

Author's Accepted Manuscript

Location choice behavior adapting to flood and cyclone hazards

Qing-Chang Lu, Junyi Zhang, A.B.M. Sertajur Rahman



www.elsevier.com/locate/ijdr

PII: S2212-4209(17)30297-2
DOI: <https://doi.org/10.1016/j.ijdr.2017.10.006>
Reference: IJDRR686

To appear in: *International Journal of Disaster Risk Reduction*

Received date: 11 July 2017
Revised date: 2 October 2017
Accepted date: 4 October 2017

Cite this article as: Qing-Chang Lu, Junyi Zhang and A.B.M. Sertajur Rahman, Location choice behavior adapting to flood and cyclone hazards, *International Journal of Disaster Risk Reduction*, <https://doi.org/10.1016/j.ijdr.2017.10.006>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Location choice behavior adapting to flood and cyclone hazards

Qing-Chang Lu^{*}, Ph.D.

State Key Laboratory of Ocean Engineering
Department of Transportation and Shipping
School of Naval Architecture, Oceanic & Civil Engineering
Shanghai Jiao Tong University
No. 800 Dongchuan Rd.
Shanghai, 200240 China
Tel: +86-21-34206674
Fax: +86-21-34206674
E-mail: qclu@sjtu.edu.cn

Junyi Zhang, Ph.D.

Graduate School for International Development and Cooperation
Hiroshima University
1-5-1 Kagamiyama
Higashi-Hiroshima, 739-8529 Japan
E-mail: zjy@hiroshima-u.ac.jp

A.B.M. Sertajur Rahman

Roads and Highways Department
No. 132/4 New Bailey Rd.
Dhaka, 1000 Bangladesh
E-mail: sertajrahman@gmail.com

Abstract

With the increasing impacts resulting from natural disasters, many people have been forced to move homes or jobs. The behavioral understanding of these movements is essential for decision makers. The main purposes of this paper are to investigate people's residence and job location change choice behavior and look into the behavioral differences between coastal and inland people under flood and cyclone events. Based on an orthogonal test survey design, questionnaire data were collected from 14 coastal and inland cities of Bangladesh. A cross nested logit model structure is proposed to address the research purposes. Results of this study indicate that more than 80% of the respondents would be likely to make changes, and people's behavioral responses are statistically different between inland and coastal observations. Flood/cyclone intensity, years lived at location, previous recovery experiences, age, and road connections are significant factors influencing people's location change choices, but factors are different depending on types of disasters and locations. Road connections to safe places are essentially important influencing people's location change behavior under

*Corresponding author

Download English Version:

<https://daneshyari.com/en/article/7471914>

Download Persian Version:

<https://daneshyari.com/article/7471914>

[Daneshyari.com](https://daneshyari.com)