

### Char and Channel Dynamics of Jamuna River

Erina Suvin, 유창규\*  
경희대학교  
(ckyoo@khu.ac.kr\*)

The typically braided river Jamuna is the mightiest river in Bangladesh, situated in the world's largest river delta. Because of geographical and environmental condition, in the rainy season this river brings enormous quantity of water and sediment load from the upstream. As a consequence, high discharge causes significant river bank erosion and increases the amount of sediment into water. Sediment decreases the capacity of the channel by raising the bed level of the rivers. Jamuna has multiple of channels around char (a tract of land surrounded by the water) and other bed forms. This destruction and construction of char result in the changes of char and channel dynamics in this River. In this analysis, satellite images of Jamuna river of the years 1999 and 2002 are overlapped. We have found that these chars and channels are highly unstable and frequently change their size, shape and position which cause rapid bank erosion.

Acknowledgement: This work was supported by the Korea Science and Engineering Foundation (KOSEF) grant funded by the Korea government (MEST) (KRF-2009-0076129) and funded by Seoul R&BD Program (CS070160).