



Big Data in Water Resources Engineering (BDWRE)

HEAD OFFICE ADDRESS:

Zibeline International Publishing Sdn Bhd
C2-2-3, Block 2, CBD Perdana 3,
Persiaran Cyberpoint Timur,
Cyber 12, 63000 Cyberjaya,
Selangor.
Tel: +603-86879842

EDITORIAL STAFF:

Publishing Manager
Tasbia Ab Rajul

Publishing Editor
Nurul Afiqah Ab Manan

Publishing Editor
Rozalaidah Abdul Karim

Technical Editor
Nuraliah Natasha Amirrulhisam

Technical Editor
Muhammad Aqil Zikry B Mohd Nizam

Frequency:
Bi-annual (2 issue per year)

ISSN: 2716-5655 (Online)

Price:
Single issue: 50 MYR
Price for abroad
Single issue: 25 USD

Web:
www.bdwre.com.my

E-mail:
info@zibelinepub.com

Contents

VOLUME 4, ISSUE 2, 2023		
No	Editorial	Pages
1	COMMUNITY PARTICIPATION IN WATER AND SANITATION SERVICE DELIVERY:AN EMPIRICAL CASE OF MANTSOPA MUNICIPALITY, SOUTH AFRICA	16-20

Editorial

One of the emerging challenges in the 21st century era is collecting and handling 'Big Data'. The definition of big data changes from one area to other over time. Big data as its name implies is unstructured data that is very big, fast, hard and comes in many forms. Though the applications of big data was confined to information technology before 21st technology, now it is of emerging area in almost all engineering specializations. But for water managers/engineers, big data is showing big promise in many water related applications such as planning optimum water systems, detecting ecosystem changes through big remote sensing and geographical information system, forecasting/predicting/detecting natural and manmade calamities, scheduling irrigations, mitigating environmental pollution, studying climate change impacts etc. This study reviewed the basic information about big data, applications of big data in water resources engineering related studies, advantages and disadvantages of big data. Further, this study presented some of review of literature which has been done on big data applications in water resources engineering.

Scientific Board

Editorial Team

Editor in Chief

Engr. Saddam Hussain Wahla
Department of Irrigation and Drainage,
Faculty of Agricultural Engineering and
Technology,
University of Agriculture Faisalabad, Pakistan.
Email: bigdata.water@gmail.com

Managing Editor

Prof. Dr Azmi Aris
Director of Centre for Environmental
Sustainability and Water Security,
University Technology Malaysia

Associate Editors

Dr. Muhammad Jehanzeb Masud Cheema
Faculty of Agricultural Engineering and
Technology, PMAS-Arid Agriculture
University Rawalpindi, Pakistan

Dr. Muhammad Uzair Qamar
Department of Irrigation and Drainage,
Faculty of Agricultural Engineering and
Technology,
University of Agriculture Faisalabad, Pakistan

Dr. Usman Khalid Awan
International Center for Agricultural
Research in the Dry Areas (ICARDA)
Abdelhadi Saleh Street, Off of Nile Street
Swiss Air Building, Giza, Egypt

Prof. Dr. Allah Bakhsh
Dean, Faculty of Agricultural Engineering
and Technology, University of
Agriculture Faisalabad, Pakistan

Engr. Muhammad Sohail Waqas
Soil Conservation Group, Agriculture
Department, Govt. of Punjab-Pakistan

Editorial Board

Dr. Andre Daccache
Irrigation Engineering and Water Resources
Management,
Department of Biological and Agricultural
Engineering,
University of California, Davis

Dr. Aitazaz Ahsan Farooque
Department of Engineering,
School of Sustainable Design Engineering,
University of Prince Edward Island
Charlottown, Prince Edward Island, Canada

Dr. Travis Esau
Department of Engineering
Precision Agriculture Research Program
Faculty of Agriculture, Dalhousie University
Truro, NS, Canada

Dr. Muhammad Azam
Department of Land and Water Conservation
Engineering,
PMAS-Arid Agriculture University Rawalpindi
Pakistan

Dr. Muhammad Naveed Anjum
Department of Land and Water Conservation
Engineering,
PMAS-Arid Agriculture University Rawalpindi
Pakistan

Big Data in Water Resources Engineering (BDWRE)

Dr. Muhammad Asif Kamran
Center for Advanced Studies in Agriculture and
Food Security,
University of Agriculture Faisalabad, Pakistan

Dr. Haroon Rashid
Khwaja Fareed University of Engineering and
Information Technology,
Rahim Yar Khan, Pakistan

Dr. Muhammad Mazhar Iqbal
Graduate School of Water Resources,
Sungkyunkwan University, 2006,
Seobu-ru, Suwon-si, Republic of Korea