dr. Farhat Abbas

Faculty of Sustainable Design Engineering, University of Prince Edward Island, Charlottetown, PE C1A4P3, Canada

#### Prof. Dr. Aitazaz A. Farooque

Department of Engineering School of Sustainable Design Engineering, University of Prince Edward Island, Charlottetown, PE C1A4P3, Canada

Deadline for manuscript submissions: closed (15 May 2021)

#### **Message from the Guest Editors**

Climate change is affecting agricultural production of countries responsible for producing food and fibre for the rest of the world. Incidents of droughts have been increasingly common in areas of rainfed agriculture. The irrigated agriculture is facing challenges in terms of having enough water in dams, canals, and thus in irrigation watercourses. Supplemental irrigation is now the need of the hour for sustainable agricultural production. Regardless of the nature of a region (rainfed versus irrigated), precision irrigation has shown promise in coping with the situation. Accurate water budgeting is needed to strategise sustainable agricultural production. Therefore, this journal aims at publishing the related research, modelling and/or review work.

- Estimation of fluctuations in groundwater levels;
- Factors affecting fluctuations in groundwater levels;
- Historical trends in precipitation;
- Future prediction of precipitation;
- Estimation of evapotranspiration or crop water requirements;
- Irrigation scheduling for horticultural, vegetable and grain crops;

**Special**sue



mdpi.com/si/49248





an Open Access Journal by MDPI

### **Editor-in-Chief**

#### Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G 0C5, Canada

### Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international Open Access journal which provides an advanced forum for research findings in areas sustainability related to and sustainable development. Sustainability publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions. **High Visibility:** indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, AGRIS, RePEc, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (*Environmental Studies*) / CiteScore - Q1 (*Geography, Planning and Development*)

## **Contact Us**

*Sustainability* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/sustainability sustainability@mdpi.com X@Sus\_MDPI