

2021 Webinar Series on River Basin Environmental Issues

(Webinar 2)

Monitoring food security from space: Historic dynamics of paddy rice cultivation in Northwest Bangladesh

Abstract: Rice is the staple food of Bangladesh, and its production status determines food security of the country. A study was conducted to map two main seasonal rice types in the northwest Bangladesh from 1989 to 2016 period when Green Revolution was occurred. The petabyte Landsat satellite data, Google Earth Engine, High Performance Computing, machine learning algorithms and local expert knowledge were used to derive the maps. The results show that the mapping methodology can accurately (generally within 20% absolute error) capture *Boro* and *Aman* rice over the Green Revolution period, and other landscape dynamic characteristics of importance for environmental assessments, such as areas of standing water.

ZOOM Meeting

Date: October 8

Time: 13:00 - 14:30

(Japan Time)

Registration:

https://www.green.gifu-u.ac.jp/BWEL/eng/webinar_series.html

About the speaker



Dr. Md Golam Mahboob received his PhD degree from the Graduate School of Engineering, Gifu University, Japan in 2013. He has been serving at Bangladesh Agricultural Research Institute (BARI) as a Senior Scientific Officer (Senior Scientist). His current research interests include mapping, monitoring and judicial decision-making of agricultural landuse for sustainable cropping practices by employing remote sensing and geospatial technologies.

Organized by: Promotion Office of Gifu University Rearing Program for Basin Water Environment Leaders (BWEL); River Basin Research Center, Gifu University, Japan

Contact: bwel@green.gifu-u.ac.jp