

Prof. D. K. Meher  
1984-85

1984-85  
The  
1984-85  
UNIVERSITY  
1984-85

23<sup>rd</sup>  
ANNUAL CONFERENCE OF  
INDIAN INSTITUTE OF  
GEOMORPHOLOGISTS  
and  
NATIONAL SEMINAR on  
***Global Environmental  
Change:  
Geomorphological Issues and  
Challenges***

20-22 NOVEMBER, 2010

**ABSTRACTS  
VOLUME**



Department of Geography  
GAUHATI UNIVERSITY  
Guwahati

## A software to assess NGOs' participation and ability to cope with difficult environmental problems

Ando Kazuo

Kazuyo Minamide

Kichiji Yajima

CSEAS  
Kyoto University  
Kyoto

Faculty of Intl. Studies and Liberal Arts  
St. Andrew's University

CSEAS  
Kyoto University  
Kyoto

This action-oriented study aims at suggesting a social software model that is useful for international development cooperation in the South Asian region, particularly, Bangladesh. Bangladesh is facing problems related to trade-off between development and environment preservation, e.g., for example, arsenic contamination, flood hazard management etc. To find a clue to mitigate the trade-off, we have conducted field studies with development practitioners such as local NGOs in Bangladesh so as to enable us to analyze, compile and mutually assess the social needs and the knowledge requisites based on practical experience of the local people. This study reports how to implement the practice-oriented area studies in Haor, an area ravaged by inundation during the rainy season in Bangladesh, by using PLA and KJ methods. The advantage of this study with NGO members working with the local people is discussed to try to establish an alternative research methodology to listen to plan and implement better coping strategies when faced with "hard" environmental problems.

-0-0-0-

### Flood probability analysis of Dwarka and Brahmani rivers : A comparative study

Sutapa Mukhopadhyay & Surajit Let

Department of Geography  
Visva-Bharati, Santiniketan

In course of time the physical landscape of the river is changed affected by anthropogenic factors as well. Human interference often adversely affects the normalcy of a river. As a result the pattern of flood can become highly unpredictable. The Dwarka and Brahmani rivers of Eastern India are not exceptions in this regard. Both of these rivers have geo-physical similarities, they have originated from Chotanagpur plateau region and ultimately flow towards the Rarh Bengal. Yet there is a distinct difference of flood character between them. Brahmani is the largest tributary of the Dwarka.

The magnitude and frequency of accurate flood prediction are very essential to catchment dwellers that have to live lives in balance and adjustment with floods. Weibull's Method has used to calculate the flood probability of these rivers on the basis of collected discharge data from 1981 to 2009. From this calculation, it is evident that in case of both of these rivers the highly devastating flood year was 2000 and the percent of probability of this flood was 3.33% and the recurrence interval of such type flood is about

23<sup>rd</sup> Annual  
Conference of

# Indian Institute of Geomorphologists

& National Seminar on  
**Global Environmental  
Change: Geomorphological  
Issues and Challenges**

**ABSTRACTS VOLUME**



20-22 NOVEMBER, 2010



Department of Geography  
**GAUHATI UNIVERSITY**  
Guwahati